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**Bringing regulation to the fore of food regime theory:
The neoliberal model of development in agriculture and beyond
in theory and practice**

A thesis
submitted in fulfilment
of the requirements for the degree
of
Doctor of Philosophy in Sociology
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Abstract

This thesis works to bring in a critically revised version of regulation theory in order to address impasses in food regime theory. This theoretical innovation enables me to identify McMichael's (2005; 2009a; 2009b; 2013) third food regime as the neoliberal model of development in agriculture (NMD in agriculture); and also discuss a possible democratic, counter-hegemonic post-neoliberal model of development in agriculture. The development of this conceptual framework enables the identification of regime and regulatory aspects particular to this neoliberal capitalist era. That is, this thesis develops a mid-range perspective that enables more specific critique of the present neoliberal era pivoting around regulation and regime. This presents an innovative take on this particular temporal plot of the Anthropocene.

There is a tendency to investigate capitalism as a homogenous history, however, this invisibilises demarcations across this history identifying distinct eras. Noting these distinctions facilitates a more thorough critique of each period. It is what distinguishes these mid-range eras that is the key to this project. I suggest that this is different regulatory architectures and different national and transnational regimes of accumulation, more specifically, different models of development.

In particular, I conceptualise the effect that regulation has on our food regimes of accumulation. I investigate existing agricultural practices and ways of life that provide an alternative to dominant forms of agriculture. Employing a revised regulation theory, I consider the link between agricultural practices (emerging in regimes of accumulation) and regulation in the present era. Furthermore, I consider how food regimes of accumulation could be regulated differently in the future in the name of environmental and social justice. In sum, this thesis conceptualises the defining food regime of accumulation and regulatory architecture of the neoliberal era defined as the neoliberal model of development in agriculture, and considers how we might conceptualise the next post-neoliberal era.

This research focus is underpinned by a motive to engage the agency of numerous groups at various levels, from the community, to the national, to the transnational, to actively conceptualise the next era of capitalism. It is a cry to attend to the crises of the prevailing neoliberal era and actively engage in a praxis approach that is grounded in theory informing

practice and change. That is, let us theorise the contemporary, thoroughly conceptualise it as a marked era, and attempt to address the failings of this era in the conceptualisation of the next era that is premised on the (not yet seen) subordination of capital.

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Glossary

Mid-range: An approach to investigating capitalism that demarcates distinct eras, or periods, across the long capitalist history. This challenges the view of a homogenous history and notes mid-range variance that intersects with the long-range processes in a particular temporal conjuncture.

Regulation: In a general sense regulation is part of the political and ideological sphere. Regulatory forms emerge from values and discourses that permeate forums and institutions operating at different levels. Different regulatory forms are adopted to specify the way that the overdetermination of the mode of production/economic base occurs. Regulation refers to the rules through which we coordinate and overdetermine the basic economic structure.

Regime of accumulation: A cycle of social reproduction defined by production, distribution, consumption and investment.

Model of development: The accumulation-regulation nexus defined by the widespread adoption of a national regulatory template, which, when widely adopted by many nation states, engenders a particular *transnational* environment, which in turn constrains the possibilities of national development. In something of a dialectic, the widespread institutionalisation of the national regulatory template intentionally generates a transnational environment which in turn reinforces the national template. Particular models of development demarcate distinct mid-range capitalist eras (Neilson, 2012; 2020).

Model of development in agriculture: The model of development as it applies to the agricultural sector. The model of development provides an umbrella under which nation states and sectors of the economy operate beneath. However, different sectors develop complexly and unevenly in the space of the prevailing model of development. This complex unfolding of the model of development in sectors is due to the position of the nation state in the global terrain of competition states, the internal dynamics of particular sectors, as well as interactions between sectors. The model of development in agriculture must be understood within the context of the prevailing model of development, however, some sectorial characteristics do not simply follow from the prevailing model of development. Nonetheless, the model of development sets the limits and possibilities of what can happen.

Food regime (orthodox understanding): A demarcated period in capitalist accumulation that is defined by food circuits that underpin particular global food relations.

Food regime of accumulation: A cycle of social reproduction defined by production, distribution, consumption and investment *in food*.

Dominant food regime of accumulation: The politically and economically dominant cycle of social reproduction defined by production, distribution, consumption and investment in food in a particular mid-range era. The success of the dominant food regime of

accumulation is facilitated through the dominant regulatory architecture adopted and deployed in a particular mid-range era.

Alternative food regime of accumulation: A cycle of social reproduction defined by production, distribution, consumption and investment in food that resists/challenges/is subordinated by the dominant food regime of accumulation in a particular mid-range era.

Neoliberal global food regime of accumulation: The particular cycle of social reproduction defined by production, distribution, consumption and investment in food that is politically and economically dominant in the particular neoliberal era of capitalism stretching from the 1980s to the present. Characterised by trans-era features such as commercialisation, monocultural production, intensive chemical inputs, an emphasis on high yields and fossil fuel dependency. However, beyond this, specific to the present mid-range era, the key aspect of the neoliberal global food regime of accumulation is centrally the neoliberal led global price assault on small producers. This global price assault is generated through long global supply chains. The globalisation of accumulation and related issues of competitive national specialisation for export whilst importing all else, and the role of supermarkets as coordinators of global supply chains are distinct features of the neoliberal global food regime of accumulation.

Alternative local food regime of accumulation: Particular cycles of social reproduction defined by production, distribution, consumption and investment in food that resist/challenge/are subordinated by the neoliberal global food regime of accumulation in the present neoliberal era of capitalism stretching from the 1980s to the present. The distinct feature of alternative food regimes of accumulation in this era is the localisation of accumulation which resists the particular form of the globalisation of agricultural accumulation that is facilitated by the regulatory impetus of this era.

Neoliberal model of development in agriculture (NMD in agriculture): The neoliberal model of development as it applies to the agricultural sector, unfolding from the 1980s to the present. Defined by the coupling of the neoliberal global food regime of accumulation and the neoliberal national-transnational regulatory nexus which facilitates the dominance of that neoliberal global food regime of accumulation.

Introduction

Our house is on fire. I am here to say, our house is on fire. According to the IPCC [Intergovernmental Panel on Climate Change], we are less than twelve years away from not being able to undo our mistakes...But *Homo sapiens* have not yet failed. Yes, we are failing, but there is still time to turn everything around. We can still fix this. We still have everything in our own hands (Thunberg, 2019, p. 19-20).

Research topic

This thesis draws from the same sense of urgency that Thunberg (2019) stresses. To attend to the fire we must first thoroughly conceptualise the present era such that accurate critique and in turn practical solutions might be put forward and implemented. This thesis works to bring in a critically revised version of regulation theory in order to address impasses in food regime theory. This theoretical innovation enables me to identify McMichael's (2005; 2009a; 2009b; 2013) third food regime as the neoliberal model of development in agriculture; and also discuss a possible democratic, counter-hegemonic post-neoliberal model of development in agriculture. The development of this conceptual framework enables the identification of regime and regulatory aspects particular to this neoliberal capitalist era. That is, this thesis develops a mid-range perspective that enables more specific critique of the present neoