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The Food Sovereignty Challenge to the Corporate Food Regime: Food for Thought

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by

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ABSTRACT

This thesis forms part of an ongoing project working with Neilson (2012; Neilson & Stubbs, 2016) towards a revised version of regulation theory that is still a work-in-progress. I have struggled towards a conceptual framework that distinguishes key concepts 'model of development', 'food regime' and 'agricultural system'. I argue that this conceptual framework enables a more thorough analysis of the current era and also provides a tool for conceptualising a new one.

I extend on the standard accounts of the concept 'food regime' (Friedmann, 1987; McMichael, 1992; 2009b) and attempt to more clearly delineate what I call the 'agricultural system', from the regulation/accumulation coupling (i.e. model of development). The corporate food regime while being essentially equivalent to the neoliberal model of development in agriculture, remains distinct from it because the food regime includes, yet is still distinct from, the prevailing model of development which over time transforms the pre-existing regulatory framework of the food regime.

Using my conceptual framework, I critique the dominant agricultural system as environmentally destructive and (key to my project) undermining of food sovereignty. The dominant agricultural system is influenced by, though not solely or directly, the prevailing corporate food regime. The current food regime is largely responsible for the threat to food sovereignty in the current era. However, food sovereignty is an inclusive movement that challenges the dominant agricultural system and I put forward the argument that a new food regime should be premised on food sovereignty.

I investigate emerging agricultural systems in Rome in order to think about the practical realities of alternatives to the dominant agricultural system that are based on food sovereignty. My field research was based on in-depth interviews using a qualitative approach. I looked at both production and consumption elements of an emerging agricultural system – central to any economic system. I met with GAS Testaccio Meticcio and three local producers, La Nuova Arca, Barikamà and Il Papavero.

I pursued a multi-level research agenda that is theoretically informed and grounded in a sense of the big picture and an associated political agenda, and yet goes all the way down to the micro-level of empirical field research. My thesis is structured following this multi-levelled agenda. Beginning with the theoretical foundations I move to a national experience before honing down on the substantive emergence of agricultural systems in Rome. Finally, I integrate these levels in a discussion of a new food regime.

Advocating for structural changes that focus on improving food sovereignty is by no means an original stance. However, my contribution comes from my core argument that the best chance of achieving such goals is through the conceptualisation and implementation of a new food regime. The centre-piece of such a regime needs to be a national template and practical strategy for promoting food sovereignty. Although I have made progress developing my revised account of the relationship between regulation and accumulation in agriculture, there are limitations to my framework which I will continue to work on.

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INTRODUCTION

The focus of this study

Antonio Onorati, of The International Food and Agricultural Trade Policy Council, said to me that whoever controls food controls the world. This statement had a profound impact on me as I began my research into the issue of food insecurity that is now rampant. Fonte (2013) nicely articulates that, "food is not a mere commodity. It is vested with political power to make a better world" (p.236). I wanted to investigate how this better world might be reached through food practices and forms of regulation that characterise and surround the production and consumption of food.

In the everyday food production and consumption practices of people around the world, which explicitly or implicitly challenge the dominant agricultural system of our time, the political power of food can be observed. The persistence of the dominant agricultural system, encouraged by the corporate food regime that continues to threaten peasant livelihoods and food sovereignty around the world, also demonstrates the political power of food.

In my thesis I investigate emerging on-the-ground projects, evolving towards an agricultural system, in Rome. This investigation helps to think about alternatives to the dominant agricultural system which in turn helps me to formulate ideas on a new food regime.

We live in a world where over one billion people are considered undernourished (Pouncy, 2011). This is a direct result of a liberalised global market that has not arisen spontaneously but rather as a result of the deliberately enacted neoliberal 'model of development'. That is, a consciously developed and intentionally implemented regulatory blueprint for the national level which, when widely adopted around the world, engenders a particular transnational regulatory environment, that in turn defines the limits and possibilities of national development (Neilson, 2012; Neilson & Stubbs, 2016). The widespread adoption of the national template of the neoliberal model of development has created an environment where capital is unleashed from the bounds of the nation state to assume global mobility and with it global power (Neilson, 2012). This has incited

intense global competition, and also escalated agricultural systems to a global level. As food has become globalised, so too has the control over food. Global power over food combined with food's subjection to global competition trends has removed control from the local level.

In the Communist Manifesto Marx spoke of capitalism spreading to the four corners of the globe (Marx & Engels, 1959), and later acknowledged the relevance of the political and ideological superstructure in his concept of a mode of production. That is, the economic base can be considered 'overdetermined' (Althusser, 1969) in ways which activate or counteract certain logics and relations of capitalism. The current neoliberal model of development proactively regulates capitalism by unleashing the core logics and relations of capitalism (Neilson & Stubbs, 2016). This can be compared to the previous Fordist era, where the Fordist model of development counteracted capitalism's inherent instability to deliver social progress for a generation.

I am working with Neilson (2012; Neilson & Stubbs, 2016) towards a revised version of regulation theory, something of an 'Australasian school of regulation theory', that is still a work in progress. Nevertheless, the revisions made have enabled me to struggle towards a conceptual framework that distinguishes key concepts 'model of development', 'food regime' and 'agricultural system' and practically enables a more thorough analysis of the current era. Attempting to generate theory has proved a particularly difficult task – and is an on-going process that will take me beyond the scope of this thesis – but one that I believe is very useful for unpacking the present food insecurity issues and conceptualising solutions to these issues.

Although I have made progress developing my revised account of the relationship between regulation and accumulation in agriculture, there are continuing limitations to my framework. Within the scope of this thesis completely fleshing out the interwoven and yet distinct nature of the concepts was beyond my reach. I have struggled towards designing a new production and consumption system that conceptually I have lost the terminology to discuss due to gaps in the French Regulation School (FRS). The FRS concept of the technology paradigm is critical in this context (although in the agricultural sector I call this 'agricultural system'). However, the technology paradigm concept encompasses complexities that have

not been fully theorised. This concept needs to be extended such that it more clearly relates to substantive practice, to discuss production and consumption elements and the exchange and distribution elements of consumption. In the agricultural sector I attempt to extend this concept in this way and more clearly elucidate the relationship between the agricultural system and accumulation and regulation. However, this is an on-going project and my conceptual framework should be considered a work in progress.

Further restricting my conceptual integration has been the multi-level research agenda I pursued. I have taken a theoretically informed approach that is grounded in a sense of the big picture and an associated political agenda, and yet goes all the way down to the very micro-level of empirical field research.

I draw on the concept and movement of food sovereignty as part of the solution to food insecurity issues. Food sovereignty is a counter-movement to what I call, following McMichael (2009a, 2009b) with revision, the corporate food regime. Food sovereignty is an inclusive movement that challenges the dominant agricultural system. The latter can be characterised by mono cultural production and intensive chemical inputs, an emphasis on high yields, fossil fuel dependency and export-orientation and is large scale and global in terms of both production chains and consumer markets. Food sovereignty also embodies a wider critique of the corporate food regime pointing out that it deepens inequalities, encourages intense global competition, and is proving destructive for the environment and peoples' livelihoods alike.

The corporate food regime can be thought of as equivalent to the neoliberal model of development in agriculture, and yet it remains distinct from it because the food regime includes, yet is still distinct from, the prevailing model of development. The latter which over time transforms the pre-existing regulatory framework of the food regime. The current food regime undermines food sovereignty and I put forward the argument that a new food regime should be premised on food sovereignty. Thus food sovereignty provides not just a critique of the current era but also content for the solution of the problems.

Thesis structure

In chapter one I begin with the theoretical underpinnings of my research which doubles as my literature review. I consider a project which the Left could champion to challenge the neoliberal project (which emerges in agriculture as the corporate food regime). My thesis has its theoretical origins in the FRS and neo-Marxism, however I follow Neilson's (2012; Neilson & Stubbs, 2016) ongoing third generation revision of the FRS, in particular his important reconsideration (and continuing development) of the concept 'model of development'. I also invest in, albeit extend and revise, the work done by Friedmann and McMichael (Friedmann, 1987; Friedmann & McMichael, 1989; McMichael, 2009a, 2009b), who too draw on the FRS in the origins of the concept 'food regime'. Using these two concepts I analyse the current era and substantiate the analysis with my definition of an 'agricultural system'.

In this chapter I also offer a discussion on the characteristics and effects of the dominant agricultural system which helps to demonstrate the flaws of the corporate food regime and how it causes both social and environmental destruction. After problematising the current era of the corporate food regime, that began around the 1980s, I turn to a brief discussion of the counter-hegemonic struggle based on the new peasant movements that emerged out of Mexico in the early 90s and the project and practice of food sovereignty. I am interested in attempts to address food insecurity issues employed by this movement and in the political power of food that is explicitly demonstrated in the food sovereignty movement.

In chapter two I narrow my focus. Whilst in chapter one I discuss the dominant agricultural system in its global sense, in chapter two I investigate how this plays out in a specific nation – Italy. I chose Italy because of the emerging agricultural system that is developing there and my accessibility to field sites and participants. Chapter two gives a summation of the historical development of agriculture in Italy which provides important context for understanding the nature of agricultural systems in Italy today. I also offer a brief discussion of the role the EU has in how the dominant agricultural system plays out in Italy. This differs in important ways from the more complete roll out experienced in other countries.

In chapter three and four I hone down further, from the global, to the national, and investigate the local. Chapter three begins with an outline of my field research methodology and details the research I did in Rome in April 2016 investigating an emerging agricultural system. This emerging system is ubiquitous throughout Italy, though my own research concentrates on one experience in Rome. This emerging agricultural system is part of a complex patchwork of agricultural systems. Multiple agricultural systems co-evolve and struggle with each other, the forms of which are unfinished and evolving. The chapter focusses on the consumption element of the emerging agricultural system and my findings of the consumer group, the Gruppi di Acquisto Solidale (Solidarity Purchasing Groups or GAS), specifically GAS Testaccio Meticcio. I also briefly delve into general consumption patterns in Italy to give some comparative context to the alternative practices in this particular emerging agricultural system.

In chapter four I discuss the production element of the emerging agricultural system I investigated in Rome. Here I detail my findings from visits made with three local producers that supply GAS Testaccio Meticcio. The chapter concludes with a brief discussion of the general production practices in Italy.

In chapter five I investigate the nature of the emerging agricultural system that was the subject of my field research. I consider how different this emerging agricultural system is from the globally dominant agricultural system, and consider what can be implied from this emerging agricultural system. Finally, I begin to think about whether this type of agricultural system could conceivably become the dominant agricultural system. For an agricultural system premised on food sovereignty (like the one I looked at in Rome) to become the dominant agricultural system I discuss two things. Firstly, I problematize its applicability to nations different from Italy, as this agricultural system is emerging in a uniquely Italian context. Secondly, I also argue that we need to conceive of an alternative food regime that would set the regulatory parameters which would directly regulate and facilitate the construction of localised, sustainable and more socially just agricultural systems. A food regime that directly facilitates the construction of agricultural systems based on food sovereignty would enable such agricultural systems to become the dominant agricultural system around the world.

I conclude with, I fear, more research goals than I began with. However, I have begun an in-depth investigation into an alternative agricultural system which offers many potentialities for remedying flaws of the dominant agricultural system. From the emerging agricultural system in Rome, we can learn a lot that can help us to think about a new dominant agricultural system that champions food sovereignty which can form a central element of a new local template of a model of development. This in turn aids in a discussion of a new food regime that facilitates place-based variations of a localised and socially and environmentally sustainable agricultural system to flourish around the world.

As a brief note I want to point out that to theorise is not to remain in the ivory tower of academia as long as theorising then informs practice, i.e. to engage in praxis. Theory and practice are inextricably linked. It is the theory that provides the end ideal, gives purpose and design to human activity. Of course there is always a tension between what emerges in practice and the ideal that drove that practice. Nevertheless, this imaginary preconception is incredibly important in the ongoing dialect that occurs as we attempt to understand the world and then change the world. People around the world everyday are engaging in food consumption and production practices that, consciously or not, resist the dominant agricultural system. I hope to offer a fair description of the everyday practices I investigated and offer some theory that might help those on the ground to take up different food practices to, in their turn, harness the political power of food to challenge the corporate food regime and instigate change for themselves, or others, stripped of food sovereignty. But I also hope this work-in-progress theory will be employed in practice by global governance bodies and nations around the world to facilitate the flourishing of food sovereignty as the power of capital is restrained and power is returned to the local.

CHAPTER ONE

The three 'Fs'; French Regulation School, Food regime and Food sovereignty

Introduction

The Left has yet to develop a practical project the likes of which will challenge the neoliberal model of development. I argue that, in part, the absence of such a project is due to conceptual limitations in key schools of thought that inform the action of the Left. Praxis becomes difficult when the theory informing the practice is limited. Key concepts need to be revised in order to fully understand past, present and, crucially, future eras. The revision of key concepts is also needed to develop a project with which to confront the neoliberal project. The concepts which I argue are crucial to achieving this purpose and are in need of revision are 'model of development' (Aglietta 1979, 1998a; Boyer 2002; Boyer and Saillard 2002; Lipietz 1988a, 1988b) and 'food regime' (Friedmann, 1987, 1993; McMichael, 2005; 2009a; 2009b). I begin by outlining the standard accounts of these concepts which I argue are limited in scope and cannot account for the current era and yet are useful tools. Both of these concepts have their conceptual origins in the FRS (Aglietta 1979, 1998a; Boyer 2002; Boyer and Saillard 2002; Lipietz 1988a, 1988b). These concepts, when revised and supplemented with the concept I call 'agricultural system', help to elucidate a deeper understanding of the current era which in turn provides space to begin thinking about how to usher in a new era.

I then give my account of these concepts by attempting to develop a conceptual framework based on Neilson's revision of 'model of development' (Neilson, 2012; Neilson & Stubbs, 2016), my revision of 'food regime', and the newly defined concept 'agricultural system'. These three concepts are synthesised in a framework that can be used to flesh out an understanding of the current era; in particular, the current food insecurity issues around the world. Furthermore, the conceptual framework can be employed to conceptualise what a new era might look like, thus it not only provides the tools to critique the current era, but provide solutions for the next.

I then apply my revised conceptual framework to the current era. I argue that this era, following Neilson, is not 'out of regulation' but rather is characterised as a model of development, specifically, the neoliberal model of development. That is, the current era is still characterised by a regulatory project which generates an accumulation configuration. Though not stable or coherent, which is essential to the standard understanding, it is still treated as a model of development. Similarly, though not stable or coherent, i.e. 'in regime' in the standard sense, there is still a regulatory project linked with an accumulation configuration that characterises the agricultural sector. Thus, following McMichael, albeit with some extension to move away from the standard account outlined, I also argue that this era, in the agricultural sector, is 'in regime' – the corporate food regime.

It is important to realise that when I state 'in regime' I am not referring to the orthodox FRS understanding of what this means. Standardly, when the texts are *clear*, a stable accumulation regime implies a stable mode of regulation, the coupling of which is defined as a model of development. Following Neilson revisions are made to this orthodox understanding anyway, but it is on this orthodox understanding that the current conceptualisations of the concept 'food regime' are based. Thus, I revise Friedmann and McMichael's concept of a food regime in order to clarify the essential elements of a food regime, and also define its relationship with a model of development more clearly. Paying homage to Friedmann and McMichael, I argue that indeed the food regime remains the umbrella concept but that its regulatory, accumulation, and agro-food complex (in FRS terminology, technological paradigm) aspects must be clearly fleshed out. In the process of delineating the three aspects of the 'food regime' concept it becomes clear that this concept is in fact a version of the 'model of development' concept. The lack of clarity in the conceptual framework used by Friedmann and others is inherited from FRS ambiguities, so my revision of 'food regime' is implicitly acknowledging some of Neilson's (2012; Neilson & Stubbs, 2016) critique of the FRS orthodox understanding of 'in regulation' and 'in regime'.

I also draw attention to key limitations in the FRS approach regarding the insufficient theorisation of the relationship between the technology paradigm and regulation and accumulation. I am afraid I inherit some of this insufficient theorisation when I begin to talk about the emergent agricultural systems in the

current era and their relationship to the model of development. Finally, I flesh out the characteristics and effects of the currently dominant agricultural system, the nature of which is impacted, though not defined, by the prevailing food regime.

The chapter finishes by introducing the counter-hegemonic struggle based on the new peasant movements and the discourse of food sovereignty. I am interested in attempts to address food insecurity issues following the food sovereignty pathway. Food insecurity, and the related rise of the new peasant movements are direct outcomes of the unfolding of the neoliberal model of development and model of development in agriculture.

The standard account of 'model of development'

The core discovery of FRS thought is the concept 'regulation' that counteracts the core logic and relations of capitalism which are fundamentally unstable (Aglietta, 1979; Lipietz, 1986a). Regulation is thus thought of as a counterforce, the weapon of democracy and the means by which to harmonise social progress with stable accumulation.

A 'model of development', in this school of thought, is the coupling of 'mode of regulation' and 'regime of accumulation'. Here is an example of a model of development based on the standard FRS definition of regulation – "the Fordist era is defined as a model of development because modes of regulation across the advanced capitalist countries offset or counteracted capitalism's generic tendency towards economic and social instability, instead promoting stable accumulation and social progress for about a generation" (Neilson & Stubbs, 2016, p. 125).

Boyer's second generation thought goes on to deem the current era as 'out of regulation', i.e. lacking a model of development (Neilson & Stubbs, 2016). Boyer's argument is centrally premised on the definition of regulation as a counter-active force. The Fordist era could be defined as a model of development because regulation was counteractive. However, Boyer suggests that because regulation is not counteractive in this era, thus implying the absence of a stable coherent accumulation pattern, we are without a model of development (Neilson & Stubbs, 2016).

A final point to note about the standard FRS account is the argument that the Fordist model of development – understood as a stable international configuration

of these 'in-regulation' national accumulation regimes – was not consciously planned or pursued. Rather, it arose as the contingent effect of processes and struggles as a kind of 'chance discovery' that enabled the coupling of accumulation and social progress for a generation.

Problems with, and revision of, the standard account of 'model of development'

There are four issues with the first and second generation FRS approach that inhibit my investigation of the revised relationship between accumulation and regulation in agriculture. The first is that the approach is constrained in its methodological nationalism. The site of regulation is only conceived as being the nation state and the role of transnational actors in constructing a model of development is absent. The transnational environment created by the implementation of the Fordist national template, that was outlined by Keynes at Bretton Woods in 1944, put pressure on the nation state to remain committed to the Fordist project. In something of a dialectic the widespread institutionalisation of the national template intentionally generates a transnational environment which in turn reinforces the national template. Neilson moves beyond the methodological nationalism constraining thinkers of previous generations of the FRS to understand the model of development as a national transnational regulatory nexus (Neilson, 2012).

The second issue with the FRS approach is that a model of development is only argued to apply when it adopts counter-active regulation, i.e. the Fordist model of development that actively weighed down capitalism by counteracting some of the core logics and relations of capitalism. Thus the argument goes, the current era is 'out of regulation'. The current era is without a model of development because counteractive regulation is not the prevailing norm. Neilson challenges Boyer's second generation analyses, arguing that indeed a model of development may adopt counteractive regulation *however it can also adopt proactive regulation* (Neilson & Stubbs, 2016); regulation that encourages and exacerbates the core logics and relations of capitalism, which though unstable in its consequences is still regulation. In practice, the template is adopted more or less and therefore nation states with the power to do so may adopt some mix of counteractive and

proactive regulation (Neilson & Stubbs, 2016). Regardless of whether the mode of regulation exacerbates or, as the FRS would say, stabilises, the core logic of capitalism, i.e. employs pro-active or counter-active regulation or some combination of the two, the economic base should always be considered overdetermined (Neilson, 2012; Neilson & Stubbs, 2016). This argument leads us to a position where we can say that we are currently experiencing a model of development – one that proactively stimulates capitalism, driven by the neoliberal project to form a global market civilisation that is safe for capital and results in neoliberal globalisation (Neilson & Stubbs, 2016).

The third issue stems from the FRS argument that the Fordist model of development was a 'chance discovery', the product of contingent struggles. Neilson's revision brings *agency* into the equation, in particular that of Keynes who invested in the design and implementation of the Fordist model of development. Recognising the conscious and intentional will responsible for that generation of growth and social progress challenges the idea that the Fordist model of development was a chance discovery. Furthermore, acknowledging the conscious design and intentional implementation of a model of development importantly enables us to begin thinking, consciously and deliberately, about the design and implementation of a new alternative model of development.

The final issue that limits my investigation is that the FRS has not adequately theorised the relationship between what they would call the technological paradigm (and in agriculture I call the 'agricultural system') and regulation and accumulation, or 'model of development'. This lack of theorisation is problematic for me given that my research devolves down to the substantive reality of agricultural systems. Regulation only indirectly constructs the agricultural system, the emergence of which is influenced by technological developments too. Thus, whilst I argue that the 'model of development', and the 'model of development in agriculture' have very important effects on the nature of emergent agricultural systems, and the dominant agricultural system, they are not simply the sole determinants. Furthermore, agricultural systems have pre-existing forms that do not simply change because of the model of development. Nevertheless, the model of development and model of development in agriculture are central to the nature of emergent agricultural systems. For example, the logic of competition that is

unleashed by the neoliberal model of development puts constraints on how agricultural systems can evolve.

Thus, I put forward a tentative argument that whilst the model of development and model of development in agriculture, linked in the food regime, set the regulatory parameters within which agricultural systems emerge, agricultural systems should not be thought of as simply an effect of this regulatory constraint (i.e. of the food regime). That is, at least in the current and previous eras, agricultural systems have not been directly regulated by the food regime. I argue later that a new food regime should more directly regulate and facilitate the construction of agricultural systems of a particular nature.

The standard account of 'food regime'

The concept 'food regime' has its conceptual origin in the FRS of the 1980s (Atkins & Bowler, 2001). However, within this school the concepts 'regime of accumulation' (and related concept 'technological paradigm') and 'mode of regulation' were not applied specifically to a particular sector. The concept 'food regime' addresses this deficit in the agriculture sector. Atkins and Bowler (2001) discuss how the concept of a food regime is used to identify three historical periods similar to those identified within the FRS; pre-World War I, the 1940s-1970s, and from the 1980s to the present. Recognising these periods using the food regime concept enables one to identify distinct periods of capitalist accumulation within agriculture.

McMichael's (2009a) concept of a 'food regime' demarcates "stable periodic arrangements in the production and circulation of food on a world scale, associated with various forms of hegemony in the world economy: British, American, and corporate/neoliberal" (p. 281). The concept is less about food and more "about the relations within which food is produced, and through which capitalism is produced and reproduced" (McMichael, 2009a, p. 281). It is about situating "the world food system and its crisis within a broader historical understanding of geo-political and ecological conditions" (McMichael, 2009b, p. 139).

Friedmann in her turn discusses the food regime concept as unifying two concepts: 'agro-food complex' and 'regime of accumulation' (Friedmann, 1987).

The agro-food complex is a concept that traces "the changing products, as well as the activities and industries associated with them, which together have defined diets and food production over the past century" (Friedmann, 1987, p. 251). The regime of accumulation is again employed following an orthodox FRS approach.

McMichael (2009b) identifies the first food regime as occurring between 1870 and the 1930s. This was based on British colonial power through which Britain outsourced basic food production to its settled colonies, encouraging monocultural production in these states. Similarly, Friedmann (1987) identifies the first food regime from 1870-1914 which is suggested to have provisioned an expanding working class in Europe and European settlements and markedly increased the amount of basic foodstuffs on the market.

The second food regime, occurring between the 1950s and 70s was based on the power of the United States in its war against communism. It was characterised by surplus food being sent from the United States to postcolonial states that were positioned in strategic areas in terms of the Cold War in a bid to develop loyalties against communism. This shifting of food surplus given as 'food aid' not only undermined local agricultural systems, supported urban labour and encouraged industrialisation, but it also subversively iterated the power relations of the time (McMichael, 2009b). Friedmann (1987) puts forward that the second food regime, for which she gives similar dates to McMichael, was substantially different in the advanced capitalist countries in comparison to the underdeveloped regions. Using FRS terminology Friedmann argues the food regime was intensive in the advanced capitalist countries, which led to standardised and highly processed foodstuffs, and extensive in the underdeveloped regions, causing displacement and commodification of traditional food stuffs.

Also in this second food regime McMichael (2009b) states that so called 'development states' began to internalise "the model of national agroindustrialisation, adopting Green Revolution technologies, and instituting land reform to dampen peasant unrest and extend market relations into the countryside" (p. 141). This move by development states reflects the political push to expand capitalist markets as the legitimate driver of growth within the nation. Thus the expansion of agribusiness began to occur in the third world. At the same time agribusiness began to develop links between specialised agricultures of

different sectors in different nation states; developing global supply chains. And so emerged a new global division of labour around agriculture (McMichael, 2009b).

The current, or most recent, food regime is described by McMichael (2005, 2009b) as the 'corporate food regime', beginning in the late 1980s. McMichael (2009b) argues that the corporate food regime is based on the neoliberal world order. Not all writers in the field agree with McMichael. There is ongoing debate about whether there is currently a fully developed food regime, or simply remnants from the previous food regime. Friedmann is one of those who disagree with McMichael. Friedmann (1987) suggests that what we have are the remains of the previous food regime, which in the underdeveloped world is "the destruction of the peasantry as a viable social and economic structure and the accompanying growth of impoverished rural and urban populations" (p. 253) and disorder in international trade because of heightened export competition.

On the one hand we have the standard account given by Friedmann who argues that we are without a food regime, and on the other we have a secondary standard account given by McMichael, who departs from Friedmann. McMichael (2005, 2009b) suggests that indeed we are experiencing a food regime which began in the 1980s. He suggests that, what he calls the neoliberal world order, rests on

A 'corporate food regime', containing atavisms of the previous regime, and organised around a politically constructed division of agricultural labour between Northern staple grains traded for Southern high-value products (meats, fruits and vegetables). The free trade rhetoric associated with the global rule (through states) of the World Trade Organisation suggests that this ordering represents the blossoming of a free trade regime, and yet the implicit rules (regarding agro-exporting) preserve farm subsidies for the Northern powers alone, while Southern states have been forced to reduce agricultural protections and import staple, and export high-value, foods (McMichael, 2009b, p. 148).

McMichael (2009b) suggests that this food regime has furthered the processes that began in the previous food regime. He argues that each food regime has embedded global food circuits deeper into the system of agriculture.

Friedmann and McMichael (1989) argue that in previous food regimes, the dominance of Britain, and subsequently the United States underpinned particular eras of capitalism and encouraged the development of a division of labour in agriculture and an uneven divide between the Global North and the Global South. The rules governing the production and distribution of food were utterly skewed in favour of the North (McMichael, 2009b). McMichael (1992, 2005, 2009b), in his description of the current corporate food regime, describes a continuation and exacerbation of that northern bias and uneven divide.

Both standard accounts of the 'food regime' concept are problematic, though I much more closely follow McMichael whose work has proved foundational. Nevertheless, I think the spirit of both can deliver a very useful tool for thinking about the nature of food insecurity issues in this era and solving these issues in the conceptualisation of a new era, and this is why in my revision of the concept I do my best to maintain the best of the accounts presently offered. First and foremost, I disagree with Friedmann who argues that the current era is without a food regime. This disagreement forms part of my extension of the concept 'food regime'. And while I strongly agree with McMichael as far as arguing for the existence of a food regime, my extension of his account of the concept attempts to address some of the issues with the present conceptualisation that relate to the conceptual ambiguities inherited from the FRS.

Problems with, and revision of, the standard account of 'food regime'

The conceptual origins of the 'food regime' concept clearly arise from the FRS. However, the concept similarly suffers from the blurring of 'regime of accumulation' and 'model of development', as occurs in the FRS generally. McMichael (2009a) defines 'food regime' as comprising regulatory and accumulation aspects that demarcate a particular stable and bounded period of economic development within agriculture on a world scale. I argue that this definition presently offered is for the most part equivalent to the FRS view which sees the coupling of the regime of accumulation and mode of regulation as the model of development. The lack of conceptual clarity in FRS that blurs regime of accumulation and model of development is no doubt responsible for the

subsequent blurring found in the standard conceptualisations of 'food regime'. In my revision of the concept I draw attention to the conceptual similarities between 'food regime' and 'model of development', currently absent from theorisation by Friedmann and McMichael, but also attempt to elucidate that while roughly equivalent, there is an important distinction to be made.

A further point is that the standard account of 'food regime' blurs together regulation and accumulation and the agro-food complex (what I call the agicultural system). I attempt to more clearly delineate the agricultural system (that replaces agro food complex) from the regulation/accumulation coupling (i.e. the model of development).

I argue that 'food regime' encompasses two main separate conceptual levels, the 'model of development' and the 'model of development in agriculture'. A model of development consists of regulation, accumulation, and in the FRS approach a 'technological paradigm'. Similarly, the model of development in agriculture consists of regulation, accumulation and the 'agro-food complex'. 'Food regime' links 'model of development' and 'model of development in agriculture' but remains distinct from both because it is not simply equivalent to either one, each which has its own logic and characteristics. More exactly, a 'food regime' refers to what I am calling a 'model of development in agriculture', that has a distinct regulatory framework, accumulation pattern, and underlying organisational forms, including changing technologies, of production and consumption. However, a 'food regime' also includes, yet is still distinct from, the prevailing model of development. That is, the latter's regulatory framework is over time, and both trans-nationally and then to its varying national forms, more or less transferred into, and thus transforming of, the pre-existing food regime's regulatory framework. This fusion that occurs unevenly across different nation states defines the terrain on which changing forms of production and consumption operating both trans-nationally and nationally interact and evolve; and out of which emerge patterns of accumulation.

Just as some argue that the current era is 'out of regulation' Friedmann (1987) argues that we are without a regime, experiencing left-overs from the previous regime or are in transition to a new one. For Friedmann the concept of a food regime involves stability of relations with "unstable periods in between shaped

by political contests over a new way forward" (as cited in McMichael, 2009b, p. 143). This concern with stability clearly harks back to the FRS origins of the concept in which regulation is the core causal concept, i.e., that counters the unstable logic of capitalism, and leads to stable and coherent accumulation. Thus, the argument goes, the current era is out of regulation/out of regime, and without a model of development, because there is no stable or coherent mode of regulation, thus implying no stable accumulation regime and thus also, no model of development. I argue that instability is not however, sufficient to deem an era out of regime or out of regulation.

I argue that *if* we are in a period of unstable transition into a new food regime it is not into a third regime as Friedmann would argue, but into a fourth; it is signalling the end of the corporate food regime (and thus the neoliberal model of development and model of development in agriculture), a food regime that I argue Friedmann misses. I suggest that we are either in an unstable period of transition as neoliberalism falls and a new regime begins, or Friedmann and others need to shake off the trappings of early FRS thinking. By this I mean it needs to be considered that though unstable and crisis-ridden, there still exists regulation (proactive) in the current era but this does not mean 'in regulation' (in the orthodox sense). Furthermore, to consider that there is still an accumulation 'configuration' though not stable and coherent, so not 'in-regime' in the orthodox sense either, but nevertheless, 'in regulation' and 'in regime'.

What Friedmann (1987) argues are leftovers from the previous regime, namely the unviability of the peasantry and hyper competition, are, I argue, core effects of the current food regime, that is fundamentally distinct from the previous one. The point is that Friedmann follows first generation FRS thinking that suggests there are periods of stability, defined by a mode of regulation (a complementary institutional configuration that counteracts unstable and socially regressive capitalist relations and logic) with a regime of accumulation, (i.e. a 'stable and coherent accumulation configuration'), interspersed with unstable periods. But I argue that these periods of instability are not equal to being 'out of regulation', and that that is what Friedmann and the FRS miss and why they argue that we are without a food regime and without a model of development, respectively.

To the contrary, following McMichael (though extending on his account as I attempt to clarify some of the ambiguity around the concept), I argue that we are indeed experiencing a food regime – the corporate food regime. This focuses on, in McMichael's (2009b) terms "the reconstitution of the state system to support a unified global market" (p. 149), which is basically compatible with Neilson's (2012; Neilson & Stubbs, 2016) concept of the neoliberal model of development.

While I agree with McMichael that there is a current food regime, I develop his advance on Friedmann's argument. Firstly, his argument about the subsidies preserving the Northern powers alone, while indeed important and problematic, is a secondary truth. The first point that needs to be made about the current food regime is that of hyper competition that has caused the more powerful countries to employ regulatory tools like subsidies to preserve their competitive advantage. The current food regime is about more than just intensifying patterns of previous food regimes, and needs to be about more than identifying atavisms of the previous food regime. Free trade, whilst inherently less free than neoliberal rhetoric purports, really does define the current era, even without those subsidies.

The key point is global competition. Neoliberal globalisation has fundamentally changed the nature of the uneven divide between the Global North and South. Drawing on my own field research I identified how those subsidises protected small scale Italian producers. Pursuing protectionist policies such as subsidies rather than liberalising policies should be a model for small scale farmers in the Global South. But given the lack of choice countries in the Global South face (as they are compelled to adopt the neoliberal national template in agriculture) flexible adoption of mixes of counteractive and proactive regulation is nigh impossible. And thus, protections are removed and the peasant sector is opened directly to competition from the industrial agriculture of the North. The point is that global competition implies direct competition between industrialised and non-industrialised countries and the Global South is squeezed much more explicitly in the present food regime as a result of that competition.

Thus, the new food regime is not just a continuation of previous regimes. In the previous era a large part of the Global South was protected, which in this era is now directly competing with the Global North. For example, can Southern farmers continue growing vegetables viably? No, because they are out competed

by industrial producers producing the same products but in the methods of the dominant agricultural system which involves large scale industrialised production which is fundamentally more competitive. Thus, I depart from McMichael's account of 'food regime' in order to acknowledge that the present food regime is qualitatively different from previous food regimes and this is because of the neoliberal model of development transforming the nature of the model of development in agriculture to pursue a global civilisation that is safe for capital.

Conceptually, the space to make the articulation between 'food regime' and 'model of development' is there in the language of the standard account. One of Friedmann's most basic expressions of a food regime is "a 'rule-governed structure of production and consumption of food on a world scale'" (as cited in McMichael, 2009b, p. 142). Using standard FRS concepts this 'rule-governed structure' refers to regulation and the 'production and consumption of food' is referring to a regime of accumulation. In clearer texts of the FRS the coupling is defined as a model of development. This is the step that is missed in current conceptualisations of food regime.

Friedmann (1993) also discusses how "the rules defining the food regime gave priority to national regulation, and authorized both import controls and export subsidies necessary to manage national farm programmes" (p. 31). The food regime defined in this quote refers to the era I would say is characterised by the Fordist model of development. I would argue that the 'rules' governing the food regime emerged from the linkage between the Fordist model of development, and the Fordist model of development in agriculture, which are encompassed in the food regime. Further to this, Friedmann also suggests that "international order must depend on complementary national policies...[and that] The international order may be explicit, as in the Bretton Woods monetary arrangements" (Friedmann, 1982, p. 252). The model of development concept allows us explain both where the ideal typical national template and policies come from, on which this 'international order' depends, and why the international order depends on complementary national policies.

My final attempt at extending the concept 'food regime' draws on Friedmann's (1993) suggestion that "transnational agrofood corporations have now outgrown the regime that spawned them" (p. 52). Because of inherited limitations from the

FRS Friedmann cannot use the 'food regime' concept to analyse the current era. On the other hand I argue that the new regime deliberately encourages the growth in power and mobility of transnational corporations, and that this is why they outgrew the previous regime, because we are experiencing a new food regime fundamentally different from those before.

Friedmann (1993) argues that no rules have yet achieved a stabilisation. I am attempting to argue that even though unstable and crisis-ridden a mode of regulation and therefore a regime of accumulation exists, and in turn a model of development, albeit incoherent and unstable. Thus, I argue, the food regime is essentially equivalent to the model of development in agriculture, which enables me to more clearly delineate the three aspects and clearly distinguish the agricultural system from the regulation/accumulation coupling, i.e. the model of development. Though, to reiterate, the food regime nevertheless remains distinct from the model of development in agriculture because it also encompasses the model of development; the regulatory framework of which transforms the regulatory framework of the food regime.

The conceptual framework

The three concepts which form the basis of the conceptual framework developed here, which informs my investigation, are 'model of development', 'food regime' and 'agricultural system'. These concepts intersect and overlap in important ways. This conceptual framework informs empirical analysis of the current era, which in turn helps to investigate alternatives. Before developing a specific revised account of the relationship between regulation and accumulation in the agricultural sector it is necessary to provide brief definitions.

A 'model of development' is defined here as a consciously developed and intentionally implemented regulatory blueprint for the national level which, when widely adopted around the world, engenders a particular transnational regulatory environment, that in turn defines the limits and possibilities of national development (Neilson, 2012; Neilson & Stubbs, 2016).

'Food regime', extending on the best spirit of McMichael, is defined as encompassing two main separate conceptual levels, 'model of development' and 'model of development in agriculture'. 'Food regime' remains distinct from both

'model of development' and 'model of development in agriculture', each which has its own logic and characteristics. A 'food regime' refers essentially to what I am calling a 'model of development in agriculture', however, it also includes, yet is still distinct from, the prevailing model of development which is more or less transferred into, and thus transforming of, the pre-existing food regime's regulatory framework.

An 'agricultural system', drawing both on Marx's concept of a mode of production, as the economic base, the FRS's concept of an accumulation regime and technology paradigm, refers initially to how people produce their food. Production is inherently connected to distribution, investment and consumption elements which together define a process of social reproduction that defines an agricultural system. The accumulation regime, or what I call, the 'agricultural system', is distinct from but integrally related to its mode of regulation, the model of development and the model of development in agriculture, two conceptual regulatory levels linked by the food regime concept.

The agricultural system is a basic economic concept, returning to Marx's concept of the economic base. The conceptual framework I am attempting to develop here needs to be subtle to account for the complexity of the real world. An agricultural system, much like the capitalist mode of production as the economic base, is more like an 'ideal typical form'. Agricultural systems exist more or less fully formed and often in co-existence with competing or different agricultural systems and practices. The uneven fusion of the model of development's regulatory framework into the food regime's pre-existing framework across different nation states accounts for the complexity of agricultural systems and changing forms of production and consumption as they interact and evolve.

I am attempting to refine 'model of development', 'food regime' and 'agricultural system' and articulate them together to provide a revised reading of McMichael's account of the corporate food regime that incorporates Neilson's (2012; Neilson & Stubbs, 2016) third generation regulation theory of model of development. This conceptual framework provides a mid-range understanding of the current era that encourages consideration of alternative mid-range counter-hegemonic projects, i.e. an alternative model of development in agriculture, an alternative model of

development, and consequentially a new food regime; and further new possibilities for agricultural systems.

Defining the current era as neoliberal led global capitalism

With my conceptual framework in mind, I now want to turn to a discussion of the effect of the model of development, generally, in our era. The implementation of the model of development is inextricably linked to the current food regime which has decisive, though not all defining, impacts on emergent agricultural systems.

Capitalism in practice manifests in different forms. The way we are experiencing it today is competitive and globalised as an effect of implementing the neoliberal model of development, the mid-range regulatory project. This is an argument which defies economic determinism in as much as it is denying that economies and societies are simply reducible to the economic base, but rather argues that this is overdetermined by the political and ideological superstructure. Although it can be acknowledged that in a capitalist society the economic base is utterly central to the nature of society, its specific form is dependent on the prevailing model of development.

The current neoliberal model of development proactively regulates capitalism, stimulating a particular national and international environment as capital is unleashed from the bounds of the nation state to assume global mobility and with it, global power (Neilson, 2012). This can be described as neoliberal globalisation. The neoliberal model of development can be contrasted with the Fordist model of development of the previous era that counteracted the transnational dimension of capitalism by constraining capitals' movement between nation states.

The neoliberal model of development should be distinguished from the neoliberal project, and from the institutionalisation of the model, whilst noting that these three elements are neither complete nor entirely exclusive. The neoliberal project began in the 1930s as a vision for a global market civilisation that affirmed the power of capital and the importance of global markets. The project developed through the 50s and 60s becoming more explicitly an ideology that in the 70s, at the crisis point in Fordism, directly critiqued Keynesianism. The Washington Consensus crystallised the efforts of neoliberal think tanks which had spent the Fordist era attempting to overcome the Keynesian weight on capitalism. Thus in

the 80s, via the Washington Consensus, the project, cum ideology, emerged within a national template, which via its widespread implementation, was designed to create a global market civilisation, the original vision of the neoliberal project.

Nation states have adopted this national template more or less. The inexact adoption by many nation states, whether voluntarily or coercively, has institutionalised the neoliberal model of development. A pattern of global accumulation is facilitated by this institutionalisation, i.e. what is often called neoliberal globalisation. However, note that neither the neoliberal project, nor the institutionalisation of the model of development is complete. Nations states in diverse circumstances adopt the template more or less depending on the choices they can make. These choices depend on the state of their economy and their position in the uneven development of capitalism which enables them lesser or greater flexibility to bend the template. For example, some nation states with the power to do so choose to favour domestic capital over global capital.

Once nation states adopt the basic national template, which includes privatisation, liberalisation and deregulation, they become subject to consequential trends which the template engenders. One of the characteristic trends of this era, that is of particular relevance to food insecurity issues, is intensifying competition. Competitiveness, as an imperative engendered through the widespread adoption of this template, has become the priority, not solely for capital, but also for nations and within those bounds, domestic firms and individuals in the workforce. This new imperative arose as nations became exposed to global market forces through trade and financial liberalisation that form fundamental elements of the external component of the proactive regulation of the neoliberal template (Neilson & Stubbs, 2016). Local firms and individuals are increasingly subordinated to global capital through, not only the effects of the external component, i.e. exposure to global market forces, but also through the domestic component of the template. The domestic component fundamentally includes privatisation and replaces "social protections for labour with reforms that flexibilize and subordinate labour to capital's requirements" (Neilson & Stubbs, 2016, p. 127).

As more and more nations adopt the national template competition globalises and intensifies. In order to maintain viability nation states must compete to facilitate

capitals' competitiveness. Nation states have more or less power to operate as effective and successful competition states (Neilson & Stubbs, 2016). Cerny's (2010) argument reinforces the importance of the state in generating the competitive playing field. Cerny (2010) suggests that "the state still has a major national yet paradoxical role to play – to expose the domestic to the transnational in order to ensure that citizens keep up with the multiple pressures and demands of that increasingly interpenetrated political, economic and social ecosystem" (p. 5). This exposure comes from adopting the national template of the neoliberal model of development. Thus Cerny (2010) argues that "the rationality or 'reason of state' - raison d' Etat - is... being superseded by a transnationalising, globalising rationality that I call raison du Monde, or 'reason of the world'" (p. 6). Capitalism is a system which begins with the dispossession of the peasantry, as the changing forms and relations of production make the agricultural subsistence production system redundant; forcing the peasantry off the land. While some of these redundant peasantry stay, suffering an increasingly precarious existence, some find their way into the city. Waged workers are created in this process, but also a surplus of desperate workers. Only a scant few find employment, most end up as part of the 'relative surplus population' (Neilson & Stubbs, 2011), marginalised, surplus to capital's requirement. Technological and organisational methods are adopted that will increase productivity in order to maintain accumulation. These changes, by increasing the productivity of labour and thus making labour redundant, cause the demand for labour to fall generating a 'relative surplus population'. Thus, through the initial dispossession of the peasantry and the increases in productivity neoliberal led global capitalism increases the number of people who cannot find work, systematically causing the burgeoning of the relative surplus population, implying a permanent pressure on those employed in the core active army, and reinforcing the imperative of competition.

In sum, let us turn to Serrano and Xhafa (2011) who offer a succinct characterisation of the capitalism we experience today. They suggest that it would be appropriate to say that crises, "uneven development, widespread inequality and poverty, social injustice, democratic deficits, and the breakdown of social cohesion... continue to be the defining features of today's capitalism" (p. 9). It

must be recognised that this era of capitalism has not spontaneously developed as though the beast developed cancer through a chance evolutionary mutation. Rather, this era of capitalism has been proactively stimulated by a regulatory project, the neoliberal model of development, that unleashes the core features of capitalism on a global scale (Neilson, 2012). The Fordist model of development, inspired by Keynes' vision and project, by contrast mitigated the transnational features of capitalism through the employment of counter-active regulation (Neilson & Stubbs, 2016).

In this era, we are experiencing neoliberal led global capitalism, which has created national environments, and by proxy a transnational environment, that while being safe for capital, has become utterly unsafe for individuals, domestic firms and nations that struggle to compete in this global market. Within global market capitalism the imperatives of the global market invade the local and become the priority. It is within this context that a complex patchwork of agricultural practices and systems develop, evolve and are destroyed. Food, the basic staple of life, like most things in the current era, has become increasingly commodified, profiteered and subject to the imperative of competition raised to a global level.

The corporate food regime

While food regimes are, by Friedmann and McMichael's (1989) argument, concerned with the production and distribution of food at a global scale, the current neoliberal model of development truly globalises the production and distribution of food through the deregulation and liberalisation of the national template that results in direct global competition. The incorporation of nearly every nation state into the neoliberal project has meant that the hegemony of the transnational capitalist elite has been felt in nearly all nation states.

While in previous food regimes Friedmann and McMichael argue that Britain maintained its hegemony in its colonised states, and later, the United States in states it strategically influenced in the war against communism, I argue that the power of the transnational capitalist elite, with the aid of various global institutions such as the IMF and World Bank, has been enforced in vastly more nations than the more regionalised nature of the hegemony described in previous regimes. Expanding global markets, liberalised trade and market regulation and

the emergence of a dominant agricultural system which can be characterised by global production flows, have all generated new opportunities for transnational corporations, increasing their global reach and market power. Thus, it can be said that the corporate food regime is fundamentally more globalised that previous food regimes and that this has been directly driven by the neoliberal model of development which over time transforms the pre-existing regulatory framework of the food regime.

From the 1980s onwards the neoliberalisation of nation states was 'encouraged' through the IMF and World Bank structural adjustment programmes. Nations make the decision, which can hardly be called a choice, to open their borders due to a lack of alternative in the pressurised global environment and bankruptcy, "loans would be advanced on the condition that recipient nations agreed to implement an unyielding neoliberal reform programme" (Tickell & Peck, 2003, p. 174). Once nations accept neoliberal reform, i.e. adopt the neoliberal national template, whether coercively or voluntarily, not only is their policy space greatly limited, but the services and support offered for agriculture get utterly reduced concurrently with the liberalising of trade markets (McKeon, 2015). For those states in the Global South, farmers find themselves in a situation where they lack domestic support and face intense competition as the nation's borders are opened to the global markets. Local peasantry is forced to compete with an influx of products coming from industrialised agricultural production of the dominant agricultural system, the production of which is often subsidised in the advanced capitalist countries. Nevertheless, the problem is not the subsidies, the problem is the corporate food regime, free trade and the uneven development of nation states which results in deep inequalities between powerful and powerless actors at all levels.

Neoliberal led global capitalism has provided "an environment for capital...[to] become 'hyper-mobile', freed from the 'tyranny of distance' and no longer tied to 'place'" (Dicken, 2007, p. 18). In this era of hyper capital mobility and autonomy the viability of nation states depends on their capacity to compete to attract capital to their shores, to win 'business confidence' (Kalecki, 1943) and a settling of capital. Within and transcending the borders of these competing nations are firms which also compete against one another. These firms vary in size from family

businesses to transnational corporations. Those corporations with the resources to operate concurrently within different nation states possess a distinct scale advantage and in this way the corporate food regime is undermining localised agricultural practices and systems and with them peoples' food sovereignty. Transnational corporations, empowered by the corporate food regime, increasingly dominate food production and are removing food from the control of small farmers around the world. Furthermore, transnational supermarket chains push out local farmers' markets and alternative food purchasing options as they too are rendered uncompetitive.

The marginalisation of the peasantry was also present in previous food regimes (Friedmann & McMichael, 1989). Peasant producers in developing countries have been subject to the dominance of firstly, the British will over how their agriculture was produced, and secondly, the influence of the United States' patterns of offloading food surplus as food aid. However, in the Fordist era (what Friedmann and McMichael identify as the second food regime) there were massive subsidies and protections for small scale peasant producers. In the current food regime, the liberalisation and deregulation of nation borders exposes peasantry and small scale farmers to the competition of the global market which has radically deepened the lack of control peasant producers have over their livelihoods.

The statistics released from FAO in 2015 suggest that 800 million people in the world live in hunger (Fraser et al., 2016). This is despite the fact that "there are approximately 2850 dietary calories available on the planet per person per day [and] ... approximately 1/3 of the food currently produced globally is wasted before it is consumed" (Fraser et al., 2016, p. 79). The key effect of the corporate food regime is the division between the 'winners' and 'losers', those various actors who navigate the terrain laid out by the corporate food regime successfully or unsuccessfully. Success, in this environment, should be thought of as structurally constrained. Those 800 million people in the world who live in hunger should not be considered unsuccessful, but systematically stunted by a food regime that encourages winners and losers through the imperative of competition; an imperative that is transferred into the pre-existing regulatory framework of the food regime by the neoliberal model of development.

The prevailing corporate food regime in part, though not solely, defines the nature of emergent agricultural systems, in this indirect way the corporate food regime has encouraged a dominant agricultural system that is particular to this era. I now turn to a discussion of the nature of the currently dominant agricultural system.

Characteristics and effects of the currently dominant agricultural system

An agricultural system refers to how people produce, distribute, exchange and consume their food. The neoliberal model of development defines capitalism's regulatory environment and over time alters the pre-existing regulatory framework of the food regime. Thus, the capitalist mode of production, but more specifically the neoliberal model of development, influences, though not directly, nor alone, the nature of the array of agricultural practices and systems that emerge.

When I refer to the dominant agricultural system I am alluding to the convergence towards a dominance of industrialised agricultural systems that are characterised by mono cultural production and chemical inputs, emphasise high yields, are fossil fuel dependent and export-orientated and are large scale and global in terms of both production chains and consumer markets. These characteristics define the dominant agricultural system of our era. Variations of this dominant agricultural system are encouraged by the corporate food regime at the expense of other agricultural systems that are localised and prioritise food sovereignty.

However, in the same way that FRS talk about a mode of regulation as an ideal typical type, that is not exactly present in any country but that inhabits, more or less, different countries; so too I talk about the dominant agricultural system as an ideal typical type, that more or less inhabits different countries as it is globally encouraged through the corporate food regime. Elements of the dominant agricultural system such as chemical and fossil fuel dependency, the innovation of the supermarket, homogenisation of crops, large scale production and export orientation make up this ideal typical type that are adapted more or less in different countries. Such elements of the dominant agricultural system are directly challenged by counter hegemonic projects and agricultural practices and systems that resist the dominant agricultural system with counter concepts.

Agricultural systems exist more or less fully formed and often in co-existence with competing or different agricultural systems. The uneven fusion of the model of development's regulatory framework into the food regime's pre-existing framework across different nation states accounts for the complexity of agricultural systems and changing forms of production and consumption as they interact and evolve.

Convergence towards this dominant agricultural system is being driven by competition – a direct result of the implementation of the neoliberal model of development. The hyper-competitive global environment puts pressure on agricultural actors to move towards variations of the dominant agricultural system that have the capacity to be globally competitive. At the same time, the increasing prevalence of such variations systematically undermines the livelihoods of small and medium sized farmers.

Further, as Fraser et al. (2016) suggest variations of this dominant industrialised agricultural system can be criticised for negative impacts on the environment. These include decreasing water quality and quantity, issues of animal welfare, and extensive use of energy and chemical inputs. Pretty et al. (as cited in Fraser et al., 2016) also draws attention to the environmental impacts of what I call the dominant agricultural system. They "attempted to calculate the "total cost" of UK agriculture, concluding that drinking water contamination, damaged habitat, soil erosion, and food poisoning imposed £2343 million of hidden costs on UK society in 1996" (p. 83). The ecological footprint of the dominant agricultural system results from an utter dependency on fossil fuels, chemical use and the erosion of soils. This fossil fuel use combined with excessive food miles contributes to the dominant agricultural system being "responsible for between a quarter and a third of greenhouse gas (GHG) emissions" (McMichael, 2009b, p. 139).

The dominant agricultural system is also heavily premised on an escalation of monocultures. The swathes of land dedicated to one form of produce has not only made the world's food supply incredibly vulnerable to disease but has also resulted in a massive loss of biodiversity. The loss of biodiversity is deeply problematic for ensuring the preservation of ecosystems which are heavily interdependent and rely on diversity (Pyhala, 2013). Intensive farming methods have become more prevalent as a means by which to try and maximise output in

the name of profit and competitiveness. However, exhausting the land trying to maximise yields is not sustainable in any true sense of the term. Pyhala (2013) problematises diminishing soil fertility and biodiversity as some of the negative ramifications from pursuing such methods.

The dominant agricultural system is globalised, much like all other substantive forms of neoliberalised sectors of production. The production of food by large firms and small scale farmers alike is increasingly encouraged to be destined for export markets as the corporate food regime encourages convergence towards a variation of the dominant agricultural system which is characteristically export-orientated. If small scale farmers do sell on the domestic market, they often find themselves completely undercut by the produce of transnational agricultural corporations. Thus, more often than not food is produced for export, destined for global markets, although a similar lack of competitiveness often meets small farmers here too.

Producing for export is not always a choice but rather a decision made through lack of alternative. Once nation states adopt neoliberal reform and their borders are opened to global markets, the dominating market becomes the global one. Competition in this global market is fierce, and transnational corporations, the biggest players in the game, completely outcompete small local producers. Transnational corporations focus production on the foodstuff in which economies of scale can be most easily achieved. Of course, this is a logic that best suits those bigger and more mobile players. Smaller firms are still tied to a nation of origin. Transnational corporations, on the other hand, have the mobility both to seek the most profitable location to produce in, and also run at a loss in some areas while profiteering in others. In a global market based on global competition the competitiveness and viability of small local producers is squashed by those with better capabilities to achieve a greater share of the market.

Gonzalez (2011) offers a succinct summary of what I call the dominant agricultural system, suggesting that it is "corporate-dominated, fossil fuel-dependent... [and] is ecologically unsustainable and economically unjust" (p. 77). Reflecting on the issues identified with the dominant agricultural system (which is influenced by the corporate food regime), i.e. the undermining of food sovereignty, negative environmental and health impacts and massive social

inequalities, it is interesting to think about how counter movements in agriculture are responding to the limitations and problems of the presently dominant agricultural system. To some extent existing problems define opportunities for thinking about alternatives. Thus, I now turn to the struggle against the dominant agricultural system. This struggle is more largely a struggle against the corporate food regime and involves ideologies and groups of people fighting for their own or others' food sovereignty, and the livelihoods of peasantry and small farmers around the world.

The counter-hegemonic struggle

The inequalities of neoliberal led global market capitalism incites immense suffering among the most vulnerable of our world while privileging the most comfortable. It systematically undermines peasants' livelihoods, destroying the self-sufficiency promised by neoliberal political propaganda, and encourages the saturation of the agricultural market with transnational corporations that incidentally control the worlds' food. Within the corporate food regime, we bear witness to the paradox of starvation amongst food waste.

However, the enduring predicament of the corporate food regime has not been suffered passively. Around the world heterogeneous practices of food production and consumption exist. Some of these practices are traditional agricultural practices that the dominant system has not yet been able to destroy; some exist in collaboration with the dominant system, others are adaptations and variations of the dominant system, still others are actively resisting the dominant system and evolving in complex and variegated ways. Resistance is sometimes imbued with a consciousness that deliberately challenges the corporate food regime, but can also simply be made up of practices that people engage in for reasons of survival, health, or social or environmental justice.

There is another discourse concerned with food policy – that of food security. The discourse of food security is taken up

by multinational food corporations, an international network of research institutions and international agencies such as the World Bank, FAO and INFAD, and implemented by many national governments, [which argue] that the only realistic path to future food security is through large-scale,

high-tech, input-intensive, industrial agricultural methods combined with a global system of procurement and distribution managed by capitalist enterprise (MacRae, 2016, p. 228).

Thus, the discourse of food security merely supports the dominant agricultural system and the corporate food regime.

The discourse of food security differs in both direction and advocates from that of food sovereignty which is championed "by local communities, organisations of small farmers and consumers, NGOs and academic researchers not affiliated to the international agri-food research system" (MacRae, 2016, p. 228). In the food sovereignty discourse, the best way to address food insecurity is in the institution "of a global food system built from the bottom up – of multiple agricultural systems and food cultures built on the foundation of local ecologies and communities" (MacRae, 2016, p. 228).

Food sovereignty is defined by Via Campesina in this way (as cited in McMichael, 2005, p. 291)

In order to guarantee the independence and food sovereignty of all of the world's peoples, it is essential that food be produced through diversified, farmer-based production systems. Food sovereignty is the right of peoples to define their own agriculture and food policies, to protect and regulate domestic agricultural production and trade to achieve sustainable development objectives, to determine the extent to which they want to be self-reliant, and to restrict the dumping of products in their markets.

The discourse of 'food security' does not offer anything new in terms of the agricultural system it advocates. The discourse and practice of 'food sovereignty' is thus the one that provides a space to consider alternative agricultural systems. The food sovereignty discourse can be nicely articulated with a Gramscian counter-hegemonic mid-range project, i.e. an alternative model of development in the Neilson sense of the term, and an alternative food regime based on my revision of the concept.

There have been counter movements premised on addressing food insecurity which can be put into three categories, food justice movements, alternative food movements, and food sovereignty movements. Whilst three categories can be

delineated, food justice and alternative food movements can and should be contextualised more widely within the food sovereignty discourse, as they are expressions of the food sovereignty movement that just focus on a specific aspect of that main goal.

The first, food justice, as a concept and movement is more focussed on class and racial inequalities (Clendenning, Dressler, & Richards, 2016). Food justice movements invariably link institutional racism with limited access to healthy, affordable and culturally appropriate food (Alkon & Norgaard, 2009; Bradley & Herrera, 2016). Thus food justice movements address issues of food insecurity and fight for food sovereignty within wider racial contexts. These sorts of movements include community supported agriculture initiatives.

Alternative food movements can be delineated from food justice movements as they focus more explicitly on the degradation of the environment caused by the dominant agricultural system and the negative health effects of consuming the products of this agricultural system (Bradley & Herrera, 2016). These sorts of movements encapsulate initiatives such as slow food, organic food, and the 100mile initiative. There are crossovers between categories as the concerns of all movements premised on addressing food insecurity are linked through the umbrella goal of food sovereignty.

The third and final group are food sovereignty movements. The food sovereignty movement forms an umbrella that encapsulates a globalised movement that could indeed be realised in some combination of the other movements, but explicitly challenges the corporate food regime. Generally speaking, food sovereignty as a concept promotes more local control for consumers and small producers within their food system (Fraser et al., 2016). The development of this control spurs empowerment for those that are marginalised and often suffering in the dominant agricultural system.

Clendenning, Dressler and Richards (2016) make clear the distinction between food justice and food sovereignty movements and discourses. They suggest that both of these movements have arisen in response to the insecurity engendered by what I call the corporate food regime. Based on differing ideological groundings food justice and food sovereignty employ various practices of alternative food

production. Both are politically charged but the movement for food justice does not challenge the broader structures and constraints of the neoliberal model of development, whilst the food sovereignty movement radically and deliberately addresses this. Calling for rights in the food system food sovereignty is an ideology that demands change to the corporate food regime itself. Nevertheless, despite differences, these two movements share a hope for a food system that is more just and that is why I argue that the food justice discourse is a focussed expression of food sovereignty.

Clark (2016) defines the concept of food sovereignty as emerging "over the past two decades as an alternative proposal to the neoliberal global food system, proposing to return more control over food systems to small-scale farmers (referred to as peasants or *campesinos*) and to other subsistence and small-scale food producers (fisher folk, pastoralists, indigenous peoples etc.)" (p. 183). Thus, the corporate food regime is directly targeted in the challenge posed by those embracing the food sovereignty concept.

Clendenning, Dressler and Richards (2016) point out that food sovereignty is often thought to be a rural concern given the concept's origins as well as the connection between land and farming. They go on to point out that not only is food sovereignty relevant in an urban setting but in fact is becoming pressing in this context that has seen a growing number of people who are food insecure. The number of those who are food insecure in an urban context is bound to increase as the industrialisation of agriculture results in an influx of people to the cities resulting in a burgeoning 'relative surplus population' (Neilson & Stubbs, 2011).

Let us turn to the origins of the concept of food sovereignty. Clark (2016) suggests that "while the precise origins of the concept appear to be in the Central American and Mexican peasant movements (see Edelman 2014), the contemporary political discourse of Food Sovereignty has been advanced by *La Via Campesina* (LVC) – "a diverse global coalition with national constituent farmer and peasant organizations in countries around the world" (p. 183). Food sovereignty is thus a global movement that emerged out of the peasant plight and subsequent peasant organisation. LVC is suggested to be the largest social movement in the world (Akram-Lodhi & Kay, 2009). The concept of food sovereignty is subject to ongoing redefinition as it is appropriated into various

actors' vocabulary and adapted to their agenda. Nevertheless, as MacRae (2016) suggests "the most widely agreed definition is that from the first International Food Sovereignty Forum in Nyéléni, Mali, in 2007 as 'the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" (p. 4). This definition emerged from the World Food Summit the year previous at which LVC produced the initial definition (MacRae, 2016). For the moment I leave the definition of food sovereignty at that, but note that I build on this substantially in chapter five as I argue it is about much more than rights and choice.

The emergence of the peasant movements in Mexico – the likes of the Zapatistas – can be understood in the context of the neoliberal restructuring in the 1970s and 80s which fundamentally altered both "forms and relations of production in Chiapas" (Morton, 2007, p. 445). Neoliberal restructuring favoured foreign markets, which simultaneously deprioritised food self-sufficiency and the agricultural industry, as resources were moved into other sectors (Morton, 2007). Left with little capacity to sustain themselves, peasants were left with no choice but to seek jobs in the new industries, where their livelihoods suffered immeasurably with the altered social relations of production they faced (Morton, 2007). Such developments ushered in new forms of organisation i.e. the new peasant movements. The key date the Zapatistas emerged was the 1st of January 1994; significantly, the day that NAFTA was signed, the trade deal "announced by the Zapatistas as 'the death certificate for the ethnic peoples of Mexico'" (Morton, 2007, p. 452). It was with the rise of peasant movements such as these that the concept of food sovereignty was born.

It is important to stress Morton's (2007) point that "it is possible to situate the rise of the EZLN within a series of organic developments linked to the emergence of a neoliberal strategy of capitalist accumulation. The distinction is important because whereas conjunctural movements stem from immediate circumstances, organic developments derive from more enduring predicaments" (p. 452). Understanding the resistance as formed against an enduring predicament entails a critique of neoliberalism generally.

Thus, the peasantry has not accepted their increasing dispossession and marginalisation passively. Contrary to orthodox Marxism and the modernist narrative, the peasantry has shown itself to be incredibly relevant into the modern era. The new peasant movements the likes of La Via Campesina liberate the term *peasantry* from the historical, backward status that modernity prescribes and radically challenge all who propose its death. The peasantry has mobilised and organised against the enduring predicament that they face. As McMichael (2008) suggests, the "peasant mobilization within and against the neoliberal project, on a world scale, is politically engaged in a way, and for a cause, rendered unthinkable by classical social theory" (p. 207).

In aiming their critique explicitly against neoliberalism, the peasant struggle becomes a search for, "a world in which many worlds fit" (Olesen, 2004, p. 262). Or as Subcomandante Marcos himself said "a search for, 'a world in which there is room for many worlds. A world capable of containing all the worlds" (Morton, 2007, p. 462). The concept of 'a world in which many worlds can fit' and the food sovereignty discourse articulate well with a project to conceptualise and implement an alternative model of development, a counter-hegemonic mid-range regulatory project. Thus, in turn Subcomandante Marcos's concept articulates with a new food regime, one that enables for flexible endogenous national development, subject to certain regulatory parameters that ensure the global environment is one that enables local alternatives to flourish.

Conclusion

This chapter has coupled a literature review with a presentation of the theoretical underpinnings of the investigation to follow where I look into the empirical experience of neoliberal globalisation in Italy, and more specifically the experience of the corporate food regime in Italy, and some responses to this.

The concepts 'model of development', 'food regime' and 'agricultural system' are the core tools I use for informing an empirical analysis of the current era. These concepts, employed in my revised account that attempts to address limitations in the standard account of these concepts, is not limited only to the past or the present, but is also useful in conceiving of future eras.

Defining regulation, not as simply counteractive, but as a force that can be proactive too, allows us to define this era as a model of development (Neilson, 2012; Neilson & Stubbs, 2016). Neilson also highlighted the transnational element of the model of development, which, particularly in the neoliberal era, is imperative to redefining the priorities and form of the nation state and was absent in early FRS accounts. Finally, Neilson notes the agency involved in the design and implementation of models of development which gives both hope for a future designed differently and a new imperative for the Left to start conceptualising what an alternative model of development might look like.

Using this conceptual framework, I give an account of the current era as being both 'in regulation' and 'in regime'. Specifically, the current era can be defined as the neoliberal model of development, which together with the neoliberal model of development in agriculture is encompassed in the corporate food regime. Emergent agricultural systems, including the dominant agricultural system, are not simply an effect of the food regime, but are nonetheless importantly influenced by it. The regulatory parameters given by the practical imbrication of these two conceptual levels of the food regime are encouraging convergence towards agricultural systems with problematic environmental and social concerns that should spark concern for the future.

This concern for the future motivates the general counter-hegemonic struggle. Not all voices that oppose the corporate food regime have been distilled; the largest social movement of our time, La Via Campesina, is testimony to this enduring resistance. This counter movement, looking for a world in which many worlds can fit, inspired me to look for alternative agricultural systems in practice. In Rome some groups of people are practicing food production and consumption in ways that deviate from the dominant agricultural system in many ways. This was thus the site of my empirical investigation.

CHAPTER TWO

Italy's evolving patchwork of agricultural systems - historical and contemporary influences

Introduction

The dominant agricultural system is encouraged, though not directly regulated, by the model of development and the model of development in agriculture (i.e. the food regime). This chapter is an investigation of how the dominant agricultural system interacts with (influences/competes with/transforms) pre-existing agricultural systems and the pre-existing national mode of agricultural regulation in Italy.

The accumulation pattern arises from the interaction of the regulatory framework and the agricultural system configuration. In this way I am separating the sense of accumulation as a pattern or configuration or regime, of the consumption/production process (as in FRS theory); from the substantive form of production and consumption that for the agricultural sector I term 'agricultural system'.

The neoliberalisation of agriculture in Italy is interesting as it demonstrates the variability and complexity of multiple agricultural practices and systems that coevolve and struggle with each other, the forms of which are unfinished and evolving in various stages of development. Just as in Neo-Marxist literature the social formation always encompassed more than one mode of production, the same situation applies with agricultural systems. In Italy the social formation is more complex than a simple situation where the dominant agricultural system is invading and destroying any pre-existing agricultural practices or systems. The dominant agricultural system is invading Italy, but has not won the competition yet. Pre-established, pre-industrial, small scale agricultural systems are in place, that are being further supported by the new radical practices that invest in something new. I do want to point out that this chapter focusses much more explicitly on the production side of agricultural systems both historical and contemporary. The subsequent chapter deals with the consumption (and distribution and exchange) elements.

There are three evolving systems or spheres of interaction in Italian agriculture. The first could be thought of as the 'alien' external system invading, represented by the globally dominant agricultural system encouraged by the corporate food regime. The second is the pre-existing mainstay agricultural system in Italy that is defending against, but sometimes adapting elements of, the dominant agricultural system. At the same time the latter is articulating with the new practices that exist on the margins, which can be considered the third system. I look at some of these new practices in detail. Most interesting for my investigations of food sovereignty are those new practices that exist on the margins that are fundamentally different in nature from the dominant agricultural system. It is promising that these practices look like they are developing and evolving into a fully developed agricultural system.

In particular, I am looking at the development of the basic elements of an emerging alternative agricultural system that is developing in Italy in the broader context of the externally imposed and unevenly unfolding neoliberalisation of Italy's pre-existing agricultural system.

However, before beginning to unpack the complexity of modern day food practices in Italy, I first briefly trace the history of agriculture in Italy. I base this historical account on Sereni's (1997) *History of the Italian Agricultural Landscape* which provides a comprehensive picture of the unfolding of agricultural practices throughout time. This history also expresses moments and patterns that were indicative of the emergence of the alternative agricultural practices I investigated in Rome. Put another way, the contemporary alternative projects and practices hark back to the pre-industrial practices in some ways.

Tracing the history of agriculture informs an understanding of the endogenous trajectory of agricultural systems in Italy and their relationship to broader regulatory projects. However, endogenous development is not alone sufficient to explain the nature of the agricultural systems that emerge in Italy. It is also about the prevailing food regime and the regulatory encouragement of agricultural systems of a particular nature. The modes of global, national and regional regulation impact, though are not solely determining of, the development of agricultural practices and systems. A fuller understanding of the emergence of

agricultural systems can be found by coupling the explanatory power of endogenous development with the food regime.

A brief agricultural history of Italy

Sereni (1997) defines an agricultural landscape as "the form that man, in the course and for the ends of his productive agricultural activity, consciously and systematically imposes on the natural landscape" (p. 17). Sereni suggests an agricultural landscape emerged in Italy with the advent of the Greek colonisation that began in the 8th century BCE, continuing into the 5th, and the Etruscan expansion in the 6th century. Before this time agricultural activity was practiced by ancient civilisations but not in a way that was consciously and systematically imposed upon the natural landscape. In terms of my terminology, an agricultural landscape could be thought of as a configuration of agricultural systems all evolving in different stages of development.

The practice of fallow – where clearings are protected and consistently worked to maintain fertility – was cemented as dominant by the Greek and Etruscan colonisation and marked the beginnings of worked fields as the contemporary reader is familiar with. The subsequent Roman conquest further formalised this practice, finalising the domination and validity of practices of fallow over temporary clearings (Sereni, 1997). Fallow instigated private property relations that suited the more bounded construction of land; "cultivated lands were now firmly separated from uncultivated lands, or pasture, and were divided into fields" (Sereni, 1997, p. 21). Boundaries were typically represented by the likes of hedges, rivers or roads.

In the years of the late Roman Empire and subsequent barbarian invasions Sereni (1997) describes a shift in the practices of agriculture. The cultivation of cereals as well as the closed fields system diminished in the wake of a rising importance of the pastoral economy and with it an open field system. The many invasions that began in the early years of the fifth century and continued into the Middle Ages reproduced the open fields system, although it was certainly not methodically pursued, thus fully formed agricultural systems seem to be absent in favour of agricultural practices in disarray. Sereni (1997) describes the landscape as being "degraded and disaggregated... with fields open to hunting and pasturage, without

definite forms, certain boundaries, or the relief of regular plantations" (p. 49). Sereni (1997) describes how in such conditions "inferior grains that required less care and were more adapted to rustic conditions... imposed itself as a technical necessity" (p. 60). However, this may have been regional as Federico and Malanima (2004) do note that "in the late middle ages, the Centre-North of Italy was one of the most advanced areas in Europe" (p. 437).

From the sixth century and beyond castra (fortified villas) – which formed the beginnings of emerging cohesion of the agricultural landscape in the countryside – became more prevalent, along with towns built on strategic high ground (Sereni, 1997). The emergence of some cohesion through the countryside is expressive of a transition from disaggregated agricultural practices evolving slowly into various pre-industrial agricultural systems.

The agricultural landscape of later centuries of the Middle Ages could be identified by the arrangements of citrus groves, sparking an extension of the Mediterranean garden style of agriculture (Sereni, 1997). Elements of these agricultural practices and particular foodstuffs are still prominent in the agricultural systems in Italy today.

Then began the Feudal era in which plots of land became cultivated by producers who lived on the land, and returned some form of revenue to the lord (Sereni, 1997). However, Sereni (1997) notes that the prevalence of the castle reigning politically dominant over the city was not an enduring situation, "the communal rebirth of the city" (p. 75) soon challenged that dominance. Those that inhabited the city became imbued with a drive to reinvigorate organised agriculture, a goal widespread and more successful between the eleventh and thirteenth centuries. Sereni suggests that over three centuries the combination of collective efforts combined with the resources privy to dominant groups, namely the feudal lords, encouraged organised agriculture to be reborn into much of Italy.

Federico and Malanima (2004) describe the tenth and eleventh centuries "as the 'golden age' of the peasants in Italian agriculture" (p. 451) due to the excess of land and lack of labour power. The grassroots nature of the development of agricultural practices at this time, i.e. stemming from the peasant producers themselves, provides great historical contextualisation for understanding the

contemporary phenomena occurring in Italy where alternative agricultural practices that are being driven from the bottom, exist and evolve.

Interestingly, with the rise of the communes many agriculturalists working with olives were no longer serfs, but were liberated peasants (Sereni, 1997), although this only occurred in certain regions where the communal revolution was strongest. Sereni points out that the revival of the communes was not experienced throughout all of Italy, many areas of Italy remained entirely disconnected from the developments of this period.

The Renaissance period saw the end of the fallow system, substituted for a more modern system of rotation that allowed a natural combination of breeding and cultivation (Sereni, 1997). Nevertheless, as Federico and Malanima (2004) note it was in the Renaissance period that Italy lost dominance in the European arena and began to lag behind the industrialising areas of Europe.

Although in the sixteenth century feudalism dominated, agricultural production certainly began to be influenced "by trends of markets and prices, which were deeply affected in this period by the opening of the new distant routes of European trade" (Sereni, 1997, p. 190). These trends sparked a shift to breeding animals, at the expense of the cultivation of grain. This shift eventually led to decline in the agricultural systems of Italy, as pasturage and open fields began to dominant once again under the regressive trends.

The agricultural landscape of Italy through the sixteenth and seventeenth centuries increasingly deteriorated and degraded. The deteriorating landscape could perhaps be linked to the crisis of the Italian economy which Federico and Malanima (2004) suggest occurred in the seventeenth century. Combating this deterioration was the Mediterranean garden which only prevailed in some southern areas.

Sereni (1997) describes how through the seventeenth century and eighteenth century Italy emerged onto the threshold of a time when "agricultural progress has the increase of profit as its single aim, and this aim was inevitably achieved through an increased exploitation of the direct producers" (p. 183). The relations within which food was being produced at this time, along with agricultural practices, were clearly becoming explicitly more capitalist.

Capitalist Development

It was in the beginning years of the eighteenth century that the capitalist development of the countryside began (Sereni, 1997). In some areas of Italy estates would be divided up into farms which "corresponded in size to the work capacity of a peasant family" (Sereni, 1997, p. 232). Thus the spread of peasant farms began, subjected both to "ancient feudal exploitation, over which was now imposed a new form of capitalistic exploitation" (Sereni, 1997, p. 234). Cultivating fields and employing practices of continuous rotation meant that open fields were declared an obstacle. Thus the aristocracy and the agricultural bourgeoisie opposed traditions of open fields of communal usage; threatening the livelihoods of the poorest people in the countryside. Although there were some successful challenges to the enclosures, particularly in the south, Sereni (1997) notes that enclosing fields progressed. Through the second half of the eighteenth century cultivating grain in the name of profit caused deforestation to increase at paces not seen previously. This pace was driven not only by capitalist profit, it was also "sadly accompanied by the desperate land hunger of impoverished peasants" (Sereni, 1997, p. 243).

The peasant farm system in which estates were commonly divided up into "farms of sharecroppers... and punctuated by scattered peasant houses" (Sereni, 1997, p. 269) became superseded by a wage labour force in some areas of Italy during the late eighteenth century and early nineteenth century. Day labourers were employed and massed in rural areas to find work daily on one farm or another. Sereni (1997) describes these workers as 'true agricultural proletarians' "dependent on the new capitalist enterprises... deprived not only of land and subsistence, but also of any means of exercising an independent role in production" (p. 270). In contrast to the sharecropping situation, they were not privy to any products, the only thing they could sell was their labour power. The increasing subordination and precarity of the peasantry has continued apace with the spread of capitalism. Into the current neoliberal era, this plight of the peasantry continues, and is an ongoing battle, hence the largest social movement of our time – the new peasant movements, fighting for food sovereignty.

In other areas of Italy, a different situation engendered an increasingly precarious existence for the peasantry. Some areas of Italy remained closely tied to feudal

relations, and thus when legislation was introduced to remove the feudal conditions land was divvied up amongst the various parties, including the peasantry themselves. However, the portion they were assigned was in no way sufficient. Furthermore, the allotment process was so slow in forthcoming that the old fief holders and new bourgeoisie "took advantage of it to usurp shamelessly the best lands assigned to the communities through the mass division" (Sereni, 1997, p. 283). Through these various developments in different areas of Italy in the eighteenth century, the proletarianisation of the peasantry developed. The golden age of peasantry in the tenth and eleventh century that Federico and Malanima (2004) identify was certainly a thing of the past by the nineteenth century where land was overcrowded and the peasantry had to work hard for little output under capitalist conditions of increasing formal subordination.

The development of railroad within Italy occurred concurrently with the unification of Italy in 1861. Up until the nineteenth century Italy had been fragmented, made up of small states. These two developments worked harmoniously in the "formation of a national market in agricultural products" (Sereni, 1997, p. 292). Sereni (1997) also notes that at the time of unification the regional specialisation that began in the seventeenth century was now enforced "by the laws of competition and capitalist profit" (p. 292). Though make no mistake, the emergence of an agricultural system in which production was regionally specialised would not have been a complete process. No doubt a vast array of other agricultural practices and systems co-existed and evolved alongside this agricultural system. Nevertheless, farmers became subordinated to the logic of competition, inspiring specialisation to compete on the now integrated national market. The logic of competition and the drive for profit inherent in the capitalist mode of production had begun.

Furthermore, it was not only the national market that farmers now had to contend with. In 1871 the Mont Cenis tunnel linking Italy with the western and central parts of Europe was opened. The entry onto the world market "provoked a further national and regional specialisation of crops" (Sereni, 1997, p. 294).

Increasing joblessness plagued the countryside as many agricultural workers were "made redundant to the needs of agricultural production" (Sereni, 1997, p. 332). These redundancies in Italy were not the result of increased agricultural

productivity as experienced in other countries; in Italy, these redundancies occurred even though agricultural production remained static. Because of the lack of industrial development in Italy, there were scant opportunities for those made redundant. Abusing the desperation, the bourgeoisie rented out their land in many small plots rather than in large allotments. Peasants were charged extraordinary fees but were left with little choice. However, this process was not complete, and some peasantry were afforded more stability in the divisions of land.

In 1880 and 1882 the agricultural proletariat of certain regions began to strike in Italy; a historical display of food sovereignty. The historical peasant agitation is perhaps responsible for the ongoing resistance to and adaptation of the dominant agricultural system in the current era that threatens the same things that were under threat all those years ago.

Sereni (1997) suggests that in the early 80s "agricultural strikes and the socialist movement... had now become social phenomena" (p. 310). But note that this was only in certain areas, the south did not experience the same agricultural agitation. In fact, Gamba (1950) notes that even in 1907 the condition of Southern peasantry was described in Italian parliament as living "in hovels dug out of the naked rock, leaning against, or superimposed upon, others of the same kind. In these the peasants do not live but, like maggots, toss and turn surrounded by putrid dung in fermentation and, in a nameless promiscuity of men and beasts, inhale a fetid atmosphere" (p. 99). Even when Gamba was writing in 1950 he suggests that the conditions of the peasantry in the South could still be described as they were in 1907 due to disadvantages in the southern regions not experienced in the North.

This historical summary of agriculture in Italy reveals important patterns and moments that aid in understanding the nature of the agricultural systems in Italy today – including those emerging alternative practices I investigated to be discussed in subsequent chapters. Some of the information develops our understanding of the form and shape of the agricultural landscape; i.e. the configuration of more or less fully formed agricultural systems – historically influenced by the practice of fallow and the Mediterranean garden. Other patterns and moments enable us to understand the treatment and subsequent organisation of the peasantry. Both aspects of the history of agriculture help to develop an understanding of the current complexity of various agricultural systems evolving

and co-existing in Italy, including the Italian response to the globally dominant agricultural system encouraged by the corporate food regime.

A brief summation of post-war and present day agriculture in Italy

After Italy was liberated at the end of World War II Sereni (1997) notes that for the first time "the organized actions of peasants have shown an ability to orientate themselves systematically not only toward immediate objective goals, but also toward the realization of structural reforms that might assure stable social progress" (p. 349). Mingione (1993) suggests that in I945 "the southern regime came under attack from a vigorous peasant revolt" (p. 314). Governing classes were unable to ignore the pressure of the movement, perhaps because "in the immediate post-war years and for much of the 1950s, the agricultural electorate constituted over half of the population (over 40% of the workforce was employed in agriculture, but the rural electorate was much larger)" (Lizzi, 2014, p. 275). The peasant revolt led to agricultural land reform that reduced the size of some of the land of the bourgeoisie and assigned these areas to families and poor peasants; thus generating a large class of family farmers. This agricultural reform is responsible for promoting "a modern, democratic, and socialist form of development in Italian agriculture" (Sereni, 1997, p. 352).

Within these post-war years the ties between small farmers and political parties were strong. Principally, the political relationship was with the Christian Democratic Party (DC), which dominated Italian politics in the post war years (Posner, 1977). The DC encouraged "the creation of a national organisation to represent small farmers" (Lizzi, 2014, p. 275). This encouragement led to the emergence of Coldiretti in 1944, one of the nation's largest peasant organisations, which to this day remains one of the most important farmers' associations (Fonte, 2013). Coldiretti was very much invested in the political success of the DC and rallied a large agricultural vote for the party. Lizzi (2014) suggests that the leader of the DC along with the first president of Coldiretti "agreed upon and adopted a policy of promoting smallholders, small farmers and the farming family as more than just a productive unit but as the benchmark social unit" (p. 275).

Sereni (1997) notes "the peasant struggle had succeeded, in one way or another, in changing the system of landholding" (p. 355). Furthermore, Sereni (1997) suggests that it was "the struggle of peasants for land and reforms, that most deeply and broadly affected the structure and forms of the agricultural landscape in the postwar period" (p. 355). Lizzi (2014) argues that in Italy "the close relationship between general farmer organisations and political parties was one of the constituent aspects of the birth and consolidation of Italian democracy in the post-war decades" (p. 274). The peasant agitation is an interesting historical pattern considering my investigation into alternative agricultural practices and systems; an investigation broadly motivated by the search for food sovereignty, a goal imperative to the cause of peasantry agitation.

However, this struggle occurred within a context of capitalist development that caused, and increasingly causes, redundancies of agricultural workers, right up to the present day. The DC itself, whilst having political ties to peasant organisations, maintained a neoliberal climate that initially favoured business and export expansion that incorporated strategic elements of leftist policy aimed at 'opening up the left' (Posner, 1977). The coalition that the DC headed excluded the political left until the 1960s (Posner, 1977). Following something of a social democrat line of thinking the DC hoped that by prioritising economic growth through encouraging exports and foreign investment a balanced national social order would prevail; dealing with Italy's fragmentation, the north-south divide and weaknesses in the economy (Calandri, 2003). Posner (1977) argues that the connection to the peasantry organisations did little to interrupt the basic neoliberal tendencies of the DC party. Furthermore, Posner (1977) argues that the "continuing liberal thrust in economic orientation... [was accompanied] with very high social costs" (p. 817). Sereni (1997) also notes that,

the power of the state itself, in its fiscal policy and foreign trade, its policy of public investment, and its policy of price controls, has served more and more closely interests that are hostile to, or at least estranged from, the agriculturally productive groups and agriculture (p. 356).

Thus, some argue that the democratic successes of the rural movement in the post war period were counteracted by the core logics and relations of capitalist development.

However, what is interesting is that while Sereni suggests that Italy had little power over its policy and capacity to support agricultural groups, what we see in the contemporary era is a nation that very much protects its small scale producers whose practices fundamentally differ from the dominant agricultural system.

Perhaps the link between an Italy whose policy was not in the interest of small producers and an Italy – that while the configuration of agricultural systems is complex, evolving and changing – is still to some extent maintaining the protection of small producers is the change brought about by the Honorable Ammintore Fanfani. In 1960 the Honorable Ammintore Fanfani recognised that capitalist logic and relations generated a crisis in the agricultural policy of Italy and thus declared a new agricultural policy "appealing to social groups not representing monopoly capital, [or] large scale agricultural capitalism" (Sereni, 1997, p. 357). The food regime prevailing in 1960 was one in which local producers were generally protected by the Keynesian regulation of the Fordist model of development, at least in the advanced capitalist countries. Thus the meta regulatory conditions were favourable for Honorable Ammintore Fanfani to introduce an agricultural policy that favoured small scale agricultural producers. The notable thing is that, albeit amongst some contestation, to an extent this protection of small scale production appears to have extended into the current era in which the regulatory conditions do not favour small scale agriculture.

The story of the modernisation of agriculture in Italy also contributes to the explanation for the retained protection of small scale production. The agricultural sector in many Mediterranean countries was long afflicted with a characterisation of backwardness. Italy was not the only Mediterranean country labelled with, what Sereni (1997) called, agricultural retardation. In the post war period Fonte and Cucco (2015) suggest that while regional differences could be delineated in Italy, country wide similarities could be seen. Farms were normally small and managed under family farm practices. Fonte and Cucco (2015) note that the family farm managerial style is more akin to the peasant model than the 'American farmer' and their logics of economics. Given the significance of the peasantry throughout the historical development of agriculture in Italy it is perhaps not surprising that the family farm management aligns with a peasant model. However, given the prevalence of the modernist narrative at this time, this

family farm logic that dominated the agricultural sector in Italy was viewed negatively, as a hindrance to the modernisation of the sector.

This push for modernisation should be contextualised within the regulatory parameters of the era, in particular those of the food regime that, in conjunction with the technological environment, contribute to the nature of the dominant agricultural system. Fonte and Cucco (2015) draw our attention to the modernist ideologies of the European Common Agricultural Policy, a specific multilateral regulatory agreement that as a regulatory tool reflects the imperatives of the food regime.

However, Fonte and Cucco (2015) outline that by the 1980s the argument that Italian agriculture was backward no longer accurately portrayed the actuality of what was happening in the agricultural sector. Many agricultural systems had already been successfully modernised. Practices of specialisation were in place (solidifying the regional specialisation that Sereni (1997) suggests began in the seventeenth century), alongside the use of automation and chemical inputs (Fonte & Cucco, 2015). Furthermore, the peasant farm, which retained connotations of backwardness, was no longer the mainstay production style of Italian agriculture. This accolade was passed to the entrepreneurial farm. Nevertheless, the peasant style farm continued to exist and evolve alongside the entrepreneurial style farm, each contributing to more or less well developed agricultural systems.

Entrepreneurial farms were defined as operating according to logics akin to the capitalist industrial firm, no matter how small the size of the farm might be (Fonte & Cucco, 2015). Thus, the agricultural system which entrepreneurial farms were a part of were considered more modernised. Once adopting capitalist logics, patterns of specialisation and intensification of farming increased.

The modernist view was shifted somewhat when a change began in European thinking in the 1990s. A crisis around food health and safety sparked the "quality turn consensus" (Sereni, 1997, p. 264). The quality turn consensus in turn inspired opinions of family farms to shift. Family farms were no longer considered to represent agricultural backwardness and thus a production practice to be relegated to history. Family farms began to be considered an asset in the construction of brand based on quality to be indicated by the "Made in Italy" stamp (Sereni, 1997,

p. 264). Family farm production began contributing to an export led marketing strategy which means that state policy could align with small scale family farm production, as employing the logic of specialisation 'Made in Italy' could come to mean increased competitiveness. In this way although the corporate food regime and the imperative of global competition that that entails has had an effect on the nature of agricultural systems that have evolved, been retained, or adapted in Italy today, nonetheless the quality turn consensus enabled Italy to protect its small scale agricultural producers.

The Common Agricultural Policy and Italy

Generally speaking, the contours of the agricultural landscape in Italy bear similarities to those in the rest of Western Europe. The corporate food regime is in part responsible for the similarities because of the global unleashing of the dominant agricultural system that must be resisted, adapted or adopted in nation states around the world. More specifically, in the Italian context, these similarities are also in part the result of the 1957 Common Agricultural Policy (CAP) of the European Union. The CAP is a regional regulatory tool which reflects the interests of a particular group of the advanced capitalist countries in the context of the corporate food regime. The CAP is aimed at both "ensuring food self-sufficiency in Europe and an active presence on world markets" (di Meana, 1986, p. 3), and increasing "agricultural productivity in order to ensure farmers a satisfactory and equitable standard of living, and to stabilise agricultural markets and farmers' incomes" (Lefebvre, Espinosa, Gomez y Paloma, Paracchini, Piorr & Zasada, 2015, p. 2089).

Lizzi (2014) argues, in reference to the CAP within Italy, that "the institutionalisation of a distributive and protectionist policy paradigm, both at the national and at the European levels, strengthened farmer organisations and other agricultural interest groups later on" (p. 274). Lizzi's (2014) prognosis appears contentious. Between 1966 and 1968 Posner (1977) argues that the effects of the CAP were "not particularly favourable" (p. 828) in Italy and suggests that exports were hindered by competition within the EU. Posner (1977) cites Willis who suggests that by 1968 Italian farmers were worse off compared to all other Italian groups. The European Commission (2016) also cite that "69 % of the Italians

think that the financial support given by the EU through the CAP is either enough or too low" (p. 5), i.e. the lower end of the scale.

The CAP is the fundamental tool for funding agriculture in the European Union. The funds amount to "€55 billion per year, 41% of the EU's total budget in 2011" (Lefebvre et al., 2015, p. 2089). Throughout the second half of the twentieth century the CAP sped up patterns of "increased intensification, concentration and specialisation of production in some areas and marginalisation and abandonment in others, leading to significant changes in the farmed Landscapes" (Lefebvre et al., 2015, p. 2089). The CAP, along with modernisation and urbanisation, is argued to be very influential in driving a uniformity of landscapes across the EU (Lefebvre et al., 2015). In order to fully understand the nature of Italian agriculture the CAP must be recognised as a regional regulatory policy of an international body influenced by the corporate food regime.

The CAP is the foundation of support in agriculture in the EU, providing subsidies and incentives used to ensure income to farmers through the maintenance of price levels. When McMichael (2009b) discusses the corporate food regime, he outlines the preservation of "farm subsidies for the Northern powers alone, while [arguing that the Southern states have been forced to reduce agricultural protections" (p. 148). The CAP is a perfect demonstration of the capacity for more powerful nation states to adopt mixes of proactive and counteractive regulation. The fallout for less successful nation states is clear when di Meana (1986) suggests that of the proportion of the EU budget that is spent on the CAP "34 per cent was spent on export refunds, enabling products to be sold at lower prices to non-member countries" (p. 4). In these non-member countries small scale local producers have to compete with agricultural production being imported that is significantly cheaper because of these subsidies. Thus, small scale production and the peasant livelihood becomes unviable. However, I want to reiterate that even if these subsidies were removed and the competition was 'fair' the problem remains – free trade and uneven development are fundamentally destructive for the less successful states and the food sovereignty of those people within.

Furthermore, the CAP does not protect all farmers across the European Union evenly. Di Meana draws our attention to an uneven distribution of success that results from the CAP. He suggests that there is "a widening disparity between

individual incomes or between types of farm income. There have been reports of cases, especially in certain very profitable sectors like grain-farming and industrial-type stockfarming, of large fortunes won from the agricultural policy, whilst other cases and far more of them, are reported of reductions in farm incomes, of as much as 30 per cent" (di Meana, 1986, p. 4). Across the EU income differences can be such that some farmers are five times better off than others (di Meana, 1986). However, there are also those that argue that the CAP has been indiscriminate in its funding. Lizzi (2014) suggests that the CAP along with social measures and public action benefits both small and large farmers. Furthermore, Galluzzo (2016) suggests that Italian family farms have been "influenced in a positive way by the funds and financial supports allocated by the European Union in order to promote the rural development" (p. 67) – although Galluzzo (2016) does argue that this varies depending on the size of the family farm in question.

The CAP, as a regulatory tool of the food regime, has encouraged developments of mechanisation, up-scaling farm size, modernisation and rationalisation, primarily through the 'second pillar' of the CAP – measures relating to the Rural Development Policy (RDP) (European Commission, 2016). One of the RDP's concerns is "the improvement of the competitiveness of the agricultural and forestry sector" (Lefebvre et al., 2015, p. 2098). Under the imperative of competition, the CAP support is focussed on encouraging an investment in machinery and an increase in the size of farms. Competition drives an increase in the size of farms, which in turn, as Lefebvre et al. (2015) suggests, contributes to a homogenisation of the agricultural landscape. Not only does the size of farms encourage homogenisation, Lefebvre et al. (2015) suggest that the CAP gives incentives to farmers to grow particular supported crops. This, contributes "to the reduction in crop diversity, already encouraged by the intensification of agriculture" (Lefebvre et al., 2015, p. 2094). Trends of mechanisation, modernisation, rationalisation, reducing crop diversity and increasing farm sizes encouraged by the CAP moves agricultural practices and systems in the EU closer to variations of the dominant agricultural system. Now I turn to the effects of the CAP on Italian agricultural systems in particular.

The capital provided by the policy enabled Italy to mechanise. The mechanisation of some of Italian agricultural practices and systems was a rapid transformation in the 1980s, accounting for the modernisation that Fonte and Cucco (2015) outline. With the increasing modernisation of Italian agriculture came "a huge increase in purchases out-side the primary sector - fertilizers, fuel, etc." (Federico & Malanima, 2004, p. 452). This development points to the emergence of two characteristics of the dominant agricultural system (fossil fuel dependency and the intensive use of chemical inputs) being adopted within Italian agricultural systems; though I am not in a position to conclude the proportion of agricultural systems in Italy which can be characterised this way.

The policy also incentivised merging, which increased the size of farms. Farms wanting to merge and up-scale are rewarded, and over-production need not be feared because any surplus product is bought by the EU. The CAP inherently encourages larger farms implying encouragement towards the dominant agricultural system.

Through the seventies and eighties there were efforts to rationalise farming in Italy. This rationalisation of agriculture "yielded an increase in the volume of production of 20 per cent" (di Meana, 1986, p. 4), while the number of farmers declined and for those that remained their incomes remained unchanged. Large-scale farms, predicated on a high use of fossil fuels and generating high yields are characteristic of the dominant agricultural system. There is a clear relationship between the CAP, a regulatory tool of the corporate food regime, and the nature of emergent agricultural systems.

Lefebvre et al. (2015) suggest that the trends of increasing farm size and reduction in crop diversity in agriculture are "rather independent from the CAP (they have also occurred in countries with no agricultural subsidies)" (p. 2095). Contrary to this, I argue that in part these trends *are* due to the CAP, and the wider regulatory conditions, i.e. the corporate food regime. However, in agreement with Lefebvre et al. I also argue that the nature of emergent agricultural systems is not solely the product of the food regime, but also the technological environment. This understanding of an agricultural system that can account for the influence of both regulation and technology, can therefore explain why countries with no

agricultural subsidies experience similar patterns, i.e. they face similar technological environments.

Nevertheless, in spite of the CAP, and more generally the corporate food regime, encouraging trends of homogenisation in agricultural systems, the Italian agricultural landscape can be characterised by rather diversified production (European Commission, 2016). The diversification of Italian production is expressive of the complex agricultural landscape I have referred to. Whilst the globally dominant agricultural system is invading the Italian context, it is also being actively resisted in many ways by the pre-existing agricultural systems of Italy.

Another example of resistance to, or perhaps adaptation of, the dominant agricultural system into the pre-existing agricultural systems in Italy is that agricultural land in Italy "belongs predominantly to smallholder farmers, that have got tiny units of production" (Galluzzo, 2016, p. 62). The European Commission (2016) argue that Italian agriculture should be characterised by small sized farms, stating that "58.7 % of holdings have less than 5 hectares" (p. 6). Giovannetti and Marvasi (2016) also argue that "food firms tend to be particularly small, almost 78% of them have less than 10 employees" (p. 115). They contribute to more than 60% of exports of food products" (Giovannetti & Marvasi, 2016, p. 114). The continued importance and majority of small scale producers, distributors etc. involved in agricultural systems in Italy should be seen as resistance to the dominant agricultural system.

Also, the European Commission (2016) outline that "Italy also applies the Small Farmers Scheme, a flat-rate simplified system of support for the smallest beneficiaries, with a maximum annual payment of EUR 1 250 per farmer" (p. 2). This is a scheme aimed at providing support and lessening the administrative pressures for small scale producers. Galluzzo (2016) suggests that in Italy "family farms are the best units of agricultural production, protecting rural areas from the risk of the socio-economic marginalization and environmental degradation with a significant level of efficiency compared to other types of farms" (p. 68).

Galluzzo's findings can help form the basis of an argument against the dominant agricultural system that proves the success, importance and viability of small scale

agricultural production. As a point of interest the prevalence of small farms – and in the manufacturing sector small firms and light industries – are argued by some to be a result of Italian culture, and in particular the strength of family relationships (Signorini, 2001, p. 71). However, I must point out here that without the protection of the EU, where Italy can negotiate in its best interests, maintaining the competitiveness and protection of small local producers would be significantly harder – as can be attested to by many nations in the Global South, and the peasantry within that, which now champion the largest social movement of our time in their march for food sovereignty.

A further demonstration of the complex interaction between Italy's pre-existing agricultural systems and the globally dominant agricultural system is the difficult introduction of the American supermarket into Italy. The supermarket is fundamentally representative of the dominant agricultural system, that is being unevenly integrated, as it faces local resistance, into the already existing Italian configuration.

The first American-style supermarket in Italy was the result what Scarpellini (2004) calls "the export of a business initiative from the United States to Italy" (p. 626). However, Scarpellini points out that the American-style supermarket in Italy, though perhaps intended to imitate the American model as closely as possible, ended up being adopted very flexibly, so much so that Scarpellini calls it a true hybridisation. The variegated adoption was the result of "internal regional differences, diverse development in productive sectors, and the overwhelming presence of small enterprises throughout the nation" (Scarpellini, 2004, p. 626).

The American business IBEC was the principle investor spending \$30,000 setting up five supermarkets initially in Milan, with plans to expand into other cities and furthermore, other areas of Europe (Scarpellini, 2004, p. 634). The company created in Milan in 1957 was called "Supermarkets Italiani S.p.a." (Scarpellini, 2004, p. 635), explicitly referencing the American style. A more Italian take, *Mercado* or "Italian Market," was rejected by Italian partners (Scarpellini, 2004, p. 635).

It was widely acknowledged that introducing the supermarket into Italy would perhaps incur resistance as everything about the supermarket from the diverse array of products, to the frozen and processed nature of some of the products and the type and use of packaging "could constitute a break with the old Italian system of distribution. Italian consumers were accustomed to small family-run stores where they were served for the most part fresh or unpacked products to be purchased on a daily basis" (Scarpellini, 2004, p. 236).

IBEC and Supermarkets Italiani S.p.a did indeed meet resistance. Permission for opening stores was granted exclusively by the local council in a very decentralised structure (a system still in place today (USDA, 2012)), which meant that local people were able to directly petition the local council with their reasons for not wanting a supermarket to be built in the area. Scarpellini (2004) says that "it certainly was not easy for Supermarkets Italiani to get a license in this context. Its directors repeatedly met with the local authorities and struggled to overcome the strong resistance put up by small store owners" (p. 639). The small store owners, with reason, were worried about the competition they would face. Considering that the supermarkets ended up vertically integrating the supply chain and importing certain products from the likes of Argentina, Denmark, South Africa and America (Scarpellini, 2004), there did not appear much inclusion or pay off for small local farmers and store owners.

Various protests were organised. Milk retailers and butchers featured prominently in the resistance as supermarkets had lowered the price of milk per litre and did not respect that one day a week all butcheries closed (Scarpellini, 2004). However, Scarpellini (2004) does suggest that the general public was attracted to the supermarket.

To ensure the attraction of the Italian public Supermarkets Italiani had to find a balance between offering the traditional supermarket items, e.g. those preprepared, frozen and packaged goods, and offering goods found at "the traditional Italian family-owned food and vegetable stands that offered almost exclusively fresh products to be bought and prepared right away" (Scarpellini, 2004, p. 642-643). This balance is what Scarpellini (2004) refers to as the hybridisation of the supermarket model that ended up in Italy.

Regardless of the efforts taken to appeal to the Italian context, trust and continued use of the supermarket, took over a year to build. Scarpellini (2004) suggests that

although some aspects of the supermarket attracted people such as "the novelty, the low prices, and the wide variety of products, Italian consumers often appeared somewhat skeptical of the new system" (p. 646).

Eventually resistance abated, and Scarpellini (2004) suggests that by the beginning of the 1960s it was confirmed that "the new system of supermarkets was well established at least in some regions of Italy" (p. 658). Supermarkets Italiani set the precedence for the nature of supermarkets in Italy right up to this day. The balance between fresh and packaged foods continues, this is because "Italians still place great value on the quality and freshness of products (rather than frozen), which is reflected in the practice of daily shopping, rather than weekly bulk shopping. Larger supermarket and hypermarket stores are slowly introducing private label brands; however, unlike other European countries, consumer acceptance in Italy is still relatively low" (USDA, 2013, p. 2). Today, the supermarket, small pop-up eateries and initiatives like GAS co-exist, and in fact "traditional grocery stores (so-called Mom and Pop stores) continue to represent the largest segment of the food retail sector" (USDA, 2012, p. 2).

The way the supermarket model was adapted to the Italian context expresses that the dominant agricultural system has not simply invaded and destroyed pre-existing agricultural practices and systems. Rather the latter, which hark back to pre-industrial agricultural practices of small scale family farm logic, resist and adapt the dominant agricultural system in important ways that result in a complex patchwork of agricultural practices and systems.

Some aspects of the dominant agricultural system (such as modernisation, mechanisation and export-orientation) are incorporated into and articulated with various pre-existing agricultural systems in Italy, while other aspects are actively resisted (such as increasing farm size, homogenising food crops and the American supermarket model). Further still, on the margins of this contestation agricultural systems that radically challenge the dominant agricultural system are emerging.

A brief discussion on the neoliberalisation of Italy, generally

My argument is centrally that the food regime plays an important, though by no means singular, role in the emergence and nature of the dominant agricultural system. Thus, I want to briefly turn to the neoliberalisation of Italy generally, to

provide some context to the neoliberalisation of agriculture, or resistance to and adaption of, that is looked at above.

Italy has been historically cautious of the trade liberalisation that forms part of the national template of the model of development. In negotiations of an EU policy towards the Mediterranean and those concerning the partnership between the European Community and the African, Caribbean and Pacific group of states between 1998 and 2000, Italy "opposed further trade liberalization in order to protect its agricultural producers" (Carbone, 2007, p. 173). In part, this opposition may be due to the continued influence of numerous agricultural interest groups, the likes of Coldiretti, within political parties (Lizzi, 2014). But I argue, in the context of the corporate food regime, Italy's opposition is centrally about maintaining the competitiveness of Italian agriculture.

Nevertheless, in the 1950s Italy made the decision to begin liberalising trade – which has continued albeit some hesitancies like those outlined above. Strategies have been consciously deployed to increase Italy's access to foreign markets (Carbone, 2008, p. 61). Furthermore, Posner (1977) outlines that "the largest Italian corporations are truly multinational" (p. 823) – the likes of Fiat. Being dependent on foreign economic assistance, as Italy is, leaves Italy open to conditions implemented by those allies. Of note is that one of the conditions required, in particular by the United States and Germany, is an economic austerity program (Posner, 1977). Signorini (2001) argues that "subsidies, protection, and restrictive rules... are beginning to be seen as counterproductive, although again Italy has yet to entirely embrace the freedom of market forces" (p. 68). Further to this Signorini (2001) also notes that "cautious deregulation of the labor market has begun... More room for flexible arrangements has been allowed in national labor contracts and, most significantly, in actual practice" (p. 81). Signorini (2001) also draws our attention to Italy being a late, but avid privatiser. So while hesitation and caution are being exercised by Italy in its adaption of the national template of the neoliberal model of development, the Italian adoption is nonetheless clear.

Conclusion

Tracing the endogenous development of agricultural practices in Italy enables us to see the historical importance of the peasantry. The peasantry and their influence

on the shape of the land and the nature of land holdings, along with the concerns of the peasantry gives context to the emergence of the agricultural practices I investigated in Rome: Gruppi di Acquisto Solidale (GAS) Testaccio Meticcio, Il Papavero, La Nuova Arca and Barikamà (to be explored in detail in the subsequent chapters). The emergence of these agricultural practices could also be explained by the persistence of the family farm logic that has driven Italy's small scale agriculture; which has in turn enabled pre-existing agricultural systems in Italy to resist some aspects of the dominant agricultural system and provided a space for a complex array of agricultural practices and systems to emerge, co-exist and evolve.

As Lefebvre et al. (2015) suggest it would be naïve "to lay all the responsibility for the transformation of rural landscape at the feet of the CAP" (p. 2089) and I certainly agree. Rather, I argue that the CAP is a regulatory tool of the corporate food regime used to neoliberalise agriculture throughout the EU. However, I do not even argue that the food regime, whilst central to the nature of emergent agricultural systems, is solely responsible for the transformation of agricultural systems. Technological developments, historical patterns and moments, as well as the food regime (encompassing the model of development and the model of development in agriculture) all contribute to the emergence of agricultural systems.

In the protected position afforded Italy by the EU, Italy is able to resist the corporate food regime to some extent and has as a result been able to protect its small scale agricultural industry in ways that the Global South have no capacity to do. The protection Italy is able to afford small scale producers is in spite of EU instituted regulation that has a bias towards the dominant agricultural system and encourages nations to move the agricultural landscape in that direction – a direction which fundamentally undermines the livelihood of local farmers globally.

Italy's agricultural landscape does demonstrate some of the characteristics of the dominant agricultural system including modernisation, mechanisation and export-orientation. As long as the corporate food regime continues, Italy's resistance to the dominant agricultural system remains precarious, balanced as it is on the protection of the EU, without which I am dubious Italy and its small scale

producers would survive the intense global competition presented by large scale transnational corporations. Thus, I argue that a central goal for a new food regime must be the direct facilitation of localised agricultural systems that prioritise self-sufficiency and food sovereignty.

In this chapter I hoped to more clearly express how the dominant agricultural system is spreading globally, and yet interacting with pre-existing agricultural systems in complex ways. I want to develop on this theme in the next chapters by detailing specific agricultural practices that I looked at in Rome. I consider these practices an emerging, alternative agricultural system that exists on the margins of the contestation between the invading dominant agricultural system and the adapting and resisting pre-existing dominant agricultural system in Italy. Thus I now turn to this emerging agricultural system as to investigate what agricultural practices, or evolving systems, that challenge the dominant agricultural system look like.

CHAPTER THREE

Consumption in an emerging agricultural system

Introduction

Recall my definition of an agricultural system as a process of economic and social reproduction that is defined by connected elements of production, distribution, investment and consumption. There are many different agricultural systems, and many less than fully formed agricultural systems, not just around the world, but sometimes within one nation state, and even within particular communities. More or less fully formed agricultural systems compete with, co-exist with, and sometimes assimilate aspects of, each other. There is however, currently one dominant agricultural system and in this chapter I want to investigate an evolving agricultural system which resists this in fundamental ways.

Given my critique of the dominant agricultural system it is imperative that alternative agricultural practices and systems are investigated that could remedy the failings of the dominant agricultural system, and can also inform a goal towards which conceptualisations of a new food regime can work towards. There is much to be learnt from existing agricultural practices that contest the dominant agricultural system. In this regard I focus on Rome and four local food practices there; Gruppi di Acquisto Solidale (GAS) Testaccio Meticcio; Il Papavero, La Nuova Arca and Barikamà.

A key problem that arises as I begin to think about this emerging agricultural system is what defines emergent agricultural systems and the dominant agricultural system. For my part, this question is insufficiently theorised. The relationship between what the FRS term the 'technological paradigm', which in agriculture is roughly equivalent to what I call the 'agricultural system', and regulation and accumulation, or 'model of development' is not given adequate attention in the FRS. I inherit this lack of theorisation which is problematic given that my research goes from the global, to the national and right down to the micro realities of the agricultural system. I tentatively address this deficit by suggesting that in previous and current eras, regulation only indirectly constructs the agricultural system because other things influence this construction too. Thus,

while the food regime has a very influential effect on the nature of emergent agricultural systems, and the dominant agricultural system, in the current era, it is not the sole determinant of the limits and possibilities of agricultural systems. When thinking about a new food regime I argue that, much more explicitly, the food regime should directly regulate and facilitate the construction of agricultural systems premised on food sovereignty. However, this attempt to theorise the connection between substantive agricultural systems and existing regulatory frameworks needs further development in later work.

This chapter begins by outlining the research methodology I used for my field research in Italy. I detail the objective of my research and then briefly describe my methods of information gathering.

In the rest of this chapter I look at one agricultural practice which I argue could be thought of as part of an evolving agricultural system. As a whole my field research looks at four agricultural practices which can be categorised into the consumption and production elements of a less than fully formed agricultural system. Production and consumption are the two key elements of the economic base, of the accumulation regime, and of my conceptualisation of an agricultural system. Thus, it is appropriate that my field research addresses each of these elements in turn. I discuss the production elements in detail in the subsequent chapter. For now, I want to investigate the consumption element. The consumer element of this emerging agricultural system centres around the Gruppi di Acquisto Solidale (Solidarity Purchasing Groups or GAS). I met with one GAS group – Testaccio Meticcio – who are based in Rome and consume food from local producers in urban and peri-urban Rome.

Research Methodology

Objective

Reflecting upon the flaws of the dominant agricultural system and the tragedy of the corporate food regime I was motivated to find alternative, agricultural systems in practice. I established contact with Dr Philip McMichael, a professor in the Department of Development Sociology at the University of Cornell, New York who has written extensively on periods of capitalist accumulation with a focus on agrarian questions, food regimes, and food sovereignty movements (see

McMichael, 2009a; 2009b, 2016). I asked for his professional opinion on the most suitable place to do some empirical research. Several options were offered, I chose Rome, Italy, based on the local food production and consumption practices occurring there. Through Professor McMichael I established contact with Dr Maria Fonte, currently with the University of Naples Federico II. Maria confirmed that she would be between Rome and Naples at the time I hoped to do research and would assist me with this.

There were three core elements to my research. Firstly, I was interested in the nature of the food sovereignty movement in Rome based on particular case studies that are involved in what I call an evolving agricultural system. The cases I looked at were GAS Testaccio Meticcio – one of the Gruppi di Acquisto Solidale (GAS) – "groups of households that cooperate in purchasing food and other goods directly from producers" (Fonte, 2013, p. 230); La Nuova Arca – a family home that expanded into an agricultural production practice that now supplies 200 customers with food (Carbone, Crisci, & Fonte, 2015); Barikamà – a social cooperative the result of solidarity within the GAS community (Diara, Crisci, & Fonte, 2015); and Il Papavero – a small organic farm that collaborates with the GAS movement (Savioli, Crisci, & Fonte, 2015). Dr Maria Fonte was central in helping me to select these case studies and establish contact with the people involved.

The second element of my research had more of a practical focus. I was interested in identifying emerging elements of alternatives to the dominant agricultural system. The emerging agricultural system that GAS Testaccio Meticcio, La Nuova Arca, Barikamà and Il Papavero are a part of appeared to me in preliminary research to operate in ways distinct from the dominant agricultural system. I was interested in the present reality of this emerging agricultural system; how did this begin? Why did it begin? How do the production, distribution, exchange and consumption elements function? Does the emerging agricultural system face any constraints and is it ideologically motivated? These were the practical questions that I hoped to answer whilst in Rome.

Learning about both the possibilities and constraints of an alternative agricultural system in practice leads into the third element of my research. I want to investigate the extent to which elements of emerging marginal agricultural

systems could be considered to provide a viable alternative to the dominant agricultural system. Furthermore, I want to consider whether it is conceivable that a localised agricultural system could become the dominant practice across the world. This line of inquiry leads into my long term interest of conceiving of an alternative model of development in agriculture with an alternative agricultural system at its core. I am interested in learning from existing alternative agricultural practices to help conceive of a new food regime. The research elements of this last paragraph are discussed in chapter five.

Method(s) of information collection and analysis

I undertook field research in Rome from the 13th of April to the 1st of May 2016. Here I employed a qualitative approach based on semi-structured interviews. Maria Fonte, my contact in Rome, gave me the contact details of Salvatore Carbone from the co-operative La Nuova Arca, Mauro Ventura who is involved with the co-operative Barikamà and Angelo Savioli from the farm Il Papavero. Maria advised me of the best person to help establish contact with those involved in the GAS movement – this person desired that their identity remain confidential. With the aid of this contact I established meetings with Uta Sievers and Alfredo Gagliardi involved in one of the GAS groups – GAS Testaccio Meticcio. Thus I employed the method of snowball sampling to recruit potential participants.

In-depth interviews

I carried out in-depth interviews with producers engaged in the local food production practices La Nuova Arca, Barikama and Il Papavero and consumers involved in GAS Testaccio Meticcio.

All participants received an information sheet (see appendix A) and a consent form (see appendix B) prior to the interview. The participant was given the choice about how they would like their identity and affiliation with their practice represented. The interviews were face-to-face and semi-structured which on average were approximately 40 minutes long. I had an interview guide on hand however, following Rubin and Rubin (2012) I engaged in *responsive interviewing* which often meant the conversation moved beyond the scope of the guide. Furthermore, after initially asking the participant to tell me their story I found that most of the questions were answered.

In total I interviewed six people engaged in the emerging agricultural system; Uta Sievers and Alfredo Gagliardi from GAS Testaccio Meticcio; Mauro Ventura from the co-operative Barikamà; Salvatore Carbone from the co-operative La Nuova Arca; Angelo Savioli from the farm Il Papavero; and one participant who preferred not to be identified, so for purposes of confidentiality I will call Jane. All but one of my participants spoke English. For my interview with Angelo, my one non-English speaking participant, Maria accompanied me to Il Papavero and translated the interview for Angelo and myself. The participants all gave their permission for the interview to be audio-recorded and transcribed and for me to take hand-written notes during the interview.

Consumption in an emerging alternative agricultural system - GAS Testaccio Meticcio

Introduction to the Gruppi di Acquisto Solidale

A particularly unique initiative the Gruppi di Acquisto Solidale (GAS) movement sparked my attention because of its passionate premise of solidarity, something that is sorely absent in the dominant agricultural system which is encouraged, though not directly defined by, the corporate food regime. The GAS movement is driven by principle and value, but ones which refreshingly seem at odds with those that seep through the corporate food regime and in practice emerge in the substantive variations of the dominant agricultural system. Sustainability for both the environment and future generations, social justice, health and solidarity imbue this movement with a contra perspective. Fonte (2013) nicely describes the GAS as "groups of households that cooperate in purchasing food and other goods directly from producers on the basis of ethical and environmental criteria and considerations of solidarity" (p. 230).

The generic arrangement for buying food in the dominant agricultural system involves an individual consumer going to the supermarket to choose a particular product that they desire, purchasing this product and leaving; buying food is more complex within GAS. Fonte (2013) points out that "the first important difference is that the act of purchase is not individual but collective, implying planning and coordination" (p. 237).

The informality of the GAS is suggested by Grasseni (2014) not to be "an economic category but a political choice, to keep business as much as possible at a face-to-face, direct transaction level. Informality thus becomes a conscious dispositive to embed trust in short provisioning chains" (p. 79). However, while GAS is an informal reality it has been recognised in Italian law which implies some level of formalisation. Whilst formalisation is not imperative to the everyday practices of GAS, and in fact is often actively resisted by most members, it does provide a policy space in which this sort of agricultural practice can continue evolving into an alternative agricultural system which could potentially become dominant given a different food regime. I would not say that the social process GAS is involved in is a fully formed agricultural system but rather an articulation of different elements that is moving towards an agricultural system. This emerging agricultural system is in contestation and/or dialectical interaction with the pre-existing dominant agricultural system in Italy; which is in turn in contestation and/or dialectical interaction with the globally dominant agricultural system.

Fonte (2013) outlines how GAS are legally represented.

In the Italian Finance Law No. 244 of 24th December 2007, Article 1, paragraphs 266-268 – GAS were recognised as "non-profit associations set up to carry out collective purchase and distribution of goods for ethical, social, solidarity and environmental sustainability purposes" (p. 233).

In comparison to this legal description, in their policy document GAS state that "The objective of GAS is to provide for the purchase of goods and services whilst attempting to realise a more human vision of the economy, that is, an economy closer to the real needs of people and the environment, expressing an ethos of critical consumption that unites people instead of dividing them" (Fonte, 2013, p. 233).

The first GAS was established in Fidenza (Parma) in 1994. The GAS movement is now widely spread and established throughout Italy, Fonte (2013) notes that in 2013 945 GAS were listed on the national GAS network. While Fonte was researching they managed to identify and map 160 GAS in Rome alone. The first GAS established in Rome specifically was around 2001 (Fonte, 2013). However,

as Fonte (2013) points out, the informal nature of GAS means that at any given time new groups may be forming and older groups devolving.

A regional network of GAS was identified by one of my participants. This regional network is made up of people trying to do something more than just purchase and consume food but move towards the vision outlined in their policy statement above. The terminology here implies the ultimate vision being one which transforms the nature of the capitalist mode of production, in the sense of the economic base, itself. The existence of a regional network offers great potential for challenging the dominant agricultural system, specifically the supermarket chains associated with the latter.

The GAS provide a direct alternative to supermarkets (which are gradually and unevenly spreading and undermining traditional forms of consumption and distribution, making a direct and radical alternative imperative to retain traditional forms). Furthermore, the GAS manage distribution and exchange, seeking to change the social structure, in the same ways as a supermarket. Just as GAS influences production, supermarkets are also increasingly controlling production. By choosing which products to stock on its shelves, the dominant supermarket system is forcing (for example) the intensification of competition between producers over prices. Thus, supermarkets are directly in command of the commodity chain (in Dicken's sense of the term) and are increasingly directly coordinating and thus, directly influencing, the structure of the production system itself. GAS is a specific variation of that logic, but rather than coordinating and controlling production process according to capitalist priorities, it is a radical consumer association which aims to influence the forms of agricultural production according to progressive principles such as organic, local, and sociable ones. The GAS is essentially an alternative distribution system based on a democratic cooperative of consumers; which can be contrasted with the supermarket distribution system.

The community that is developed is a success that is celebrated among the GAS members. Community is truly something to celebrate in an era of pronounced individualisation (Beck, 2007). Individualisation is imposed on individuals by social structures. Beck (2007) argues that the institutionalisation of individualisation is evident in the relationship between the state and people. The

recipient of state policy and so on "is the individual and not the group, the collective" (Beck, 2007, p. 682). For people living in an era of pronounced individualisation they are faced with, an "impossible task of finding biographical solutions to systemic contradictions" (Beck, 2007, p. 685). While I would not follow Beck's (2002) individualisation argument into the realm of class as a 'zombie category', this phenomenon does posit challenges for any reinvigoration of solidarity or the collective, which makes the GAS and the emerging community built on solidarity quite a success.

The importance that is placed on building relationships between the producers and consumers, and also among the consumers themselves, goes hand in hand with the value of buying local food. For of course maintaining a community and developing relationships is less feasible when the constituents are separated. Grasseni (2014) suggests that for GAS activists or "gasistas, trust substitutes an oppositional setup that places consumers and producers as vocationally at odds in a free market" (p. 88); and in the globally dominant agricultural system.

Brunori et al. (2012), having studied the GAS in Pisa suggest that the principles which GAS are based upon are reflexive consumption, solidarity within the group and with producers, socialisation, and development of synergies "that is, the use of social links to generate economies in food production and distribution" (Brunori et al., 2012, p. 10). From my findings I would also add that the principles which drive engagement in GAS Testaccio Meticcio include health and environmental preservation, along with the promotion of solidarity and socialisation etc. identified by Brunori et al. (2012). There is potential that this practice can inspire a wider shift in the type of food bought, how it is bought and who or where it is bought from.

The origins of GAS Testaccio Meticcio

A GAS can be initiated by anyone – although it is helpful if the coordinator has previously been involved in another GAS. The initial coordinator of GAS Testaccio Meticcio was Alfredo Gagliardi who began the group in 2011. A. Gagliardi (personal communication, April, 2016) thought that the GAS he first joined was less participatory than he thought ideal. He suggested that only a few members were left to manage all of the roles. This lack of engagement also

extended into the social arena. He expressed that he was not happy that "there were people that were just coming and taking their stuff and we didn't know anything about them" (A. Gagliardi, personal communication, April, 2016). Dissatisfied with such behaviour he was inspired to begin a new GAS which would be premised on the participation of all members. This was something (A. A. Gagliardi (personal communication, April, 2016) really stressed; "when someone wanted to join I really say, but remember you have to participate".

Fonte (2013) draws attention to a distinction between the GAS that are instigated in a workplace environment or by a formal organisation, and those driven by grass roots initiatives. Of the former, Fonte gives the example of the Italian Christian Workers Association which promoted a GAS, and suggests that GAS with origins such as this are organised in a more formal hierarchy, with greater organisational responsibility at the top of this hierarchy. This sort of organisation differs from the likes of GAS Testaccio Meticcio and other grass roots GAS which are more participatory. Fonte (2013) points out that most GAS are more in line with the latter, prioritising participation in the organisation "seeing it as important to democracy and political consciousness" (p. 233). Interestingly enough Fonte (2013) found that most GAS in Rome are more informally organised and prioritise participation.

Fonte (2013) suggests that the origins of the GAS can vary greatly, and that this, along with the variable circumstances in which they function "all influence the character of the inspiration that motivates them and their mode of organisation" (p. 233). This variation creates a lot of diversity in the GAS. Some of the inspirations which motivate the GAS include "leftist political ideologies... environmental concerns... Catholic (or other Christian) spirituality... obtaining healthy food or making the food system more sustainable" (Fonte, 2013, p. 238)

One of the most important aspects of beginning a new GAS is ensuring that the space where the weekly meetings are to be held is accessible and visible. When Alfredo was beginning the GAS he was offered some space in the suburb Testaccio Meticcio. He did not know anyone in this suburb so he began by advertising on the internet and with flyers on the suburb's walls. Often when a GAS begins a lot of the people do not have any knowledge about how a GAS operates which was why Alfredo's previous experience was instrumental in

beginning GAS Testaccio Meticcio (A. Gagliardi, personal communication, April, 2016).

The GAS began slowly, with only a few members in the beginning, around six or seven (U. Sievers, personal communication, April, 2016). A. Gagliardi (personal communication, April, 2016) described this as being difficult because not all the members were ordering consistently so they were not reaching the minimum orders for the producers. When they moved location to a different area of Testaccio the visibility, and thus the membership, of the GAS increased. U. Sievers (personal communication, April, 2016) suggested that it "just exploded, it was incredible. We were so central then, that everybody in the neighbourhood knew about us". They ended up getting such a response that they had to stop advertising.

GAS Testaccio Meticcio now has about 40 active members. This is described as being a big GAS, implying a large amount of money and goods to handle. One of the members described how "at a certain point I realised that we couldn't grow in number of people because we had reached the right number, which was 30 or 50 people" (Jane, personal communication, April, 2016). Fonte (2013) suggests that most GAS ensure their group is maintained at a small size so as to ensure that "personal relationships may be developed among all the members of the group" (p. 233).

Physical description of GAS Testaccio Meticcio

GAS Testaccio Meticcio meets weekly at Via Nicola Zabaglia 24. This is the office of a left wing political party called SEL, although there is no relation between the organisations. The members described it as being accessible and quite central, although it felt quite quiet and residential when I visited. Perhaps the proximity to residential addresses helped make it more accessible. This office was reasonably non-descript, on the ground floor, fronted by a foot path. Next to the office was a very small park before the next big apartment style building began again. The space was perhaps 8m long by 4m wide. There were some chairs stacked up to one side and a long table at the back. When I arrived some of the groceries to be distributed had already been delivered, and were in brown paper bags resting in plastic crates. The meeting followed a printed agenda, however

where topics allowed it laughter would break out, and sometimes small conversations would crop up, so there was an air of informality creating a sense of community and friendship amongst the members.

The functioning of GAS Testaccio Meticcio

The internal workings of GAS differ from group to group, although the general principles remain common. A GAS is a group of people, who meet together for approximately two or three hours once a week. During this weekly meeting, farmers drop off their produce – which has been ordered previously in weekly, fortnightly or monthly orders – and the food orders are picked up by the GAS members. Fonte (2013) points out that "it is the product coordinator, not the individual GAS member, who pays the producer" (p. 237). This weekly time slot is not solely about the delivering and collecting of goods but a large portion of it is also dedicated to an agenda-run meeting used to address issues or questions. Many orders are dropped off at the very beginning of the evening, which enables them to be sorted out somewhat. Nevertheless, a few farmers continued to bring in orders through the course of the evening, while the discussion was being held. This discussion was held in a circle in the middle of the office space.

For GAS Testaccio Meticcio the weekly meeting occurs on a Thursday evening beginning at 6.30pm. The official end of the meeting varies as the agenda dictates, but the socialising does not end congruently with the more formal meeting. The meeting I attended wrapped up at approximately 8.45pm, although people were still socialising once I left perhaps ten minutes after that. Throughout the course of the evening, ten males and sixteen females were involved in some way, including both GAS members and local producers. People were either actively involved in the meeting, or passing through picking up their orders, or dropping off deliveries. Those that passed through would greet the members having the meeting and then begin searching through the orders for their own. Some of the produce I noted being delivered included beans, artichokes, sweet cakes and Barikama's yoghurt.

While the weekly meeting appears to be the most active time for the GAS, work also occurs during the week. There is email correspondence to and fro between members dealing with issues concerning the amount of food being ordered. Furthermore, orders are placed throughout the week by those members with that

role. The placing of orders occurs through a software system. Those members must collate the order, download it with all the names and respective amounts for each person and then ensure that is respects the minimum order that the farmer will accept. Then the member sends the order to the farmer.

Orders are placed at set times depending on the product. There are weekly, biweekly and monthly orders. Fonte (2013) points out that the products are selected
based on *production practices* which are considered more important than *product*characteristics in the pursuit of "enhancing environmental sustainability and
principles of solidarity" (p. 235). The dominant agricultural system, in particular
the affiliated supermarket, does not as readily provide consumers the ability to
make choices based on production practices. It is easier to make decisions about
product characteristics because of the variety, but there is no room for negotiation
on production practices once the product reaches the shelf of the supermarket.

The vegetables are the core order, organic and locally sourced, they are ordered weekly. Upon my visit they were receiving the first order of vegetables from a new vegetable producer. This will be the fourth vegetable producer in the five years of this GAS. The producer is not selected haphazardly, but rather, "in accordance with ethical and solidarity principles, the most important of which are respect for the environment and for people" (Fonte, 2013, p. 232). Not only must the food be organic, visitation to the producer's fields occurs to ensure, for example, animals are well cared for (U. Sievers, personal communication, April, 2016). Fonte (2013) adds that when GAS meet with producers on their farms they also "discuss issues of agricultural practice, organic certification, working conditions (especially where immigrant workers are employed), recycling, price formation and price variation, production planning and risk sharing" (p. 237).

Various other orders are added bi-weekly and monthly. Eggs, yoghurt and baked goods come in bi-weekly. On the last Thursday of every month this GAS has their biggest order that includes the monthly deliveries, for example the Fairtrade order through which chocolate and coffee is purchased.

U. Sievers (personal communication, April, 2016) suggested that there are other companies in Rome that offer a similar proposal to the GAS but that focus less on encouraging community and more so on access to the product. U. Sievers

(personal communication, April, 2016) suggested that such companies "actually give you your vegetable box but it costs about three times as much as what we sell it for; and you don't have to have a role of course and you don't have to come once a week or plan ahead so it's much easier for the customers to do that sort of concept". This can be contrasted to the participatory nature of the GAS, and "how everyone works together to get stuff done".

There are various roles within the group, and it is expected that everybody does something to contribute. Initially those who did not take up a role had to pay a five-euro penalty, although this has since been stopped. Nevertheless, U. Sievers, (personal communication, April, 2016) suggests that "people are generally encouraged and eventually everyone does something and you can see that this only works if everyone contributes".

A. Gagliardi (personal communication, April, 2016) described his initial role as a coordinator, which he subsequently shared with another member of the group. He thought the differences between the two complimented each other nicely, suggesting "it's better if two people work together that are different" (A. Gagliardi, personal communication, April, 2016). Both Alfredo and the other coordinator have since stepped down from this role.

During the course of the meeting I was also made aware of a role that involves managing the avocado order. There was one person responsible for receiving the 15kg order of avocados into their office. However, one of the points of discussion was that he was no longer able to receive the order. Unfortunately, there was noone to take up the role and thus the avocado order would be ceased in the future. This points to the limitations of this alternative distribution system. Not only will the avocado producer lose a consumer base but any GAS consumers with a preference for avocados will have to find an alternative means of obtaining them. However, although in this case the local producer has lost a consumer base, when the relationship with a GAS is successful producers are afforded more security than what they would have in the dominant agricultural system. A problem only arises if the GAS they supply cannot fulfil order requirements, as is the case for the avocado producer working with GAS Testaccio Meticcio at the time of my research.

U. Sievers (personal communication, April, 2016) gave a detailed account of the egg order, as managing that order was her role within the GAS for a while. The eggs came from about 50kilmetres outside of Rome. On a Monday morning Uta would send the order to the egg producer. The amount would vary fortnight to fortnight, "you know 90 eggs or 120 eggs this week, or 172 eggs or something" (U. Sievers, personal communication, April, 2016). The order of eggs would then be brought into the city on Thursday afternoon. Because the GAS is very much a cooperative experience, and Uta was not able to receive them into her home, the eggs would be delivered to one of the members in the area and then they would bring them into the weekly Thursday meeting for pick up.

Another role that Uta had, following charge of the eggs, was to welcome new people into the GAS. This involved helping them through a trial order to ensure they understood the process and explaining that they must be able to pick up their food every Thursday. If members are not committed to the latter, it obviously creates problems for the group. New members reach out to the GAS themselves, as the GAS had ceased advertising once they reached a stable core of about forty (U. Sievers, personal communication, April, 2016).

GAS Testaccio Meticcio is participatory in two senses. Firstly, the engagement with a role to contribute to the functioning of the group. Secondly, there is a social aspect of participation. The group makes efforts to know one another, and also to do social events together (A. Gagliardi, personal communication, April, 2016). U. Sievers (personal communication, April, 2016) mentioned picnic trips on the weekend out to the countryside. Not only are the relationships between members of the GAS actively cultivated, but also the relationships between the group and the local producers.

Not everybody within the group does participate actively, despite the expectation. Some choose not to visit the producers or stay for the weekly meetings, but prefer to simply pick up their order and leave. U. Sievers (personal communication, April, 2016) thought that "about half of the people get actively involved. So they stay a bit longer and they chat and they get to know each other... so you'll see, the core group is basically those that always show up for the meetings". During the weekly gathering, members can interact with the farmers/producers if they are there when the farmers come to deliver their goods. So not only is there potential

opportunities to develop relationships with producers during organised trips out to the farmers' land, but also when they come to deliver their goods.

Demographic

A. Gagliardi (personal communication, April, 2016) describes those involved in GAS Testaccio Meticcio as professional people, middle aged and comfortably employed. One participant mentioned that at age 44 they were amongst the oldest in the GAS (U. Sievers, personal communication, April, 2016). There are a few other people in their late forties, however there is no one who is really young. U. Sievers (personal communication, April, 2016) pointed out that there are no students amongst their group "because they would not be able to afford it". Generally speaking, the demographic picture of GAS Testaccio Meticcio is people in their thirties, "who work and have a level of education with which they can then analyse situation, like the one of the supermarket and make choices you know" (U. Sievers, personal communication, April, 2016). U. Sievers (personal communication, April, 2016) mentioned that although she is of the opinion that GAS are normally composed of families, this is not the case for their GAS. The absolute majority of members are single people, or couples. Although there is a minority of people who are single mothers, or couples who have very recently had a child.

The suburb Testaccio where this GAS is based is described as being "an up and coming area, the neighbourhood has completely changed. It's become so cool to live here; rents have gone up and so more people who can afford this kind of food have also moved into this area so it's good" (U, Sievers, personal communication, April, 2016). It was suggested that the average income of members is quite high. One participant suggested that "in general the GAS at the moment is more a niche market for people that can afford it. I think there is a kind of potential to widespread more but there are some social barriers" (Jane, personal communication, April, 2016). Thus, although the food purchased in this GAS is described as being affordable for organic food, perhaps it is still nonetheless more expensive than other non-organic options. This sentiment is confirmed by Grasseni (2014) who suggests that the cost of purchasing food in the GAS is higher than through other avenues. Grasseni (2014) states that "the overall expenditure of 6,232 interviewed *gasista* families amounted to more than

4,600,000 euros, specifically 742 euros per month per family (amounting to more than 13 per cent of the average Italian food provisioning monthly expenditure)" (p. 84). The green movement and other social movements of the age are also criticised as only being accessible to middle class people with both the money and time to dedicate to making alternative choices.

Without being able to compare between the demographic of other GAS, one can only speculate about the reason that GAS Testaccio Meticcio uncharacteristically lacks family membership. Perhaps the membership roughly reflects the general demographic of the area where this GAS is located. U. Sievers (personal communication, April, 2016) described the area as both fashionable and expensive to live in. Perhaps the cost of living limits both the amount of families in the area or the ability of people with families who do live in the area to choose to purchase food in GAS when perhaps supermarket purchasing is more affordable. This is only speculation, further investigation is needed to understand why the membership of this GAS uncharacteristically, for GAS, lacks families.

The occupations of the GAS members were quite diverse, although the resulting income appears less so. For example, one member worked at the bank of Italy, another member restored old buildings, one worked in the migrant centre and another is a famous journalist in Italy. The ethnicity of the core active members — those who engaged in the formal aspect of the weekly meeting — was not overly heterogeneous. All of the core active members were Italian except for two people, one of whom was Belgian and the other, German.

Where possible I noted the gender of those engaged in the weekly meeting. There were more women directly involved in the meeting and the sorting of the orders, i.e. the majority of core active members were women. Men were more likely to pass through and not engage in the formal agenda-run meeting. Only two men remained for the entire duration of the formal meeting. Over the course of two hours and 45 minutes a total of sixteen women and ten men were involved in some way – active members, members passing through or producers dropping off deliveries. Without more field research it is hard to speculate about the reason for this gender distinction. The only suggestion I would put forward is that traditionally women were in charge of the daily food shopping (Scarpellini, 2004) which might be a practice continued today in food consumption. This is backed up

by Grasseni (2014) who finds that "62 per cent of GAS practitioners are female... [and suggests that] This is not so counter-intuitive in Italian society, where procuring food, shopping and cooking is still largely left to women" (p. 82).

Of the GAS in Rome that Fonte (2013) looked at she found that

Most members are aged between 35 and 50, with medium to high-level formal education and belonging to the middle class rather than the upper or lower. GAS members are most frequently employed in the public services, as teachers or researchers etc., or in the professions, as doctors, archaeologists, journalists and the like, but we also found many artisans, self-employed people, retired people, students, young (and not so young) people with precarious jobs and lower-status employees, or, as one interviewee said, 'proletarianised middle class' (p. 233).

Comparing my findings to the demography that Fonte presents it seems that GAS Testaccio Meticcio is quite typical/representative of the general demographic of those involved in GAS. In terms of age, class and occupation my findings generally echo what Fonte describes. However, within GAS Testaccio Meticcio there were no young people or students. As for the precarity of the jobs of those in GAS Testaccio Meticcio, one can only speculate that as a general trend in neoliberal led global capitalism their jobs may too be increasingly precarious in this era of hyper competition and responsibilised individualism (Neilson, 2015; Standing, 2012). Fonte (2013) does note that among GAS members "there is a widespread perception that their households operate on a tight budget, making it difficult or impossible for them to obtain healthy, sustainable food at 'affordable' prices in the conventional market" (p. 233), which lends itself to the probability of precarity (Neilson 2015; Standing, 2012) amongst GAS Testaccio Meticcio members too, even though this was not mentioned by my participants.

The support network

The GAS are pivotal for the security of local farmers. In this sense the GAS coordinates a commodity chain of producers. Not only does the guaranteed consumer base of the GAS buffer the intense competition that producers face in the corporate food regime, but the GAS also helps the producers with their funding needs. This prevents producers from relying on loans from the bank that charge interest. These sorts of endeavours are a display of the solidarity and security within the emerging agricultural system. On the other hand, the dominant agricultural system is for the most part completely bereft of security in the wake of hyper competition which in turn undermines food sovereignty for much of the Global South and marginalised areas of the Global North.

Pre-financing is something that many GAS do. GAS Testaccio Meticcio initiated pre-financing approximately four years ago. They pre-finance both Il Papavero and Barikama. When it comes time to pay for the produce, those members that helped with the pre-financing only have to pay half price. For example, at one stage Barikama needed to buy a fridge, so the GAS gave them the funds for that, and in return the GAS only paid half price for their yoghurt until the fridge had been paid off. This not only develops relationships due to active engagement, but also a mutual trust and reliance which is pivotal in this emerging agricultural system.

The GAS have had a large impact in local areas. Fonte (2013) suggests that due to their impact "GAS have become a recognised political subject, also active in political initiatives. GAS in Rome, for example, promote educational activity in schools and neighbourhoods on themes such as nutrition and sustainability... [they] promote initiatives of sustainable mobility and animal welfare, and in 2011 were very active in the referendum against the privatisation of water in many municipalities" (p. 235).

The heterogeneity of value and motivation

In terms of the political, environmental and consumer values of members A. Gagliardi (personal communication, April, 2016) notes that the group is quite heterogeneous. This inevitably leads to conflict within the group when choices must be made pertaining to certain orders or producers etc. One example given was the choice about whether to include meat. A. Gagliardi (personal communication, April, 2016) was of the opinion that "it's very strange that you can take advantage of animals and be part of a GAS but for many people it's pretty normal". In order to really embody the practices of critical consumption A. Gagliardi (personal communication, April, 2016) thinks it is necessary to exclude

the purchase of animal products from the GAS. This is not a value shared by all of the members of the group.

Another example given is debate around the extent of freedom that GAS members should have in regards to choosing between producers. A. Gagliardi (personal communication, April, 2016) suggested that "some people think that you should have the freedom to choose what to buy in the sense that there should be a big offer at the GAS and everyone should be free to choose what to buy in this big offer". Rather, A. Gagliardi (personal communication, April, 2016) thinks that as a group the decision should be made collectively about what they should purchase and who they should buy it from; that as a group they should only select one producer for each good. This limits the extent of each individual's choice, but perhaps our choice *should be* limited by seasonality and yield size in order to promote and encourage sustainability. As a point of interest A. Gagliardi (personal communication, April, 2016) points out that anyone can bring forward a potential producer from which the group could order a new product if the group agreed.

Fonte (2013) suggests a distinction can be made

between the more and the less committed, the radicals and the followers. Some GAS representatives, especially those organised in the workplace and those associated with cultural and environmental associations, see GAS as a service whose function is only to provide healthy food at affordable prices; others (the most engaged) see in the new practice a prefiguration of a new, more sustainable, food economy and society. These two visions are very distinct, both being present in the minds of GAS members, and are not necessarily contradictory. Indeed, they often co-exist in the same group (p. 234).

Navigating conflicts based on different values perhaps stemming from different visions would be central to the organisation of the GAS. As most GAS prioritise participation in organisation, democracy must run its course in managing visions that sometimes, though not always, may result in conflicts.

In a way U. Sievers (personal communication, April, 2016) also drew attention to variation in value and vision within the group. She suggested that as new

coordinators took up the role, the GAS inevitably changed shape. She was not presenting this as a negative thing. U. Sievers (personal communication, April, 2016) remarked that "it needs to move through phases and the old people need to step back. That's one of the huge lessons - that you can only push for your vision for so long and then enough new people have showed up and it's going to be different".

The localism of GAS Testaccio Meticcio

Although the values of the individual constituents of the GAS may be different, the GAS movement generally is purported to be premised on the value of localism, among others. Localism in terms of food production and consumption can be understood as the local exchange of products; which may or may not be organic food and may or may not be motivated by safety and environmental concerns or sympathy for the farmers. Albeit Winter's (2003) research being based in England and Wales, he offers an interesting insight around the assumptions and use of 'localism' that I consider important.

Winter (2003) suggests that often in literature and policy there is a mistaken conflation of organic production with localism. Winter's research found "considerable evidence of an ideology of localism based on sympathy for farmers" (Winter, 2003, p. 29) rather than being centrally about organic food production. The consumers know the farmers and are aware of their struggle to compete and so want to use their consumer power to remedy some of those struggles by buying locally. Winter's (2003) research suggests that localism is driven primarily by support for the local economy.

Winter (2003) also argues that localism should not be equated "simplistically with food safety and environmental issues" (p. 30). Because localism is not always premised on concern for the environment, some of the local food production engaged with in acts of localism may not always be environmentally friendly. As Winter (2003) suggests, some farms which locals purchase from are "intensively managed with high inputs of nitrate fertiliser and... with attendant problems of soil compaction and/or erosion" (p. 30). Winter's (2003) research, warns against celebrating agricultural practices premised on localism as inherently more environmentally friendly and sustainable than the dominant agricultural system.

(although it is worth noting that all things being equal localism is more environmentally friendly by virtue of the reduced transport miles between production and consumption). Nevertheless, this caveat prevents us from forming, as Winter suggests, a strict dichotomous relationship between the dominant agricultural system and localised alternative agricultural systems. Localism needs to be understood as being motivated by fragmented and diverse concerns which means consumer satisfaction can be obtained without any promotion of agricultural systems that are sufficiently different from the dominant agricultural system to be called alternative.

Turning now to the localism of GAS Testaccio Meticcio, it seems that their localism in practice *can* be conflated with organic production, and yet is more flexible in terms of purchasing solely from local producers. Fonte (2013) mentions that often members of GAS acknowledge they are not sufficiently skilled in agricultural practices to know which ones are sustainable, thus "buying certified organic food has become one of the routine methods for facilitating the process of selecting producers" (p. 236). This only reinforces Winter's (2003) point about the variation within localism and the need to investigate the subtleties and "the complex meanings and significations attached to acts of consumption" (p. 31).

For GAS Testaccio Meticcio there is some compromise on localism – in the sense of buying solely from local producers – when this comes into conflict with the choice and preference of the members. This compromise arises because some goods are simply not available in the region which encourages ordering from further afield. For example, their organic avocados come from Sicily, because local organic avocados are unavailable. U. Sievers (personal communication, April, 2016) noted that "when you look around, even in the health food shops or the organic shops, the avocados come from Chile". Another participant mentioned that their dates come from a cooperative in Iran (Jane, personal communication, April, 2016). There is a trade-off between local and organic production, where for GAS Testaccio Meticcio, organic production trumps.

A. Gagliardi (personal communication, April, 2016) suggests that the GAS must simply better delineate between needs and wants. He does not support the group's decision to buy products that are not local. He wants to encourage people to

consider whether they really *need* that product or whether it is simply a want (A. Gagliardi, personal communication, April, 2016). Whether the continuation of ordering from regions and countries far exceeding the 'local' expresses a limitation of this emerging agricultural system that cannot offer what consumers desire, or a limitation of the consumers themselves who have become so wedded to the logic of the sovereign consumer, is something that warrants further investigation.

Consumer concerns

Winter (2003), among others, is interested in the meaning and significance associated with consumption. In my field research I hoped to learn about the meaning and significance that GAS members associate with their consumption within the emerging agricultural system they form a central part of. Winter (2003) identifies a series of concerns: "human health and food safety, the environmental consequences of globalised and industrialised agriculture, farm animal welfare, and fair trade.... which are seen as the prime motivating factors in a move away from the homogenised products of the global agro-food industry in the western world" (p. 24). For the most part the participants in my research expressed what Winter calls the 'prime motivating factors' as their own motivations for consuming the way they do. However, there were some additional motivational factors and consumer concerns that inspired their decisions.

U. Sievers (personal communication, April, 2016) suggests that a spectrum of motivations influences members' engagement with GAS, but identified health concerns as a key motivation, saying "I mean this is healthy food, we know there are no pesticides in it and we eat it because it's healthy and it's real food". However, organic food is available through other avenues, so there must be other factors influencing the engagement with GAS in particular. A, Gagliardi (personal communication, April, 2016) suggests that although motivations are always personal, and he cannot speak for all members of the group, he said that buying good food at a good price that was still fair for the producer was a key factor for many people. The GAS provides an avenue for consumers wanting to purchase affordable, organic food. This echoes Fonte's (2013) findings that suggests "the basic motivational purpose in the GAS in Rome derives from the search for healthy, more sustainable food at an affordable price. One strongly held common

belief is that organic food is healthier and more sustainable than conventional food, but that in many neighbourhoods in Rome organic food is in effect unavailable" (p. 234).

A concern for the environment was also expressed as a factor motivating engagement with GAS, both A. Gagliardi and U. Sievers touched on this. A. Gagliardi (personal communication, April, 2016) noted that purchasing organic food not only promotes the health of the person, but the health of the environment too. U. Sievers (personal communication, April, 2016) addressed their localism suggesting that it is an attempt to protect the environment by negating the supermarket practices — "you know all the plastic that's involved and all the transport and so on". U. Sievers (personal communication, April, 2016) said that their aim is for their purchases to adhere to a zero kilometre logic; "to be local and rather not from further away than 100km" (U. Sievers, personal communication, April, 2016). As noted earlier, some exceptions are made. Fonte (2013) mentions that pursuing environmental sustainability means GAS prefer to buy local not just to reduce emissions from transportation but also to maintain biodiversity. Remember that a loss of biodiversity is one of the critiques levelled at the dominant agricultural system.

U. Sievers (personal communication, April, 2016) also touched on the explicit desire for relationships that attract people to the GAS. GAS enables consumers a direct relationship with those producing their food. She mentioned that it is attractive that "you can also go and visit the producers and you know what they look like" (U. Sievers, personal communication, April, 2016). This is something unique in the context of the globally dominant agricultural system, however perhaps less unique in the context of the Italian agricultural landscape made up of agricultural systems and a pre-existing dominant agricultural system largely based on small scale family farm production. I will expand on this point further on.

U. Sievers (personal communication, April, 2016) also mentioned that "some people come because it's such nice company, because we do hang out here every Thursday night. I'm also here until about 7.30, some people stay until 9 because it's nice to be here". This element of solidarity and community building perhaps provides a welcome change considering trends of competition and individualisation that are widespread in neoliberal led capitalism.

The added bonus of building direct relationships with producers helps GAS to ensure that they can purchase organic food at affordable prices that nevertheless are considered a fair price for the producers. The direct relationship shortens the chain between production and consumption, removing any intermediaries which therefore lowers the cost; "there are no supermarkets or shops, no logistics and no warehouse, all intermediaries between producer and consumer having been eliminated" (Fonte, 2013, p. 237).

Finally, participants identified a connection to Italian history as a reason for deciding to purchase food this way. U. Sievers (personal communication, April, 2016) suggested that engaging in this practice of food consumption is "a way for Italians specifically to be in touch with nature when they're in a big city; and most of them have at least a parent or grandparent who has grown up in the countryside...they are realising what they've lost and they kind of looking back and see that if they had been able to cultivate their grandparent's fields that that's what they would be eating". A connection to the land was pronounced within one participant's account of their history. They told me that their grandfather had a holiday house on a small farm. Here the family grew food that they took home all year round, including products like tomatoes, olive oil and wine. Although the participant did not themselves grow the plants, the connection to such practices and a family farm logic seems to link to engagement in such food practices as the GAS in their own life. As Fonte (2013) points out, "in the context of preserving and/or restoring (traditional) agriculture, food can be a vehicle for certain experience-based 'values' worth handing down to the next generation" (p. 236).

The prime motivating factors that encouraged people to engage with GAS echo some of those identified by Winter (2003). Concerns for both their own health and that of the environment were expressed both by my participants and those in Winter's research. Furthermore, Winter argues that localism is often inspired by sympathy for local farmers. Whilst my findings may not reflect that exact sentiment, certainly building a relationship with those producing their food was important for my participants. Thus it seems that connection, whether pre-existing or future-oriented, with local farmers is a factor encouraging people to consume outside of the dominant agricultural system. Not all of the motivating factors

revealed in my research fall under Winter's 'prime motivating factors'; this is because some are uniquely related to the development of agriculture within Italy.

The factors motivating those involved in GAS Testaccio Meticcio are unaffiliated with any institution (such as a workplace or church) which reflects the bottom up nature of this GAS. Not only are the motivations of the members unaffiliated with any institution, but so too is the organisation. A. Gagliardi (personal communication, April, 2016) remarked that he is unsure whether there is anything top-down that can be done to improve things. The grassroots nature of the movement is reflective of the real need for alternatives outside the dominant agricultural system.

Linking the history of Italian agriculture with the engagement with GAS

It is important to connect the historical development of agriculture in Italy with the present day developments of the emerging agricultural system GAS is a part of. Some of the factors that drive engagement in GAS today, as outlined by the participants, directly link with some of the historical developments of agriculture in Italy.

Family farm logic has endured right through the development of agriculture in Italy due to resistance to and continued protection from the neoliberal project. This logic encourages small scale farming, an element at odds with the dominant agricultural system, and more indicative of an alternative agricultural system. This family farm logic was sustained by the peasant agitation and revolt that eventually led to agricultural land reform which reduced the land holdings of the bourgeoisie, dividing them up amongst families and peasantry, which produced a large class of family farmers.

The ties between large peasantry organisations, such as Coldiretti, and politicians and political parties also sustained family farm logic. When policy was agreed upon that championed small farmers and family farming not only as productive, but also as the benchmark social unit (Lizzi, 2014), the importance and continued relevance of the family farm was crystallised.

The long-sustained relevance of the family farm perhaps in part explains the attraction GAS members have to consuming from localised small scale farmers,

with whom they are able to develop a relationship with. A. Gagliardi (personal communication, April, 2016) explained that Italy was a good place to begin the emerging agricultural system, "because there are many small producers like from the past, like people from the countryside that were producing things for themselves like small families".

Furthermore, the association between family farms and quality product that arose with the "quality turn consensus" (Fonte & Cucco, 2015, p. 264) has perhaps persisted into the present. Thus, when consumers desire *quality* healthy food there is appeal for a movement like the GAS. Here we can see an articulation of traditional agricultural practices with more recent developments.

Consumption as the beginning of an agricultural system?

Fonte points out that "literature on alternative food networks (AFNs) raises questions as to whether individual consumer behaviour may be at the heart of the transition towards more sustainable food systems" (Fonte, 2013, p. 230). In terms of the emerging and evolving agricultural system GAS forms a part of it seems that, in this case at least, consumer behaviour does indeed motivate the farmer's behaviour and in turn the emergent agricultural system itself. U. Sievers, (personal communication, April, 2016) mentioned how people want to buy good, local food that is more or less affordable and that that is the core of the operation. From this core, farmers then get involved and work with them. However, a subtle, though nonetheless important point needs to be made. The consumer behaviour arises because of failures and problems with the dominant agricultural system, and it is this that really motivates the beginnings of an emergent agricultural system.

Furthermore, discussing consumer behaviour as central to the emergence of alternative developing agricultural systems can led one into the trap of supporting the neoliberal argument of responsibilised individualism. Responsibilised individualism implies that individual consumers are left to take responsibility for transitioning society into a new agricultural system through their market choices.

Fonte (2013) argues that using practice theory to analyse food consumption absolves many dichotomies such as the empowered and disempowered consumer and importantly moves "attention from individual attitudes and behaviour to the interconnections among the different elements of a practice, as well as among the

intersections of different practices, practice theory provides stronger intellectual grounds for policy interventions designed to address systemic challenges such as the transition to more sustainable model of food consumption" (p. 232). This explication of practice theory holds potential.

I argue that we can think of consumer behaviour as one part of a whole composed of both agency and structure that is necessary for an alternative agricultural system premised on social and environmental justice to become the globally dominant agricultural system. I argue that an alternative food regime, should provide the regulatory parameters necessary for an alternative localised agricultural system to become dominant which could be encouraged by consumer behaviour at the micro-level. This is in line with Fonte's (2013) point that while motivations and beliefs have transformative power at the same time action is conditioned by social structures; "transition to sustainability is consequently represented in all its complexity as a systemic change of interconnected material and immaterial elements, rather than simply as a redirection of consumers' attitudes and behaviours" (Fonte, 2013, p. 238).

I return to Fonte's work in chapter five when I begin to consider the possibility of a localised alternative agricultural system becoming more dominant and both pushing out and remedying some of the flaws of the dominant agricultural system.

Conclusion

Food consumption as a social practice, part of a social process I call an agricultural system, holds potential for helping to transition society into a new agricultural system which could form the core of a new food regime. However, food consumption forms one element that must be coupled with many others in order to see the transition occur. The consumption element I observed in my field research was central to the emergence of this evolving agricultural system. It was the GAS that encouraged local producers to get involved. However, as I argued above, the best chance of transitioning society towards a new dominant agricultural system is by coupling agency and structure, by implementing microchange at the level of the consumer but crucially macro change at regulatory levels.

Aside from its role in potentially being an element that helps institute change in society, at the more basic level, food consumption as a social practice is an expression of a variety of values, mental understandings, background knowledge and desires as people in their everyday make choices about what to purchase, where to purchase it from and how to purchase it.

Food consumption in Italy is strongly influenced by a history of agriculture that is tied to a small scale family farm logic and fresh quality produce. This is evident in both the nature of the emergent supermarkets in Italy (discussed in the previous chapter) – one avenue through which food consumption can occur that is more closely linked to the dominant agricultural system – and engagement with GAS, a localised initiative driven by solidarity, a desire for quality and health and environmental concerns.

GAS Testaccio Meticcio offered me insights into what the consumption element of an alternative agricultural system might look like. The direct relationships and celebrated community of GAS Testaccio Meticcio was pronounced. Knowing both those who produce your food and those with whom you consume food was important. The participation of the collective was impressive. Individual consumption very much becomes collective consumption in the GAS. Choices are intimately shared with others and the effects of those choices must be directly accounted for because of those proximal relationships with the producers.

In some ways food consumption becomes much more complex through the GAS. The coordination and collaborative decision making, money managing, relationship building and weekly commitments make the practice seem cumbersome and difficult. However, it works in practice because it is driven by the very people who participate in making it a reality. Furthermore, the lack of intermediaries shunts a lot of necessary work back onto the GAS, but this enables them to achieve the lower price, albeit a fair price, for the products they desire. Thus, although complex it proves to be a very effective food consumption practice.

I want to reiterate that an agricultural system is made up of interconnected elements of production, distribution, investment and consumption elements which together define a process of social reproduction that defines an agricultural

system. This chapter focussed on the consumption element of the emerging agricultural system I looked at in Rome but which exists across Italy. I now turn to the production element and what I learnt from three local food producers that provide food for GAS Testaccio Meticcio.

CHAPTER FOUR

Production in an emerging agricultural system

Introduction

In this chapter I want to investigate the production element of the emerging, not yet fully developed, agricultural system that I investigated in Rome but which is evolving throughout Italy. As argued in the previous chapter, the GAS are the consumption element, but also, similarly to a supermarket, coordinate distribution and exchange as well. Production and consumption are the two key elements of the economic base, the accumulation regime, and my agricultural system. Thus, I now want to discuss the production element in-depth.

In this emergent agricultural system the GAS are the consumer base for many local producers. Given that in 2013 945 GAS were listed on the national GAS network, with a high chance of more GAS existing that were not listed, many local producers are needed to supply the GAS around the country. I only focussed on GAS Testaccio Meticcio, a particular GAS in Rome, but just to demonstrate the extent of local producer engagement, this one group used a different producer for yoghurt, vegetables, baked goods, eggs, avocadoes, and fair trade items among others.

This chapter gives a description of three producers involved with GAS Testaccio Meticcio. I am interested in their production practices and motivations for engaging in this emergent agricultural system. Why is it that these producers choose to produce food for local consumption rather than the conventional market which has largely become global due to the corporate food regime?

I begin by looking at a La Nuova Arca – a family home that expanded into agricultural production and now supplies 200 customers with food (Carbone, Crisci, & Fonte, 2015). I then move on to Barikamà – a social cooperative the result of solidarity within the GAS community (Diara, Crisci, & Fonte, 2015). Finally, I look at Il Papavero – a small organic farm that more explicitly expresses the continued presence of pre-industrial agricultural practices in the contemporary era. (Savioli, Crisci, & Fonte, 2015).

I finish the chapter by looking at food production more generally in Italy, including that which occurs in Italy's pre-existing dominant agricultural system that is contesting some elements and adapting others of the globally dominant agricultural system

Production in an emerging agricultural system

La Nuova Arca

I want to begin by painting a picture of the setting of La Nuova Arca. The New Ark is a picturesque "family home" (Carbone, Crisci, & Fonte, 2015) established on three hectares on the outskirts of Rome. To reach La Nuova Arca the drive took us put past farmland and peri-urban Rome. The house is gated, surrounded by grassed areas dotted with trees, amongst which sits a slide and swing set. Completing the picture of a family home, a black Labrador-cross dog greeted us. The agricultural fields themselves sit at the foot of a rolling hill leading up to the house. The house was almost invisible from the fields at the bottom of the hill behind fences and trees.

The fields were arranged in line upon line of varying produce, around the edges of which grew beautiful red tulips that speckled not only the fields of La Nuova Arca but all the pasture and fields as far as one could see. The food that is produced is fresh. On delivery days, they harvest the food from the fields in the morning, and it is delivered that afternoon.

La Nuova Arca can be thought of as social project premised on farming that began in 2010. This project encourages the reintegration of disadvantaged people into the labour market. Migrants, single mothers and vulnerable youth are provided job opportunities and entry level skills (Carbone, Crisci, & Fonte 2015). The agricultural output is more of a by-product of the project of social aid rather than the core of this project itself. That is, agricultural production is treated as a means to achieving greater social inclusion. Specifically, the social priority of the project is to provide paid work to those in need (S. Carbone, personal communication, April, 2016).

Salvatore Carbone and his wife house single mothers and their children. However, their aid extends to other disadvantaged people, namely migrants, refugees, and vulnerable and troubled youth, who work on their agricultural production which is

mainly sold to the GAS. This initiative has been termed 'solidarity agriculture' (S. Carbone, personal communication, April, 2016). S. Carbone (personal communication, April, 2016) suggests that the work they do at La Nuova Arca is unbeatable saying "we are going to give organic food, fresh food, low price and you are supporting a positive cycle of supporting people in difficulties, so if you say no I mean, why should you not?".

A range of fruit and vegetables are produced, organically, and sold at a 'fair price'. A fair price involves selling their food at a price affordable for consumers, but which still enables a fair wage for producers. In terms of organic market prices, La Nuova Arca positions themselves in the middle. This middle ground pricing is essential to deliver their message, which is that if you want to buy organic produce you do not need a lot of money (S. Carbone, personal communication, April, 2016). This is a different message from that given by the supermarket outlets which sell organic food for a high price, driving an elite market for organic goods. These high supermarket prices inspire a lot of people to engage with the GAS as a way of obtaining more reasonably priced organic food. In the evolving agricultural system that pivots around the GAS, solidarity within the group and with the producers is very important. La Nuova Arca is one of the producers with whom the GAS form a direct relationship with. This relationship is fundamentally different in spirit from that of the relationship between consumers and producers in the dominant agricultural system. While all economic systems have production and consumption, the direct and personal relationship between producers and consumers in this emerging agricultural system is very distinct from the completely impersonal relationship in the dominant agricultural system. For La Nuova Arca as well as GAS Testaccio Meticcio the importance of networking and building communities around close relationships of mutual solidarity was really emphasised.

The functioning of La Nuova Arca

The methods of La Nuova Arca involve, firstly, attempts to understand the requirements of their customers, who are largely the GAS; 90-95% of the production goes to approximately thirty GAS groups, including Testaccio Meticcio (S. Carbone, personal communication, April, 2016). After understanding

their needs, S. Carbone (personal communication, April, 2016) said they begin planning the plants they will grow through the various seasons. The food they produce is organic and also variegated, decisions they made based on the needs they identified. Identifying the needs of the consumer before beginning production bears similarities to Toyotism; producing just in time.

S. Carbone (personal communication, April, 2016) remarked that it is pointless to produce just one product. He said they need to be able to put forward a basket of assorted products in order to provide an alternative to the supermarket. Thus, their agricultural production is far from the monocultural, mechanised and industrialised farms characteristic of the dominant agricultural system. Instead, production at La Nuova Arca is line after line of different products. This results in what S. Carbone (personal communication, April, 2016) describes as "a continuous production of different products to put in the basket".

Matteo – the production manager – showed me around La Nuova Arca's three hectares that certainly looked capable of filling a diverse basket. Each line of produce was different and included garlic, beans, zucchini and lettuces. Down on the fields we met three immigrants who were working for La Nuova Arca and were originally from Africa, two of them spoke enough English to introduce themselves. These men worked the fields with Matteo and an Italian man, who soon joined us on the tractor. The produce is watered by an irrigation system made up of on-ground black piping that was controlled by a tap at the top of the piping that allowed water to flow down the pipes that ran the length of the lines of produce. Matteo did mention that they had a lot of issues with the piping breaking, he thought it was something to do with it lying on the ground. Amongst their three hectares of land Matteo noted that some areas were less fertile than others, Matteo mentioned that previously the right techniques had not been employed.

One person is responsible for managing the production practice. This manager is required to have knowledge about all of the products they produce and help guide the workers through the correct practices with each of the products. For instance, when we were walking the fields, the current production practice manager, Matteo, saw one of the workers tilling a section of the field wrong. The tractor was being driven incorrectly, so Matteo had to go over and correct them. S. Carbone (personal communication, April, 2016) indicated that relying on that one

person with all the knowledge can in some ways increase the risk to their community because if the person decides to leave, so too does their knowledge.

- S. Carbone (personal communication, April, 2016) pointed out that managing this continuous production of a variety of products is complex because nature does not always run according to schedule or plan. Ensuring variety and continuity, especially when the food is organic, all adds to the complexity of the process and makes the planning very important.
- S. Carbone (personal communication, April, 2016) explained how organic food production adds complexity to production. Firstly, they do not overstress the plants. Characteristically, the dominant agricultural system does over-stress the plant by adding fertiliser and trying to defy seasonality through artificial means in order to ensure bigger yields. High yields are pursued in the name of profit, something which is not a priority at La Nuova Arca. Furthermore, organic plants only have their natural defences against animal and insect attacks. Because they do not overstress the plants or use pest repellents at La Nuova Arca there is a further degree of unpredictability compared to non-organic production practices. Not only must La Nuova Arca deal with the unpredictability of the weather and the like that affects all agricultural production, but also those unpredictabilities that increase specifically because of organic production, all which adds to the complexity of production (S. Carbone, personal communication, April, 2016).

In order to combat the unpredictable nature of organic small scale farming S. Carbone (personal communication, April, 2016) emphasises the importance of working "in net". This provides a solution when the unpredictability of nature disrupts production. If a particular produce was expected to be ready one week but is not, S. Carbone (personal communication, April, 2016) explained that they approach other producers who have the product that is required and they sell other producers' products for them, and in doing so fill their diverse basket of produce. This favour is returned when other producers incur the same problem. This is the key to ensuring the continuity of small scale farming that provides variety.

S. Carbone's (personal communication, April, 2016) expression of working 'in net' resonates with the 'Third Italy' approach to production which encompasses the ideas of flexible specialisation – as opposed to mass homogenised production

- and the idea of cooperating 'industrial districts' where clusters of multidisciplinary small firms and workshops specialise in producing a range of loosely related products. The range of products on offer in these industrial districts implies production is based on economies of scope which replaced economies of scale. S. Carbone (personal communication, April, 2016) suggests that if you try to "play this game alone... you are not going to [succeed]". This draws attention to how the methods of this local production practice resonate with the Third Italy logic. S. Carbone (personal communication, April, 2016) said that if you do go it alone, in order to maintain an individual enterprise, scale and volume factors increase, which would fundamentally change the nature of the La Nuova Arca project.
- S. Carbone (personal communication, April, 2016) mentioned that the network of producers La Nuova Arca is a part of could operate differently. Within the network each producer could specialise in one product, such that collectively they provide a variety of goods and then distribute them. However, the target of their production is, in particular, the GAS, and this is something that typically they do not like. This is because it impacts on the relation between producers and consumers. One of the desires of the Gruppi di Acquisto is being able to establish a relationship with the producers. If, instead of dealing with, meeting and receiving deliveries from each individual producer (as they currently do), the GAS only interact with someone who intermediates on behalf of the network of producers, that value is compromised. La Nuova Arca want to support the GAS and their values, not only because the GAS are their main customers, but also because solidarity and building relationships is something that La Nuova Arca themselves value too, and on which they base their food production (S. Carbone, personal communication, April, 2016). S, Carbone (personal communication, April, 2016) described this as "a choice we have made since the beginning... our mission is the relation with people, if we lose that, I mean the question for us is why are we doing it?". If the direct relationships are lost, so too is the community and solidarity such relationships engender. The nature of the relationship between producers and consumers would become more similar to that in the dominant agricultural system.

Thus, in terms of production, two aspects are hugely important; planning to ensure continuity of production and a variety of products, plus the development and maintenance of a network with other producers to maintain production in the event of unforeseen situations, certainly common in a small-scale, organic operation. The network La Nuova Arca is a part of ensures that they are able to consistently supply produce, however, S. Carbone (personal communication, April, 2016) mentioned that the inconsistency of their customers, the GAS, is also something to they have to factor into their production practice.

S. Carbone (personal communication, April, 2016) drew attention to issues they have over the summer months. The Gruppi di Acquisto typically disappear in the summer because of vacation. Attempts to reach new customers, who are unaware of La Nuova Arca during this time is difficult (S. Carbone, personal communication, April, 2016). S. Carbone (personal communication, April, 2016) suggests that addressing new customers requires a lot of work in terms of creating the right mentality. As S. Carbone (personal communication, April, 2016) put it, this is a culture question, and it takes time to encourage cultural evolution. However, Nature and the production cycle cannot wait for potential customers to have a cultural shift. Furthermore, those who La Nuova Arca are trying to support still need their wages paid at the end of the day. Also, the GAS are their consistent customers throughout the year and because of the relationships that are fostered between the GAS members and La Nuova Arca, their loyalty is extremely important (S. Carbone, personal communication, April, 2016). Thus, their absence in the summer time is something that needs careful consideration. The GAS are considered much more than simply customers, but rather "companions, coinvestors and co-generators, groups and individuals who share our vision and our values" (La Nuova Arca, n.d., para. 2).

Thus, last year La Nuova Arca began an initiative that is called *Spreco? No grazie. Io sono solidale*. This means, Waste? No thanks. I am in solidarity (S. Carbone, personal communication, April, 2016). This was initiated on the premise that not everyone can afford to go on a vacation in the summer. It is the people who remain that might appreciate receiving some fresh, organic, affordable produce, that typically do not have access to such food. The proposal was that if you are a member of a GAS that La Nuova Arca is in relations with, you can

subscribe to a weekly payment, or pre-book weeks in advance, and then continuing as normal the GAS member orders the products they desire for their basket. However, on the weeks when they are vacationing, that basket has still been paid for. Thus, rather than letting fresh produce go to waste, a basket of fresh, organic produce, that equals the value of the GAS member's subscription, will be delivered, at no extra charge, to families in need in the area. The exchanges would be very transparent such that those who are away can see evidence of their basket having gone to a family in need, at little cost to themselves – perhaps 40 or 50 euro a year (S. Carbone, personal communication, April, 2016).

Barikama

Barikama is a type B social co-operative, which in Italy necessitates that at least 30% of those involved are disadvantaged people. Disadvantaged people are defined as "people with physical, mental and sensory disabilities, former patients of psychiatric hospitals, people undergoing psychiatric treatments, drug addicts, alcoholics, young people under 18 but of working age with family difficulties and prisoners admitted to sentences which are alternatives to imprisonment" (Social Enterprise London, n.d. p. 25). Somewhat ludicrously the African migrants which make up the majority of Barikama do not meet the definition of 'disadvantaged' even though suffering with poor literacy skills, no stable residence and a lack of employability.

Barikama translates to 'resistance' and that aptly captures the story of these people who have made a livelihood out of circumstances that could easily have dictated otherwise. The core group of Africans migrated in tumultuous conditions from Sub-Saharan Africa. They came from Mali, Senegal, Ivory Coast and Guinea and they are always open to new arrivals. After they arrived they first began working in the south of Italy where work conditions were abysmal, for example they were paid 20 euro for working 12 hours a day. The reality of Rosarno – a municipality in a Southern Italian region was a scene of horrendous exploitation and racism. Conditions here eventually sparked a revolt in 2010 amongst some of the workers, encouraging some to leave the south and the conditions of oppression they had been working under. The situation in the South has not improved for many people, African people in particular.

Four of the members of Barikama were among those who left the South after being involved in the riots of Rosarno in January. Arriving in Rome in 2010, the journey progressed no less painfully. Sleeping in a train station it was not until a social centre helped them that their plight began to improve. At the social centre someone put forward a solution; they could try making something and selling it to the public. It was from these beginnings that the idea of making and selling yoghurt was born.

Suleman, the current president of Barikama, and five other men were given 30 euro to start, and founded Barikama in 2011. It was thanks to the social centre initially, and later the GAS (members of which encouraged the development of Barikama as a social co-operative) that Barikama is now the small scale success it is.

Barikama now produces organic vegetables and yoghurt. Set near the idyllic Lake Martignano, Barikama is based on Casale di Martignano - a certified organic farm and cheese factory that offers them use of their equipment and other assistance. Lake Martignano rests at the foot of a small, gentle hill, a top of which sits the building where Barikama make their yoghurt. It was indicated that during the summer people came to swim in Lake Martignano and lie about on the grassy shores.

At the beginning Barikama faced difficulties. The language barrier was one thing, but garnering the trust of the Italian public also proved difficult. The support and solidarity of GAS addressed this later issue. The development and success of Barikama is testimony to the level of solidarity and passion for community that surrounds the GAS. It also demonstrates a new level of relation between producer and consumer that appears to bring a sense of community and compassion to food production.

Not only do Barikama produce yoghurt and vegetables, mainly for the GAS, they are also beginning a new project – the opening of a food bar. The bar represents a whole host of new opportunities. They hope to be able to use the bar as a distribution platform for their goods as well as a being its own new venture. The bar is in a park in the centre of Rome, so Barikama is hopeful that production will

increase through selling and advertising their current goods on site, but also through providing a space to sell things like frozen yoghurt.

The functioning of Barikama

Barikama sells their organic vegetables and yoghurt to approximately 20 GAS, as well as some members of the public through particular markets and stores. By bicycle they do home deliveries of their organic yoghurt and vegetables, and also some of the cheese and sausages made by Casale di Martignano. They also sell their produce at many markets throughout the month. One of these markets is called 'terra TERRA', which literally translates to 'earth earth'. These markets are driven by a desire to be outside of the dominant agricultural system. The producers do not want to deal with organic certification, thus they certify themselves and then they organise markets to sell their produce. These markets occur every weekend in the suburbs of Rome. Finally, there are also three stores in which you can find Barikama's yoghurt.

They began producing a mere 15 litres of yoghurt a week, they are now producing upwards of 100 litres of yoghurt a week. The yoghurt is bottled in glass jars which Barikama encourages its customers to return, washed, so they can reuse them. The yoghurt is celebrated as containing no thickeners, no preservatives, no sweeteners and no dyes. This is delivered to the various customers on a bicycle, as Barikama is premised on respect for the environment. Casale di Martignano help with the initial transportation from the farm into Rome, to a warehouse that is based about ten minutes from Termini, a central train station. It is from this warehouse that the goods are then delivered by bicycle. Barikama have recently purchased an electric scooter to help increase the efficiency of delivery whilst still upholding their values of environmental preservation.

Both the making of the yoghurt and the growing of the vegetables occurs on Casale di Martignano. The cultivation of the vegetable garden has occurred since 2014, in collaboration with Casale di Martignano. The proceeds from the vegetables are divided evenly between Casale di Martignano, who own the land, and Barikama. Amongst the vegetables grown are basil, cucumbers, onions, green beans, zucchini, potatoes, eggplants and various tomatoes. Everyday someone from Barikama goes out to Casale di Martignano to tend to the vegetables.

The yoghurt production happens once or twice a week, depending on demand, on a Tuesday and/or Wednesday. The room where the yoghurt was made was clean and filled with stainless steel surfaces. The area needed for the process took up much less space than one might have imagined, the room was perhaps 4m x 4m. Inside there was a large stainless steel trough-type piece of equipment and next to this a circular silver barrel. Along with some contraptions for measuring Ph levels this seemed to be the extent of the most important equipment for making their yoghurt.

Advertisement and marketing is done through media outlets such as a Facebook page and a website. There is also an element of self-promotion because the yoghurt is organic it attracts a customer base through word of mouth. Although the yoghurt is more expensive than what you would find in the supermarket (they cannot compete against the cheaper supermarket prices) M. Ventura (personal communication, April, 2016) describes it as being of a much better quality.

Il Papavero

Il Papavero, of the three producers I visited, most explicitly has its roots in traditional agricultural practices. Angelo Savioli and his wife Fiorella own and run the small, organic, family farm. For Angelo it is working directly with the consumers, specifically local consumers, within a local economy that is his success (A. Savioli, personal communication, April, 2016). A. Savioli (personal communication, April, 2016) aptly summarises the experience under the corporate food regime, saying that the ones who control agriculture, of which there are about ten firms in the world, "control our life, they decide what we eat, how we eat and how much it costs to eat". This is something he wants to change. He hopes that realities of the new emerging agricultural system he is a part of will diffuse and that from this change will come (A. Savioli, personal communication, April, 2016).

To get to Il Papavero, Maria Fonte picked me up from the train station Spagna. We drove for quite a while out of urban Rome, on highways and past farm land or pastures that Maria said had been reclaimed from swamp land. It very much felt rural where we headed, but it is still considered part of Rome.

Angelo and Fiorella's organic farm operates on principles of biodiversity and environmental preservation. It has been an organic farm since 1994, when Angelo and Fiorella converted all the fruit trees (A. Savioli, personal communication, April, 2016). The conversion of the farm to organic took five years. The desire to convert was based on a dissatisfaction with what A. Savioli (personal communication, April, 2016) called "the conventional system". Not only were they struggling financially working within the mainstream market, but they were also opposed to using chemical products on their produce. A. Savioli (personal communication, April, 2016) is convinced that the dominant agricultural system does not work, and that it will inevitably collapse due to negative impacts on the environment, on peoples' health and a few people accumulating profit at the expense of the work of others. A. Savioli (personal communication, April, 2016) described his experience working for sixteen years in a pharmaceutical firm. During this time he became conscious of the failings of what he called the economic system (i.e. the capitalist mode of production), in particular he drew attention to the injustice of the wage labour relation. These sorts of insights inspired Angelo and Fiorella to convert their farm to organic in the hope of stepping outside of what 'the conventional system' (A. Savioli, personal communication, April, 2016), what I call the dominant agricultural system.

The farm's production paradigm also became based on principles of custodianship. A. Savioli (personal communication, April, 2016) describes how he became conscious that his relationship to the land should not be about being the owner of the land, but rather the custodian of the land. This kind of ecosocialist understanding challenges the dichotomy (central to the discourse of capitalist modernity) that exists between nature and society that became dominant in the nineteenth century in the west (Macnaghten & Urry, 1998) – see the next chapter. A. Savioli (personal communication, April, 2016) theorised that the land has been there, and will continue to be there for so much longer than his time on it, and thus he has to leave the land in a better condition than what he found it. This stemmed into a desire to leave behind a viable project, one that was not only economically viable but also environmentally viable.

The farm is set up very simply. There is a field in which rows of strawberries run, delineated from the next field by a basic wire fence, along which various fruits

trees are staked. The next paddock was full of fruit trees including peaches, apricots and new variety of pear Angelo was trying out. What was particularly interesting was that Angelo had wild herbs, fruit and vegetables growing all around the various areas of his property. Some of the edibles that grew wild included apples, sage, mint, rosemary and lavender. There were bee hives on the property and a little shelter screen was set up through which children that came for education trips on the farm could watch the bees safely. The grass was kept quite long around the farm (though not so on the strawberry field). A. Savioli (personal communication, April, 2016) explained that keeping the grass long and leaving the weeds was to encourage the insects, because everything in nature has a role and needs to be looked after, this reflects the custodial relationship Angelo has with the land.

The passion for localism is clear in Angelo's work. He thinks the production and consumption of food needs to be rooted in territory because less energy is consumed, less non-renewable resources are expended and the produce is undeniably fresher (A. Savioli, personal communication, April, 2016). A. Savioli (personal communication, April, 2016) points out that if his strawberries were to travel to New Zealand or Germany, not only would the expense be much greater in terms of resources and cost to the planet, but the product itself would be necessarily treated with chemical products so as to prevent it spoiling. Thus, the food is not fresh, it is travelled, chemically treated, and picked well before it is ready. He is greatly displeased that since the second world war we have been consuming fossil fuels simply to move food from one country to another. A. Savioli (personal communication, April, 2016) argues that food should not travel, rather people need to develop other food habits.

However, although A. Savioli (personal communication, April, 2016) is deeply invested in the hope that more and more people will start to produce and consume food locally he thinks it is difficult. He recognises the wider structures at play that are oppressing such alternative thinking and practice. A. Savioli (personal communication, April, 2016) mentioned that if the most recent free trade agreement between Europe and the United States is signed, it will make things more difficult still. He is also deeply concerned by the emergence of GMO. Not only is Angelo concerned about the inherent nature of GM, but more so about the

monopoly that will necessarily emerge because the GMO variety will be produced by only one actor from who everyone has to buy. The patents on GMO seeds are spreading and A. Savioli (personal communication, April, 2016) notes how this "will impede the farmer to cultivate his own varieties".

Not only do the free trade agreements, and increased prevalence of GMO, make the diffusion of local food production and consumption more difficult, A. Savioli (personal communication, April, 2016) also thinks that the capacity of democracy has been massively limited and does not count much anymore "because the power is concentrated on the financial big actors and that's destroyed democracy". A. Savioli (personal communication, April, 2016) notes that these few big actors with whom the power is concentrated continually want to liberalise and privatise, and that this is an issue. A. Savioli (personal communication, April, 2016) draws attention to many of the issues of the corporate food regime, and it is these issues which inspire him to both produce food and engage with consumers in a different way.

Although biodiversity still exists in Italy (as the pre-existing dominant agricultural system resists the invasion of the globally dominant agricultural system encouraged by the corporate food regime), and the capacity to produce a wide variety of food continues, it requires an ongoing fight against the homogenisation of the globally dominant agricultural system. A. Savioli (personal communication, April, 2016) describes his experience in terms of how European regulation is destroying biodiversity. He offers the example of wine. In Italy making wine in a certain way that uses sugar is forbidden, but European regulation is allowing this practice. He suggests something similar is happening with cheese. While in Italy cheese is not able to be made with powdered milk, in Europe they now can. The argument is that European regulation is undermining biodiversity and traditional local production as it (through regulatory tools like the CAP) promotes the principles of the globally dominant agricultural system. A, Savioli (personal communication, April, 2016) describes his fight as being against things like a loss of biodiversity and the undermining of traditional local production; "it's a fight for these things". It is interesting to reflect on the European Union and how it both has and has not helped traditional small scale farming in Italy. The EU has helped through the protectionism afforded Italy against the global market, which has

enabled Italy to maintain competitiveness even though the pre-existing dominant agricultural system in Italy is one which is predominantly defined by small-scale production. However, at the same time the EU context undermines Italian production in other ways, on the grass roots level, through the competition it faces within the EU.

The functioning of Il Papavero

The methods Angelo employs in agricultural production reflect his concern for environmental sustainability. He recycles the plastic containers he delivers his produce in. Furthermore, he maintains a custodian's role with the land (as mentioned earlier) which inspires him to produce in ways harmonious with, and indeed supporting of, the entire ecosystem, insects and all (A. Savioli, personal communication, April, 2016).

Biodiversity is something Angelo wants to encourage and so he produces a variety of goods. He is thinking of diversifying further and producing legumes and beans (A. Savioli, personal communication, April, 2016). Initially A. Savioli (personal communication, April, 2016) describes his production as a monoculture; they only grew peaches. But as Angelo realised the importance of organic and *diverse* production he changed his methods and began incorporating other products, beginning with the strawberry. This development came from the realisation that mono-cultural production is simply unsustainable. He reflected on the production habits of his grandfather and his father who grew many things. The had "animals, they had legumes, they had cereal, grain, wheat, they had many fruit and they never lacked anything" (A. Savioli, personal communication, April, 2016). It was this logic that led him to diversify. Not only for the environment but for their own security. When farming only one product, the risk is intensified, production may be fantastic one year and yet pitiful the next (A. Savioli, personal communication, April, 2016).

When Angelo begins the production of a plant he experiments with different varieties to ensure that the one he selects will flourish in the particular conditions of his fields. For example, the variety of strawberry he produces he describes as being less prone to sickness and produces fruit for two to three months in

comparison to other varieties that only produce for one (A. Savioli, personal communication, April, 2016).

During the organic conversion Angelo and Fiorella were able to make some comparisons between varieties of plant and how they developed with and without chemical products. Angelo discovered that while the industrial variety of peaches did not manage to repel the aphids (which inhibit production), even with the chemical products meant to prevent them, traditional varieties were able to better defend themselves without the aid of chemical products. Aphids still appear on the traditional variety – that Angelo now grows – but in significantly fewer numbers, and just in a concentrated spot, rather than invading the whole plant. Angelo discovered that all the plants they converted to organic developed some resistance of their own without the need for chemical products (A. Savioli, personal communication, April, 2016).

Although Angelo's farm is now fully organic, he remarks that he could not sell his fruit to the supermarket in the condition he produces because of the hygiene regulation of the European Union (A. Savioli, personal communication, April, 2016). There would be many strict requirements on the boxes he could use, the cleaning facilities etc., all of which would be costlier for no benefit, as the conventional market was not a place they prospered anyway. Thus the direct contact with the GAS makes it possible to sell his produce in less regimented conditions.

Another production implication of not using chemical fertiliser is that the plant is not being stressed to produce maximum yields. The plant is left to produce what it can produce by itself. This means that some plants produce ten kilos, while others might produce thirty kilos of produce. Allowing the plants to self-regulate has increased the quality of the fruit. A. Savioli (personal communication, April, 2016) suggests that as their organic production developed, they found both the density and flavour of the peaches to be much better. In a direct weight comparison between a peach produced conventionally, and an organic peach, of the same diameter, Angelo has found that the organic one weighed more than the conventional one (A. Savioli, personal communication, April, 2016). The quality of these organic peaches soon became noted, people describing how "these were

the peaches that we used to eat when we were small, years ago" (A. Savioli, personal communication, April, 2016).

Initially Angelo sold his produce through intermediaries. This was detrimental as it was the intermediary who fixed the price without taking into account fluctuating costs on the farm. A friend of Angelo's suggested that rather than giving his products to intermediaries Angelo should engage in direct selling with the GAS. Thus Angelo was introduced to a GAS, the coordinator of which introduced him to another five or six groups, so that year he began selling his peaches to the GAS. In a matter of weeks he was working with over 20 GAS. It was about twelve years ago that Angelo became aware of the GAS (A. Savioli, personal communication, April, 2016). Once Angelo diversified and began producing strawberries he approached the GAS about this product, and through the network all the GAS were notified, and they began purchasing the strawberries as well (A. Savioli, personal communication, April, 2016). They bought the strawberries from him because of the relationship they had developed through his peach production. They trusted the quality of the peaches, but they also trusted the relationship with Angelo. The GAS members come to visit the farm, meet and talk with Angelo and see how their food is produced.

Once Angelo was working with 20 groups he began discussions with them around a farmer project which incorporated the GAS as active participants. The farmer project was based on the idea that together they could plan his production. However, this was made difficult due to the fluctuations in the GAS. A. Savioli (personal communication, April, 2016) described how some would die and others would grow up, so there was an instability as the GAS themselves fluctuated, and the various members too. So A. Savioli (personal communication, April, 2016) articulated that "it was difficult to have a continuity of support". To address this, four years ago he proposed a more formal relation with the GAS which took the current form of pre-financing (A. Savioli, personal communication, April, 2016). This developed a great sense of involvement for the GAS, through literal investment, in the project. A. Savioli (personal communication, April, 2016) remarks that he found that it aroused a strong sense of commitment to his farm, as "they feel part of the project".

The stricter relation with the GAS ensures that even with fluctuations of the groups he will have continuity. Angelo now shares this relation with forty GAS. Within each GAS "you have to take into account at least 20 or 30 families, so it's more than 1000 families that is provisioned" (A. Savioli, personal communication, April, 2016). This is a significant number of families and households choosing to purchase their food in a way and from a place that differs from those of the dominant agricultural system.

A. Savioli (personal communication, April, 2016) thinks that in terms of the size of the farm "they are reaching the limits of what they can produce here, and they don't want to become much bigger because it changes the nature of the farm". Of the 40 GAS that Angelo has a relationship with around 24 of them participate in the pre-financing of his farm. This project ensures Il Papavero's continued security, while for the GAS it ensures the continued supply of the produce they choose to purchase. Angelo receives finances from these particular GAS in anticipation of the expenses he will face throughout the seasons. This means he does not have to request loans from banks. Rather, the money they pre-finance gets discounted when the GAS buys the product. So at the beginning of the season Angelo will receive the financing, make all the purchases he needs to make, cover any costs and then sell his, for example, peaches back at a rate that discounts the respective finances offered at the beginning of the season.

In terms of excess product the relationship with the GAS is such that Angelo will phone the groups and they will take care of finding people who want to buy the fruit. Angelo has also made new contacts, such as those with a farm called 'Nude Fruit' that also help absorb excess product if the GAS do not manage to do so. A. Savioli (personal communication, April, 2016) now describes himself as "a real farmer, full farmer, because... he doesn't have to be preoccupied by the market anymore". This gives him the space and energy to focus on agricultural production.

Angelo is part of what he calls a participatory system built around the direct relationships between himself and the members of the GAS. He is the farmer however, the consumers, the GAS, participate in the same project. The benefit of such a relationship is that if his costs increase he can tell the GAS, justify the increase in price and then increase it in order to cover his costs. The competitive

logic that the corporate food regime has nurtured does not apply in a participatory relationship such as this. Angelo meets with the coordinators of the GAS in July, yearly, to discuss the price for the following year. This is the space to account for any changes in the costs and therefore the price.

Discussions have also extended to include a project concerning how to improve the conditions and the pay of those who come to help Angelo harvest the produce. They acknowledge that agricultural work is hard, and cannot be undertaken for the length of a regular work day. The aim is "to diminish the hours of work and increase the pay" (A. Savioli, personal communication, April, 2016). Even setting the price at a level that covers Angelo's costs, and affords workers a decent wage, their price is still lower than supermarket prices. The community developed around the farm and the GAS means they can discuss these sorts of topics and address social concerns together through the production and consumption of food.

Summary of production in an emerging alternative agricultural system

The production element of this emerging agricultural system is clearly based on social concerns. The core concern of all three of the producers I met with seemed to be to address a social issue, and the agricultural production is a way to remedy some of those concerns. La Nuova Arca is determined to help those excluded from the labour market including vulnerable mothers and children, troubled youth and refugees and immigrants. Barikama is a cooperative driven by immigrants who had trouble integrating into the labour market in Italy and so started producing agriculture as a means to address their needs and the needs of newly arrived immigrants. Il Papavero, whilst more centrally about producing food as a livelihood and a practice inherited from Angelo's father, attempts to address the social and environmental issues of the dominant agricultural system and encourage change at a wider level through this grassroots initiative.

The production practices investigated here are based on attempts to remedy social issues and preserve the environment. These core concerns inspire these producers to form direct relationships with a consumer base that engage with their production in ways that also reflect values somewhat in line with their own. The GAS seems to fit the bill as a consumer base that are engaged in food

consumption driven by, amongst other things, values of localism, environmental concern and solidarity.

A community is built around the GAS that includes these, and many more food producers. The development of this community that focusses on remedying some social issues makes the food production in this emerging agricultural system very different from the homogenising, industrialised, large-scale, fossil fuel dependent food production in the globally dominant agricultural system.

General food production in Italy

As outlined in previous chapters, the dominant agricultural system (encouraged by the corporate food regime) interacts/contests with pre-existing dominant and marginal agricultural systems in different ways in different places forming a complex patchwork of evolving and devolving agricultural practices and systems. In Italy, large scale production, characteristic of the dominant agricultural system, is largely absent. I argue the protectionism afforded Italy through the European Union has given Italy a competitiveness buffer which has enabled the continued persistence of small scale agricultural production. Without this protection, the small scale agricultural production characteristic of the pre-existing dominant agricultural system and many emerging marginal agricultural practices and systems in Italy would likely be unviable as it could not compete against the large scale production of enterprises from around the world.

The protection Italy receives has enabled it to maintain a viable organic sector and the continued persistence of small scale agricultural production. The USDA (2013) outline some of the facts about organic food production in Italy:

- Italy has the largest area of organic cropland in the EU and is a major exporter of organic products in Europe.
- Italy is a net exporter of organic food (mainly processed) with most of its €900 million production shipped to other EU Member States, the United States and Japan.
- During the 1990s, the organic sector in Italy showed one of the largest average annual growth rates in Europe in terms of land under organic management. Since then, Italy's organic area has grown to around 1 million hectares

• In Italy, there are 43,230 organic producers (para. 2).

The persistence and importance of organic production in Italy in its pre-existing dominant agricultural system is supported by the organic production in the emerging agricultural system I looked at. In turn, the organic production of the pre-existing dominant agricultural system supports the organic production in emergent agricultural systems. The support each system offers the other is not a conscious or deliberate move, but as these more or less fully formed agricultural systems evolve and interact they mutually reinforce each other against the invading globally dominant agricultural system that is characterised by nonorganic, heavily chemically treated, food production. Nonetheless, the organic production in the emerging agricultural system is more affordable than that obtainable through the pre-existing dominant agricultural system, which means that emerging agricultural systems are also in contest with the pre-existing dominant agricultural system.

In terms of general trends in food production in Italy Giovannetti and Marvasi (2016) argue that "the Italian food industry seems to lag behind with respect to that of other EU countries such as France or Germany" (p. 111), but that nevertheless it remains one of the biggest exporters of food and beverages in the world. Italy is ranked as the 8th largest food and beverage exporter in the world, and 5th in Europe (Giovannetti & Marvasi, 2016, p. 111).

Italian food products are held in high esteem around the world. The high-quality products are identified by those bearing "'made in Italy"... "Protected Designation of Origin" or the "ISO 9000" certification. The evidence suggests that Italian food firms producing high-quality products are more likely to export more and to more distant and richer destinations" (Giovannetti & Marvasi, 2016, p. 113). Giovannetti and Marvasi (2016) do suggest that "product quality plays an important role in the export performance of Italian food exporters" (p. 114). Nevertheless, imports still outpace exports giving Italy a trade deficit of approximately 598 million Euros in 2013 (Giovannetti & Marvasi, 2016, p. 112); thus Italy's agriculture *generally* seems to conform to an export orientation, characteristic of the dominant agricultural system.

However, uncharacteristically of the dominant agricultural system, but characteristic of Italian agriculture generally are small scale producers. Galluzzo (2016) suggests that "the agricultural property in Italy belongs predominantly to smallholder farmers, that have got tiny units of production, mostly fragmented but incorrectly considered, due to their dimension, inefficient, managed and owned by only one farmer and his/her family workers" (p. 62). U. Sievers (personal communication, April, 2016) reiterated this when I spoke to her about the Italy's agricultural patterns. She said "they don't really do big scale agriculture here... I mean organic farmers are like all the other farmers, they have a small piece of land" (U. Sievers, personal communication, April, 2016). The prevalence of this farm size and method of farming harks back to the family farm logic driven both by the closed fields system and peasant agitation in the historical development of agriculture in Italy. The family farm, small, managed by one farmer and their family or workers, still continues today to be characteristic of Italian agriculture. Not only are small scale family farms characteristic of production in marginal emerging agricultural systems, but throughout the complex agricultural landscape made up of a configuration of more or less fully developed agricultural systems interacting, contesting and co-existing in different ways. Thus, as is the case with organic production, different more or less fully formed agricultural systems premised on small scale production managed by family farm logic mutually support each other against the contesting globally dominant agricultural system.

Conclusion

The three producers I looked at, La Nuova Arca, Barikama and Il Papavero, all choose the GAS as their consumer base for two reasons. Firstly, they had issues in the conventional market. For example, the members of Barikama found it difficult to establish trust and rapport with the Italian public, and Il Papavero found the conventional market unviable financially. Secondly, these producers wanted their agricultural production to address environmental and social concerns not dealt with in the dominant agricultural system.

The emerging agricultural system made up of the GAS, on the consumption side, and producers such as La Nuova, Barikama and Il Papavero on the production side, has encouraged a new social practice involving new mental understandings

that ushers in a new way of thinking about the relation between production and consumption.

Comparing the food production I looked at in the emerging agricultural system to general food production in Italy, it seems there are many similarities in terms of the nature of production. The persistence of organic and small scale production in both the emerging agricultural system and pre-existing dominant agricultural system is interesting. Perhaps it explains why so many people are attracted to the emerging agricultural system because the nature of the food they purchase is not so different from that which they could purchase in more conventional outlets, and is more affordable.

However, differences can be drawn between production in the emerging agricultural system and production in the globally dominant agricultural system encouraged by the corporate food regime. Deeply embedded within the food production in the emerging agricultural system is a concern for environmental sustainability and the development of a community through embracing practices of solidarity. Production in the dominant agricultural system actively negates these values. Centrally the dominant agricultural system is export-orientated, chemical intensive, fossil fuel dependent, global, large scale and homogenising. None of these characteristics lend its production to being environmentally friendly or capable of creating communities. Thus, I argue there is much to be learnt from the production element (and the consumption element as elucidated in the previous chapter) of this emerging agricultural system that can help to remedy some of the environmental and social destructions of the globally dominant agricultural system.

CHAPTER FIVE

Weaving theory with empirical findings to contemplate possibilities for the future

Introduction

In this chapter I discuss the final elements of my research objective. Firstly, I investigate the nature of the relation between the food sovereignty movement in Rome (as expressed in the emerging agricultural system I looked at) and the food sovereignty movement around the world. Secondly, I want to compare the emerging agricultural system I looked at with the globally dominant agricultural system to investigate differences. Finally, I want to consider whether it is conceivable that a localised alternative agricultural system premised on food sovereignty could become the dominant system across the world. For this to be possible I argue we need to conceptualise and pursue an alternative food regime which would have an alternative agricultural system at its core.

Previously, and currently, the agricultural system has only been indirectly influenced by the food regime. I argue that local accumulation regimes, which in reality emerge as agricultural systems, should be central to the template of both the model of development in agriculture and the model of development generally in a new food regime. I suggest this because local accumulation is the most promising avenue to facilitate self-sufficiency (thus, security), and environmental and social justice. Not only should the new food regime directly regulate agricultural systems, but *directly facilitate the construction of* new agricultural systems premised on food sovereignty.

Food sovereignty in Rome?

Firstly, I want to extend on my brief exploration of the concept 'food sovereignty' in chapter one. A simple definition of the concept often employed is "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" (MacRae, 2016, p. 4). However, while food sovereignty is about obtaining the rights of people to make choices about their food practices,

first and foremost it is about promoting localism and self-sufficiency, which is directly undermined in the corporate food regime.

Food sovereignty is about power, returning to the opening statement of this thesis, 'whoever controls food controls the world'. Food sovereignty is centrally premised on restoring the power of food back to the local, promoting security that is implied by one's own self-sufficiency. Currently, the dominant agricultural system is globalised, and dominated by transnational corporations, thus correspondingly, the power is also global. When food is globalised, power is with the global elite; food sovereignty promotes the opposite. By ensuring that food is local, power is also retained at the local level. *Local self-sufficiency and the subsequent security is the key*, to food sovereignty, not rights or choices which come as secondary truths.

Food sovereignty is an inclusive concept that promotes localised and organic agricultural systems. Although expressed in many different ways and diffused throughout the world, similarities can be seen throughout the food sovereignty movement. I briefly touch on examples of food sovereignty in Mozambique, Chile, USA, and my own field research in Italy to demonstrate the diffused and variegated nature of the food sovereignty movement, that is nonetheless utterly connected in its response to the dominant agricultural system. The diffused food sovereignty movement today maintains a continuity with historical epochs as the peasantry continue making history at forefront of food sovereignty. Nevertheless, new experimental projects and alternative emerging agricultural systems, whilst harking back to a peasant way of life and maintaining that degree of continuity, are also adding new ideas and radicalised adaptions of traditional practices and the dominant agricultural system.

I want to briefly mention here that even though the peasant way of life is under attack under the corporate food regime, the peasantry is still incredibly relevant. McKeon (2015) outlines that the peasantry "make up almost half of the world's population, provide at least 70% of the world's food... and are responsible for the bulk of all investment in agriculture" (p. 242). The bitter paradox is that this group, which is facing the greatest loss of survival, security and livelihood, is fundamentally essential to feeding the world's population. McMichael (2016) also points out "the significance of 'approximately 500 million small-scale farmers in

developing countries making them not only the vast majority of the world's farmers but, taking into account their families, responsible for the well-being of over two billion persons'" (p. 658)

McMichael (2016) gives a thorough discussion of the concept of food sovereignty which he argues is much more than a 'peasant turn' and gives a fuller sense of the depth of this concept.

The food sovereignty movement is not simply about peasants, or food; rather, it addresses the undemocratic and unsustainable impact of the contemporary trade and investment regime. It is about reorganizing international political economy... More than a protective countermovement, this intervention concerns sovereignty for states as well as food producers...The movement is 'recentering agriculture as part of a larger project against the destructive imposition of market relations and commodification on every aspect of life', and food sovereignty is presented 'as a solution to multiple global crises stemming from the neoliberal project... In short, food sovereignty 'is not about restoring a peasant utopia; rather it is about countering the catastrophic social and ecological effects of the neoliberal assault on the agrarian foundations of society. It stems from mobilization in/of the countryside, but has broader implications' (p. 649-653)

McMichael's discussion enables us to see the depth of the challenge posed by the food sovereignty movement. It is not only a peasant counter-movement, but a movement fighting for all dispossessed people against the implications of the corporate food regime.

Following this definition, it is fair to surmise that the emerging agricultural system I looked at in Rome embraces the essence of the food sovereignty concept. The people I met, motivated by a variety of reasons to produce and consume food locally and organically, were embracing and actively pursuing their food sovereignty. The key factors my participants expressed that motivated them to produce and consume food they way they do included concerns about health, cultural heritage, solidarity and environmental sustainability – all elements that are encompassed in food sovereignty. Although none of my participants used the

term, their actions expressed dissatisfaction with the dominant agricultural system, some participants even drew attention to wider issues, the result of what I would call the corporate food regime. It is this sort of dissatisfaction that has historically, and presently, around the world, incited a food sovereignty call to arms.

There are similarities between the emerging agricultural system I looked at in Rome, which is implicitly based on food sovereignty, and the expression of the food sovereignty movement that began in Mexico. The latter experience is based on a traditional peasant agricultural system that is being undermined by the dominant agricultural system encouraged by the corporate food regime. The former represents the emerging elements of a new agricultural system that blends traditional practices with more recent ideas. Both national experiences resist the dominant agricultural system.

I draw on a discussion I had with one of my participants to demonstrate that problems are being identified with the dominant agricultural system, even from Italy, which is somewhat protected by the EU from the harsh intensity of global competition. One participant mentioned how their agricultural minister recently allowed lots of olive oil to be imported from Africa. This was identified as a problem because "most of small farmers they couldn't take the olive from the tree because it's too expensive" in comparison to that being imported (A. Gagliardi, personal communication, April, 2016). A. Gagliardi (personal communication, April, 2016) also explained how a lot of Sicilian citrus, described as really good oranges and lemons, used to be burnt and wasted because of international trade. These sorts of effects are a direct result of the corporate food regime. Small farmers' capacity to produce food is being undermined by the corporate food regime, and similar stories can be heard around the world as those embracing food sovereignty fight against the dominant agricultural system and the corporate food regime it more or less represents.

In the literature of the food sovereignty movement it is generally accepted that neoliberalism is the enemy. The direct challenge to the neoliberal project is partly what imbues the food sovereignty movement with the potential to provide a very radical challenge to the corporate food regime because the wider regulatory constraints are acknowledged. Understanding the influence of the food regime on

emergent agricultural systems, and on the globally dominant agricultural system, is very relevant for the food sovereignty movement. This movement can champion an alternative food regime that would create an environment that could facilitate the flourishing of an ideal typical dominant agricultural system (that embraces food sovereignty) around the world.

What differs between the emerging agricultural system I looked at in Rome and the dominant agricultural system?

The emerging agricultural system I looked at in Rome differs from the dominant agricultural system in many respects. It is important to look at the differences between the two to identify what we can learn from this evolving agricultural system that could remedy some of the faults of the dominant agricultural system.

Fundamentally, the nature of the emerging agricultural system contests that of the dominant agricultural system, which is in part, though not solely or absolutely, defined by the corporate food regime which primarily creates an environment safe for capital. By contrast, the emerging agricultural system I looked at (as in traditional peasant agricultural systems) creates a community where the production and consumption of food is safe for people in terms of both the production methods of the food, the long term safety offered by greater environmental preservation and the immediate security afforded producers by having a direct relationship with their consumers. That is, the demand generated by the GAS provides another market for producers other than the hyper competitive global market. One participant mentioned that "there are some farmers that if the GAS wouldn't exist they would have sold their land or abandoned it. So for those people... it was very difficult to deal with global and conventional markets". Thus the intense competition generated by the corporate food regime and facilitated by the dominant agricultural system is mitigated in the emerging agricultural system.

Trust is fundamental within this emerging agricultural system. Trust enables producers to skip costly official certification that ends up functioning as a mechanism to support big business who can afford to certify and therefore appear more attractive in the market. For example, the GAS often encourage the producers to forget about organic certification, which is expensive. The ability to

do this comes down to the direct relationship between producers and consumers. The GAS are able to say "we know you, you don't need to pay some others to certify that you are good, we know that you are" (U. Sievers, personal communication, April, 2016). This community is something to be celebrated, and the emerging agricultural system functions based on these direct relationships built on trust which are absent in the dominant agricultural system.

The nature of production methods in the emerging agricultural system are also fundamentally different from those in the dominant agricultural system, remedying some of the environmental destructiveness of the latter. Whilst the latter is dominated by mono-cultural production and chemical inputs, emphasises high yields, is fossil fuel dependent, export-orientated, large scale and global in terms of both production chains and distribution and retail systems, the former embraces the idea of custodianship of the land and prioritises biodiversity; utilising organic production methods to protect both biodiversity and the environment more generally. The emerging agricultural system does not push for maximum production output and of course produces for local consumers in a community based market, as is common in the peasant framework.

In short, the key difference between the emerging agricultural system and the globally dominant agricultural system is that the former is based on the concept of food sovereignty. The core production and consumption elements of the emerging agricultural system are based on values of localism, environmental preservation, health, and solidarity, facilitated through organic production and local production for local consumption. These values and practices are encompassed in the food sovereignty concept, and in reality the food sovereignty movement. The key is that the emerging agricultural system is increasing the self-sufficiency of those involved, subsequently providing greater security, which is exciting in this increasingly precarious neoliberal era (Neilson, 2015; Standing, 2012).

However, I do not want to romanticise this emerging agricultural system. The emergent consumption and distribution element (the GAS) has yet to become a full replacement for other food purchasing avenues. Fonte (2013) researched the extent to which the GAS members purchase food in this emerging agricultural system and suggests that

on average about 20/25% monthly food expenditures of the GAS members in Rome are channelled through the GAS system of provisioning. Even if GAS members report buying food through other shorter supply chains, notably farmers' markets, the new system of provisioning still falls clearly short of being a total substitute for the conventional food supply chains. GAS members move between different types of practice (both conventional and alternative) making it imperative that there should be continuous reflection on the contradictions, ambivalences and insufficiency of environmental food performances (p. 238).

There are several explanations for this lack of full substitution. Perhaps the emerging agricultural system does not adequately meet the needs (or wants) of an average GAS member. Or everyday life constrains the ability of GAS members to fully commit to the practices necessary to purchase food through the GAS (which still implies room for development to encourage ease of commitment). Or that this social practice of food consumption and distribution has not fully developed new understandings, background knowledge and behaviours that are necessary to commit to the principles of food consumption that drive the emerging agricultural system.

Overall, the connection between the producers and the consumers is an especially important insight to learn from. The direct relationship builds a community of solidarity and trust which offers producers security and assurance in an era where the dominant agricultural system offers, if anything, the opposite. The consumers on the other hand, are offered the chance to access the type of food they want to purchase that is produced using methods agreeable with their values at an affordable price. What we learn is that pursuing food sovereignty promotes the self-sufficiency of local producers and enables both producers and consumers to address problems in their own micro-spheres and in their wider societies caused by the dominant agricultural system, and more widely the corporate food regime. In the localisation of this emergent agricultural system, power has been given back to those involved. The active resistance of the globally dominant agricultural system not only helps continue their own self-sufficiency, but also that of others. In particular, those in the pre-existing dominant agricultural system in Italy that is

contesting the invading globally dominant agricultural system; and those further afield around the world engaging with a more or less fully formed agricultural system that embraces food sovereignty.

I now move to a discussion on how applicable an agricultural system based on food sovereignty is in different places around the world. I am not suggesting that the particular emerging agricultural system I looked at in Rome is the ideal national exemplar upon which to compare and base the conceptualisation of a new dominant agricultural system. Rather, I am suggesting that what I learnt in Italy is that an agricultural system premised on food sovereignty holds great possibilities for remedying the problems of the currently dominant agricultural system. Rather than using a particular national experience, I am using a particular model of a localised agricultural system based on food sovereignty as a kind of ideal yardstick. It is the applicability of this which I want to investigate. I argue that this ideal model should be directly facilitated by a new food regime that allows placebased variations of this ideal agricultural system to be flexibly adopted around the world accounting for unique histories and cultures.

Could localised agricultural systems conceivably become the globally dominant agricultural system?

Given the failings of the globally dominant agricultural system, it is understandably exciting to look at emergent agricultural systems that are fundamentally different in nature. But in order to truly reverse patterns of environmental destruction and social injustice engendered by the dominant agricultural system, agricultural practices based on food sovereignty, such as the emerging agricultural system I looked at in Rome, need to be more widespread. The more widespread food sovereignty-driven agricultural systems are, the less domineering the globally dominant agricultural system will be. Thus, the less power transnational agribusiness will have, as more is returned to the local, and with it greater self-sufficiency. The question is, is an alternative agricultural system based on local self-sufficiency and social and environmental justice, i.e. food sovereignty, applicable in other areas of the world?

The first point that needs to be acknowledged is the specifically Italian history that has in part engendered the emerging agricultural system premised on food

sovereignty. As A. Gagliardi (personal communication, April, 2016) explained, Italy "was a good place where to start this stuff because there are many small producers... from the past, like people from the countryside that were producing things for themselves, like small families". The agricultural history and continued importance of small farmers in Italy is conducive to a localised agricultural system such as that which is emerging. This sentiment was reiterated by U. Sievers (personal communication, April, 2016) who suggested that "they don't really do big scale agriculture here... I mean organic farmers are like all the other farmers, they have a small piece of land".

The climate and terrain in Italy also encourages the emergence of an agricultural system that produces for local consumers. U. Sievers (personal communication, April, 2016) acknowledged the suitability of the Italian climate for agriculture; "basically you can eat off your farm anywhere in the country of Italy, anytime of the year you have food". Furthermore, Italy has great biodiversity from the north to the south. Regionally, it's described as having different micro climates and different territorial characteristics (A. Savioli, personal communication, April, 2016), which gives Italy the capacity to grow a diverse range of foodstuffs year round. Such capacity for agricultural production, and diverse production at that, is not possible in some countries.

U. Sievers (personal communication, April, 2016) offers a nice distinction between the situation in Italy and Germany, saying that although in Germany there are also farms, and people with a desire to grow their own food

It's perhaps one more generation removed, since Italy has only recently come out of this and people still remember it. They still have parents and grandparents who grew up on the land. It's much closer for them, they've never gone through the industrial revolution of the land. They went into the supermarket and right back out of it. The people who are here, only their generation ever had a supermarket, and they've seen it and said no, and here they are again. So it was very short, whereas in the USA for 100 years already people have not ever seen anything produced on the land they've only seen the supermarket chains.

In chapter two I offer a detailed discussion of the emergence of supermarkets in Italy and how they had to be adopted to fit the Italian public's desires. My point is that in the Italian context an alternative agricultural system that is localised, prioritises healthy and fresh food, and encompasses direct relationships between producers and consumers is not too far removed from the pre-existing dominant agricultural system in Italy; which to some extent still retains these aspects in spite of the contestation with the invading globally dominant agricultural system. Although, it must be noted that there is nevertheless a substantial difference between the extent to which these aspects are embodied in the pre-existing dominant agricultural system of Italy, and the emerging agricultural system; in that they are much more fully embodied and prioritised in the emerging agricultural system.

Without having done field research or even adequate secondary research into agricultural systems in other countries due to time and word limits, I cannot offer an in-depth discussion of the applicability of an alternative agricultural system based on food sovereignty to another nation. Future research will engage in a deeper comparative study of other nations around the world to investigate the extent of applicability. With that caveat in mind, I do want to suggest that place-based variations of a localised, environmentally and socially sustainable agricultural system would be applicable in other nations. Below I briefly touch on some examples of more or less fully formed agricultural systems around the world that I argue are sufficient evidence that an alternative agricultural system premised on food sovereignty is applicable in adapted variations around the world and thus could conceivably become the globally dominant agricultural system.

Localised agricultural systems are emerging worldwide. Cruz e Silva's research (2006) develops a picture of food sovereignty in Mozambique. In Mozambique the Maputo General Union of Agro-Pastoral Cooperatives (Maputo UGC) is a union comprised of cooperatives which engage in food production. This exists despite Mozambique's participation in the IMF and adoption of World Bank policy from 1984. These institutions push the national template of the neoliberal model of development on countries and thus Mozambique adopted principles of the template, including liberalisation and privatisation. This meant that the UGC confronted a globally competitive market which did cause issues for the UGC.

Nevertheless, they have been able to remain functional. Against the regulatory constraints of the corporate food regime the UGC have continued agricultural practices that pursue and embody food sovereignty as the union of cooperatives attempt to help retain some degree of self-sufficiency for those left desperate.

A further example of food sovereignty can be found in the Bibio region of Southern Chile. Cid Aguayo and Latta (2015) analyse responses in this region to the globally dominant agricultural system. This region is championed as housing the most noteworthy examples of alternative agriculture being practiced in the country and is also home to the "largest remaining concentration of peasant farms" (Cid Aguayo & Latta, 2015, p. 398). They look at three areas of alternative agriculture; a network of peasant women – "curadoras de semillas (seed "curators" or "healers")... community-based urban agriculture and exportorientated certified organic farming" (p. 398); all of which are expressions of the food sovereignty movement.

Unsurprisingly, it was the decade of the 1980s in which state reform in Chile cemented an "export-orientated agribusiness model" (Cid Aguayo & Latta, 2015, p. 400), what I would call the dominant agricultural system. Cid Aguayo and Latta (2015) suggest that only those areas deemed insufficient for commercial agriculture evaded the neoliberal reform of rural space and agricultural practices. Although peasant economies were marginalised in these isolated havens, they did provide a space for the peasant lifestyle to survive and peasant organisation to increase (Cid Aguayo & Latta, 2015). The responses to the dominant agricultural system and its effects champion principles of agro-ecology and are based on "principles of ethical consumption, urban-rural partnership, and solidaristic economic exchange" (Cid Aguayo & Latta, 2015, p. 398). Responses are also concerned with "returning to the ancestral practices because, well, we know those practices from when we were children" (Cid Aguayo & Latta, 2015, p. 402). All of these principles and priorities are encompassed in the pursuit of food sovereignty, which is so much more than a peasant movement, though it owes its initial and continued firepower to this mobilised group. Food sovereignty is about self-sufficiency and returning power to the local, by returning food, through various more or less fully formed agricultural practices, to the local.

Clendenning et al. (2016) look at responses to rising insecurity in New Orleans and Oakland. Urban food movements have spawned operating on discourses of food sovereignty and food justice (Clendenning et al., 2016). These movements are not only ideologically driven, but practice alternative food production such as community supported agriculture, making use of abandoned urban areas to farm their own food, in attempts to remedy insecurity and hunger.

In Vermont, a rural state in the United States of America, localised food practices can also be found. Ayres and Bosia (2011) link the presence of local food practices to a historical trajectory of tradition in the state that for a long time has favoured "small-scale frugality, local citizenship, and direct democracy" (p. 56). Direct democracy stems from a political structure that Ayres and Bosia (2011) consider to be the most decentralised of any state in the United States. Ayres and Bosia (2011) state that not only does Vermont have "the most farmers markets per capita in the US [but also]... ranks first in the US in per capita direct sales from farmers to consumers" (p. 58). The state of Vermont has adapted the food sovereignty model into many widespread everyday practices throughout the state including "'slow food', urban gardening projects, permaculture, purchasing food when it is 'in season', and agricultural land reform" (Ayres and Bosia, 2011, p. 56).

These examples serve to demonstrate the existence of many emerging, more or less fully formed, agricultural systems based on food sovereignty that exist marginal to, and in contestation with, the dominant agricultural system around the world. I put these examples forward to argue that place-based variations of an agricultural system based on food sovereignty is applicable around the world. I began in Rome, and from the insights I drew there, found similarities in many more or less fully formed agricultural systems in a diverse collection of nations around the world; expressing the global applicability of an agricultural system based on food sovereignty. However, though many projects are developing on or beyond the margins of, and are contesting, the dominant agricultural system, and in some cases more explicitly the corporate food regime; these projects are not unified in an alternative post-neoliberal project. I struggle towards the argument that considerations of an alternative model of development in agriculture, and model of development generally, in short an alternative food regime that

encourages, and directly regulates and facilitates, an alternative agricultural system (a more fully local accumulation model) is the way to unify the diffused food sovereignty movement into a practical project that can challenge the corporate food regime.

Thus I argue, in order to facilitate the flourishing of place-based variations of an agricultural system premised on food sovereignty, my core argument is that an alternative model of development in agriculture needs to be conceptualised and implemented which would thus move us into a new food regime.

The food regime, along with technological developments, encourages a particular 'ideal type' globally dominant agricultural system. A new food regime can directly facilitate a dominant agricultural system based on food sovereignty. Of course, the ideal typical type does not exist anywhere, place-based variations of it do. Thus, the new food regime should enable locally developed agricultural systems that prioritise food sovereignty to flourish; populating the world with locally realised manifestations of a dominant agricultural system that encourages food sovereignty and diversity. I now turn to looking at some of the issues which a new food regime should address.

Thinking about a new food regime

To begin thinking about a new food regime we must begin thinking about an alternative model of development. It helps to compare the previous Fordist model of development with the current neoliberal model of development. Both, although employing fundamentally different regulation, have proved unsustainable. In terms of social progress, the Fordist era of capitalism was leaps and bounds ahead of the current neoliberal era. This is due to its Keynesian style mode of regulation; "the core of the mode of regulation was the reconciliation of rapid increases in productivity with the growth of real income and with stability in its distribution. Real wages increased regularly because they were linked to productivity growth" (Aglietta, 1998). It was the introduction of non-capitalist ideas, counter-active regulation and the many "social protections associated with the Fordist era" (Neilson, 2007, p. 105) into the coercive, unstable logic of capitalism that humanised and domesticated it, characterising the Fordist experience of capitalism

from the 1940s to 1970. The basic logic of capitalism was over-determined by Keynesian mechanisms that could compensate for its problems.

However, the "ultimate dependence of production on the natural environment, both as a source of material inputs in the form of renewable and non-renewable resources and as a receptor of the waste products of production" (Dicken, 2007, p. 29) means that a Fordist type regime is unsustainable. Social progress was only seen in this era because of the coupling of productivity being driven by the demand side with the regulation that confined capital to the nation state boundaries, protecting labour and domestic interests. However, one cannot advocate a return to this humanised form of capitalism as the alternative because it is simply ecologically unsustainable. The environment cannot handle the incessant drive for more production in the name of profits, regardless of how regulated capital's movements are. We must attempt to conceive of a model of development that is egalitarian and environmentally sustainable to move beyond the environmental failings of the Fordist era and the social and environmental failings of the neoliberal. While I do not have the space to flesh out the template for an alternative model of development here, I want to consider key issues that must be overcome.

Breaking down the dichotomy of nature and society

Schumacher (1974) draws our attention to the issue that 'the problem of production' is far from solved, contrary to popular iteration. While Schumacher is talking about industrial production for the most part, I think his argument is nonetheless relevant to agricultural production too. Most profoundly he suggests that the unsolved problem of production is a result of the change in attitude that humanity has taken up towards nature, particularly those in the west. This attitude is one of superiority and separation. Humanity has come to think of themselves as capable of commandeering nature as if humanity somehow exists beyond nature. Schumacher (1974) beautifully articulates the idiocy of this god complex, suggesting that humanity "talks of a battle with nature, forgetting that, if he won the battle, he would find himself on the losing side" (p. 11).

The stark contrast that exists between nature and society is thought to have become dominant in the nineteenth century in the west (Macnaghten & Urry,

1998). Championing this supposed dichotomy that exists between nature and society has enabled the complete relegation of environmental concerns as secondary to the profit motive. The modernist discourse, that so successfully dominates impressions of nature in the West, followed a Hobbesian line which entails that society must overcome the shortcomings of the 'natural', to achieve progress. Thus nature began to be conceptualised as something that needed taming and subjugation. Progress was to be measured in terms of the mastery of nature, an idea that "presupposed the doctrine of human exceptionalism: that humans are fundamentally different from and superior to all other species" (Macnaghten & Urry, 1998, p. 12).

The common-sense definitions in both Europe and North America have delineated a sharp distinction between nature as passive and humanity as active (Anderson & Berglund, 2003). It is in this assumed passivity of nature that we find justification to treat nature as a tool to be manipulated and upon which we premise our intervention (Macnaghten & Urry, 1998). The current corporate food regime fails to acknowledge the essential role nature has as the life blood of the Spaceship Earth (Schumacher, 1974). In short, the separation between nature and society is what enables the continued justification of the intensive exploitation of the environment by the capitalist mode of production, and in agriculture, by the dominant agricultural system.

When thinking about an alternative food regime it is important to reclaim an understanding of nature and society as two parts of an interdependent whole. Such an understanding dismisses the dichotomy that has so plagued current understandings. While sociologists employ an understanding of individuals as a conjuncture of biography and history, we must also think of nature as not only having a biography, a narrative of its own development, but also a social history. Vice versa, it is necessary to understand society through, not simply the narrative of manmade development – its biography, but as having a natural history. Social and natural histories are in constant interaction. Anderson and Berglund (2003) nicely articulate the environment as a "sphere of life activity" (p. 8). This idea is summarised in Dove's (2001) notion of nature and society 'co-evolving', and supported by Macnaghten and Urry's (1998) assertion that there is "no simple and

sustainable distinction between nature and society. They are ineluctably intertwined" (p. 29).

Treating nature as a tool is why Schumacher (1974) argues that 'the problem of production' is far from solved. However, it is also due to, what Schumacher (1974) calls the modern industrial system, consuming "the very basis on which it has been erected" (p. 16). This is also true of the globally dominant agricultural system. Inputs are taken in unparalleled quantities from the environment such that this industrialised, chemically intensive, fossil fuel dependent, large scale, high yield, export orientated agricultural system can function. The outputs further damage the environment as the soil erodes, biodiversity is threatened and pollution greatens.

Schumacher (1974) defines those resources which we find and without which we cannot do anything as irreplaceable capital. The problem of production, he says, cannot be solved because by far the majority of the capital we use in production comes from nature, not capital which we have created. This irreplaceable capital is being exhausted at a distressing pace, in 2013 Pyhala suggested that "we are exceeding the planet's regenerative capacity by about 30 percent" (p. 195). McMichael (2016) in his turn argues that

Regarding the future, the world is at a significant threshold expressed in the 'overshooting' of Earth's biocapacity and the crossing of planetary operational boundaries (climate change, biodiversity, the nitrogen cycle), with others such as fresh water use and oceanic acidification at serious tipping points. Managing the future is now a clear priority (p. 660).

The problem of production cannot be solved while we continue to pursue the same patterns of accumulation and the same dominant agricultural system. As I've argued earlier, a new food regime that encourages a dominant agricultural system that is flexible and premised on food sovereignty is key to diminishing these environmental (and social) impacts. An alternative food regime must prioritise environmental sustainability, respect that nature and society are utterly entwined, and encourage a dominant agricultural system that can give some reprieve to the regenerative capacity of the planet. However, we must problematize the use of the

term sustainable. 'Sustainability' has become something of a buzzword and yet in its increasing use, seemingly becomes more of a background wallpaper feature.

Sustainable – what does this mean?

In the abstract sense we could think of the term sustainable meaning that something is able to be maintained or upheld. Then, in terms of human practice, which involves both society and nature, we should be able to uphold and maintain our practices into the foreseeable future and beyond. The dominant agricultural system is fundamentally undermining that possibility. While on the other hand, true sustainability is central to food sovereignty.

One of the first definitions of sustainable development was published in the 1987 Brundtland Commission's report (Pyhala, 2013). The definition purported development to be premised upon "the needs of the present without compromising the ability of future generations to meet their own needs" (Pyhala, 2013, p. 200). Such a definition seems promising. However, there are questions that can be asked concerning hegemony and power; by whose standard are we defining needs? Do all needs get met equally? Are there some in a position to deem something a need that in fact is not? These questions apply to the notion of sustainable development itself. Pyhala (2013) is right to question "whose sustainability we are really talking about in the discourse of "sustainable development" (p. 197). It appears that within this era of the corporate food regime what we are upholding and maintaining is the power and wealth of the transnational capitalist elite and the systematic undermining of small farmers and peasantry throughout the Global South and the margins of the Global North.

It was this same institution, the Brundtland Commission, that went on to appropriate sustainability into mainstream logic by stressing that "economics and ecology must be completely integrated" (Tulloch & Neilson, 2014, p. 33). The Rio declaration also contributed to the de-radicalisation of sustainability suggesting that the "opening up of trade barriers... [would] better address the problems of environmental degradation" (Tulloch & Neilson, 2014, p. 34). The discourse of sustainability has been largely integrated into the discourse of the neoliberal project.

Since becoming a frequently used term and discourse, 'sustainability' has lost its radical potential (Tulloch & Neilson, 2014). The environmental crisis, which is increasingly exacerbated under the corporate food regime is incredibly worrying. Yet those championing an alternative have lost a tool to critique the practices of the current era because of the de-radicalisation of this concept. 'Sustainability' could once have been a tool used to fundamentally oppose the dominant agricultural system, however, sustainability has now become a discourse of legitimation that merely serves to validate neoliberalism and the market. Pairing liberalisation with a capacity to address the current environmental issues is blatantly misguided given that liberalisation and the mobility such regulatory practices give capital are contributing to the environmental destruction wrought by the dominant agricultural system.

After that discussion one might ask again what does sustainable mean? The answer is not given by how it is employed within the neoliberal agenda. I argue one part of the answer is printed on the front of Schumacher's (1974) book, "small is beautiful". This is a radical reclamation of a term lost to a legitimation of neoliberal globalisation, and also points to a fundamental characteristic that an alternative dominant agricultural system should pursue. Small often has negative connotations like insignificant, minute, insufficient and undeveloped. However, the food sovereignty movement, characterised by a diffusion of varying more or less fully formed agricultural systems that are *small* scale and localised, around the world is far from insignificant. Perhaps small is actually the strongest stance humanity can take towards developing a future that really is sustainable.

Food for thought about an alternative food regime

Breaking down the dichotomy between nature and society is a challenge which I put forward to myself and other researchers considering ideological issues that a new food regime needs to address. Dissolving this dichotomy will encourage common sense understandings to shift in ways that might assist more people in understanding the interwoven relationship between nature and society and inspire an uptake of a custodian role. This ideological struggle should be coupled with changing regulatory parameters, given by the food regime. A new food regime requires conceptualisation of an alternative model of development in agriculture, and conceptualisation of an alternative model of development. Thus, in order to

help the ideological shift, the food regime needs to (unlike in previous eras) regulate and directly facilitate the construction of a dominant agricultural system. One that is not premised on the exploitation of the environment and nature, but rather a harmonious co-existence, by pursuing practices of food sovereignty. In doing this, a new food regime can appropriately be called sustainable.

Once having made steps to remedy the problem of production it is then important to remember that a new food regime must also remedy the social failings of the current era. Without having the space to offer a complete discussion on the regulatory templates of a new food regime I want to present my initial thoughts:

- The goals of the national template must include: enhancing the viability of each nation state's autonomy; harmonising humanity's interaction with nature; eliminating competition between nation states encouraging cooperation instead; and removing the mobility, and therefore the power, of capital. The national template should engender a transnational environment that enables various localised, place-based variations of an alternative dominant agricultural system premised on food sovereignty to flourish. Self-sufficiency will become realistic for nation states in a transnational environment where, amongst other standard practices, capital will be utterly restrained.
- Current international organisations such as the UN, the EU, the IMF and the World Bank are fundamentally undemocratic and divisionary; for example, in the IMF "24 industrial countries hold 10–11 seats on the executive board while 42 African countries hold only 2" (Held, 2006, p. 166). Either these organisations need to undergo immense restructuring, or perhaps they should be disestablished in favour of something resembling a global democratic parliament; the decision-making mechanism of a new mode of global governance.
- Even development is in the first place to be facilitated by ensuring all
 countries have viable and locally sovereign agricultural accumulation
 models. As a global priority, this should start with the least viable
 countries. However, it must be acknowledged that in practice complete
 self-sufficiency for all nation states is unrealistic. A distributive role in a

- new mode of global governance would be an essential part of the success of a new food regime.
- The national template needs to be flexible to enable endogenous development, premised on unique ways of life and a diverse range of cultures. The principles which all nations must concede to if the food regime is to function effectively (i.e. best promote the viability of all nation states, small farmers and food sovereignty) include a sustainable engagement with the environment, through some form of an agricultural system that embodies food sovereignty in the full sense of the term and regulation of the mobility of capital in order to garner some degree of solidarity in place of the competitiveness of the current food regime. Thus the national template needs to be centrally premised upon local self-sufficiency and autonomy, which hinges on agricultural systems that prioritise food sovereignty.

Conclusion

This chapter extends my research into areas beyond the scope of this thesis. However, the emerging agricultural system I looked at in Rome implicitly pursued food sovereignty, although this concept was not explicitly mentioned by any of my participants. It is interesting to note the variety of countries, all in different stages of development that are home to an expression of food sovereignty. Expressions that are connected in their response to the corporate food regime. The extent to which the food sovereignty movement is diffused throughout the world, and expressed in various place-based ways offers hope for thinking about a new dominant agricultural system that prioritises food sovereignty.

The emerging agricultural system I looked at in Rome differed from the dominant agricultural system in important ways. The emerging agricultural system creates a fundamentally different environment; one of community, trust, security and solidarity rather than the individualising, insecure and competitive environment of the dominant agricultural system. Learning from these differences helps to conceptualise what an alternative dominant agricultural system should encompass encouraged by a new food regime.

I have argued that it is conceivable that place-based variations of an alternative agricultural system premised on food sovereignty could become the dominant agricultural system around the world. The diffusion of the food sovereignty movement and various alternative more or less fully formed agricultural systems that currently exist, from Mozambique to Vermont, that I briefly touched on, are testimony to this. My core argument however, is that for this to be a viable reality we need to conceptualise and implement a new food regime with food sovereignty (i.e. localised, environmentally and socially conscious agricultural systems) at its core. While regrettably not having the space to think about the template of the model of development in agriculture and the model of development that would enable the reality of a new food regime, there are some key issues to think about going forward. These include breaking down the dichotomy of nature and society and re- radicalising the discourse of sustainability through some Schumacherian sense of 'small is beautiful'.

CONCLUSION

The initial questions that this research proposed were based on the practical realities of the globally dominant agricultural system, indirectly influenced by the corporate food regime, and an alternative embryonic agricultural system developing in practice. The research questions focussed on the differences between this emerging agricultural system and the dominant agricultural system and the possibilities the former offers for thinking about an alternative dominant agricultural system, directly regulated by a new food regime.

The conceptual framework I applied to think about these questions has its origins largely in the French Regulation School. More specifically my conceptual framework draws on the work of Neilson (2012; Neilson & Stubbs, 2016), Friedmann and McMichael (Friedmann, 1987; Friedmann & McMichael, 1989; McMichael, 2009a, 2009b). The three concepts which form the basis of the conceptual framework developed in this research, are 'model of development' – understood following Neilson's third generation regulation theory, 'food regime' - having its origins in the work of Friedmann and McMichael but whose work I revise, and 'agricultural system' - which I define. These concepts intersect and overlap in important ways that I hope provide a fuller understanding of the current era and can help to think about possibilities for the next. This conceptual framework presents my revised account of the relationship between regulation and accumulation in agriculture which I argue is essential for understanding why and how food sovereignty is threatened in this neoliberal era. However, this conceptual framework and the revisions I struggle towards are an on-going project and my conceptual framework should be considered a work in progress.

Nevertheless, using this conceptual framework, I gave an account of the current era arguing that it can be defined as 'in regulation' (though not in the orthodox sense), defined by the neoliberal model of development. The neoliberal model of development in agriculture, which is roughly equivalent to the food regime, remains distinct from the model of development which applies to capitalism generally, while the former applies to the specific agricultural sector. The food regime remains distinct from both the model of development and the model of development in agriculture as it links both levels. Over time, the regulatory

framework of the model of development is transferred onto, and thus transforming of the pre-existing regulatory framework of the food regime.

In the current era, regulation only indirectly constructs emergent agricultural systems, the nature of which is also constructed by technological developments. However, I argue a new food regime should have a specific ideal type dominant agricultural system at its core that is premised on food sovereignty and is more explicitly directly regulated. Furthermore, the new food regime should directly facilitate the construction of agricultural systems premised on food sovereignty.

The corporate food regime and globally dominant agricultural system have generated negative social and environmental effects which should generate concern for the future. I hope that in the presentation of the diffusion and strength of the inclusive food sovereignty movement and the variegated nature of evolving agricultural systems on the margins of the dominant agricultural system have provided both some insights into possibilities for the future and some assurances that the enduring predicament of the corporate food regime has not been suffered passively. Active resistance using food which is vested with political power can provide us with insights to begin conceptualising a new food regime.

The field research that I completed in April 2016 in Rome was essential in terms of responding to some of the core questions that this research has posed. It enabled me to gain an insight into how emerging agricultural systems begin and why; how the production, distribution, exchange and consumption elements might function, and any ideological motivations. I was drawn to Rome because of preliminary research based on the GAS movement in Italy. The emerging agricultural system I found deviated from the dominant agricultural system in exciting ways.

The emerging agricultural system I looked at is a localised grassroots initiative driven by solidarity, a desire for quality, and health and environmental concerns. It provided an option for producers who struggled in the conventional market. The three producers I looked at, La Nuova Arca, Barikama and Il Papavero, are afforded security in this emerging agricultural system as the imperative of competition is mitigated by an evolving agricultural system built on solidarity and trust. In sum, this emerging agricultural system creates a fundamentally different

environment from that of the dominant agricultural system; one of community, trust, security and solidarity rather than the individualising, insecure and competitive environment of the dominant agricultural system.

I have attempted to demonstrate the complex patchwork of agricultural systems, that are more or less fully formed that contest with/adapt aspects of/support each other in Italy. The globally dominant agricultural system is invading the pre-existing dominant agricultural system in Italy, although this has, for the most part, resisted this invasion, and adapted small elements into a uniquely Italian context that retains aspects of pre-industrial agricultural practices in many of the more or less fully formed agricultural systems. Italy is able to resist adopting many of the characteristics of the dominant agricultural system because of the protection offered by the European Union.

The protection of the EU is also central to Italy maintaining the competitiveness of agricultural practices such as small scale production. In the Global South, often through lack of choice, countries cannot protect their small scale producers. Of course I am not arguing that the Global North should liberalise to even the playing field, as the problem would still remain. That problem is free trade, global competition and capital mobility that undermines food sovereignty and the viability of small producers around the world.

Food production and consumption in Italy is strongly influenced by a history of agriculture that has been based on small scale family farm logic and the importance of fresh quality produce, things which are for the most part absent in the dominant agricultural system. The institution of supermarkets (a key element of the dominant agricultural system) into Italy was wrought with struggles as the American supermarket model had to be adopted to meet these traditional practices. The motivations of the food consumption practices in the emerging agricultural system demonstrate the importance of these historical traditions. Furthermore, the food production, for its part in the emerging agricultural system, was largely reminiscent of these historical patterns as well. The persistence of these historical patterns may aid Italy in resisting the dominant agricultural system.

I do want to acknowledge that there are some limitations to my findings based on in-depth interviews. Firstly, I only met with one of the GAS in one of the cities in Italy in which the GAS can be found. Thus I had to draw on secondary research to confirm my conclusions or to make generalisations. Given more time, meeting with several of the GAS in each city would provide more basis for the findings I present here.

Secondly, I was hoping to learn about what an alternative dominant agricultural system might look like based only on looking at one emerging agricultural system in one nation. Drawing conclusions about how an alternative agricultural system based on food sovereignty principles might play out in other nations and communities that I did not do field research on was difficult; particularly as my findings suggested that the emerging agricultural system I looked at was very wedded to the Italian context both historically and socially. Future research based on a comparative approach, involving field research in a variety of nation states in a variety of communities would enable me to draw more thorough conclusions based on the recurring themes I find. However, from the secondary research I did, I tentatively argue that place-based variations of an agricultural system that prioritises food sovereignty (i.e. is localised, organic, environmentally and socially just) is applicable in a variety of places around the world. Thus, as a preliminary conclusion, pending more research, it seems that such an agricultural system could conceivably become the dominant agricultural system around the world given a new food regime.

This research has confirmed that there are more or less fully formed experiments pushing towards agricultural systems that create a fundamentally different environment from that created by the dominant agricultural system and from which many insights can be gained. It also offered contributions to a discussion on the diffusion of the food sovereignty movement which can be expressed in variety of ways, with varying foci, that are nonetheless united in their response to the dominant agricultural system, and more widely the corporate food regime. The grass roots agricultural system that is emerging in Rome, and throughout Italy, expresses similar discontentment with aspects of the dominant agricultural system that can be observed in literature on other parts of the world. There is undoubtedly grounds for thinking that agricultural systems premised on local food production

and consumption can be adapted to many places around the world suffering under the dominant agricultural system.

The food sovereignty movement, expressed in a variety of emerging and fully formed agricultural systems around the world can become more than a countermovement on the margins of the globally dominant agricultural system that deepens the neoliberal project in agriculture. I argue the food sovereignty movement is the key for characterising what a new era should look like. It has not only defined the content of the problems in this era, but also defined a vision for the future. This is a future in which variations of localised agricultural systems, that are sympathetic to the characteristics and cultures of specific locales and aim for the sustainability of the environment and the self-sufficiency of small producers, become the dominant agricultural system around the world.

My advocating for structural changes that focus on improving food sovereignty (which implies environmental preservation, social justice, and self-sufficiency through localised agricultural practices) is by no means an original stance. However, my contribution comes from the core argument that I offer which is that the best chance of achieving such goals is through a new food regime which centrally involves the conceptualisation and implementation of an alternative model of development in agriculture and an alternative model of development. This is an extension of the work done by Neilson and McMichael to which I owe great dues.

As this thesis reaches its end I think it important to reiterate what needs attention in further research by myself and any other researchers eager to employ their agency in the conceptualisation of a food regime that champions food sovereignty. Firstly, it is imperative to recognise the agency involved in the design and implementation of models of development. This gives both hope for a future designed differently and a new imperative for the Left to start conceptualising what an alternative model of development in agriculture and model of development generally might look like.

It is important for multidisciplinary thinkers to come together to conceptualise what the national template of an alternative model of development in agriculture and an alternative model of development should look like. From here a new food

regime becomes plausible. I hope to investigate this more in the future but also hope that other researchers will take up the mantle in order to offer a practical project that can restore food sovereignty, helping localised agricultural systems around the world flourish which in turn will decrease food insecurity issues. A world where the ideal type dominant agricultural system is variations of a localised agricultural system that prioritises environmental preservation, community, and self-sufficiency is something that should excite those worried about the degradation of the environment and the social injustices caused by the dominant agricultural system encouraged in the corporate food regime.

My research struggles towards some clearer understandings of a revised relationship between regulation, accumulation and (what the FRS called the 'technological paradigm') and I call the agricultural system, however, this is still a work in progress. Much more theorisation and field research is called for to further develop the project I work on here as the new 'Australasian school of third generation regulation theory' struggles towards a clearer more stable form.

Schumacher (1974) denigrates the fact that more effort, both monetary and otherwise, is not being put into "studying the possibilities of alternative methods of production and patterns of living" (p. 12). This failure is something that more people, *increasingly* more people, should be denouncing as we take the high-speed lane down what Schumacher (1974) calls a "collision course". Let us thus fulfil Schumacher's challenge and take up a passionate and direct interest in studying alternative methods of production, specifically in agriculture, an alternative agricultural system (and corresponding food regime) that prioritises a return of food to the local, and with it a return of power to the local.

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Appendix A – Information sheet for in-depth interviews

UNIVERSITY OF WAIKATO Faculty of Arts and Social Sciences School of Social Sciences

In-depth semi-structured interview for MSocSci "Sociology Thesis"

Research Topic:

"Starvation amongst a mountain of food waste; can local food production and consumption models offer a viable alternative to globalised corporate agriculture?"

Researcher: Darelle Howard Supervisors: Dr David Neilson & Dr Fiona McCormack

INFORMATION SHEET

What is this research about?

I am doing this research as part of my study for a Master of Social Sciences degree at the University of Waikato in New Zealand. My thesis will examine the food sovereignty movement in Italy through particular case studies. My main goals are to question whether local food production systems and food sovereignty movements can provide a practical alternative to global market agriculture. I will consider the possibility that producing and consuming food locally could become the common practice around the world. To try to answer such questions I need to learn about the realities of local food production systems and food sovereignty movements in practice.

What participation in this research project involves

I would like to interview you to hear your story about your involvement with local food production and/or consumption activities. My aim is to understand the realities of local food production in practice. I have some questions to ask you, but my hope is that we can treat this interview as a conversation and have an in-depth discussion about the topic. I expect the interview to last approximately 40-45 minutes. With your permission the interview will be audio-recorded, transcribed and I may take hand-written notes during the interview. The audio recordings and the transcripts will be kept securely stored, and will only be accessible to my supervisors and me.

The information from the interview will be used in my Master's thesis which will be published online, and extracts may be used in further publications or presentations that arise from this research.

What are your rights if you choose to participate?

If you are willing to participate in this research you may choose how you want your identity to be represented in the research. You can choose to be identified by your name alone; or you can also choose to be identified by your name as well as the name of the food production practice you are involved in; or you can choose to keep your identity confidential. If you want to keep your identity confidential I will attempt to do so by replacing your name with a pseudonym. Nevertheless, there is a risk that you may be identified even with the use of pseudonyms, so I cannot guarantee confidentiality.

The audio-recording of your interview, the transcript and any other data will be kept by me in a safely locked place, and will only be available to myself and my supervisors. If you wish, I will give you a copy of the transcript. You may also want a copy of the recorded interview.

If you agree to take part in this interview, you have the following rights:

- a) To refuse to answer any particular questions, and to terminate the interview at any time.
- b) To ask any further questions about the interview or research project that occur to you either during the interview or at any other time.
- c) To withdraw your consent at any time up until 4 weeks after your interview by contacting me (see below for contact details).

"This research project has been approved by the Human Research Ethics Committee of the Faculty of Arts and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee, email fass-ethics@waikato.ac.nz, postal address, Faculty of Arts and Social Sciences, Te Kura Kete Aronui, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240."

Researcher's contact details:	
Researcher Darelle Howard Email: Ph:	Supervisors Dr David Neilson Dr Fiona McCormack

Appendix B – Consent form for in-depth interviews

UNIVERSITY OF WAIKATO FACULTY OF ARTS & SOCIAL SCIENCES

PARTICIPANT CONSENT FORM

Name of pers	on interviewed:			
Any questions satisfaction. I time during m	s that I have, relating to understand that I can as	the research, have sk further question	ing the research project. been answered to my s about the research at any ny participation at any time	
am happy to ta		n stop the interview	answer questions unless I w at any time, and I can	
consent for the	nis consent form, I will e researcher to use the i e Information Sheet.		of my interview, but I give arposes of the research	
I will receive	a copy of the transcript	of my interview to	check	
	ed the representation of h the researcher and I w		ne identity of my	
"I consent to being ir	nterviewed about my	"I agree to	abide by the	
involvement in a loca	volvement in a local food practice for this		above conditions"	
research on the above	e conditions"			
Participant : Signature : Date : ContactDetails :		Researcher: Signature: Date: ContactDetails:	Darelle Howard	
		ContactDetails.		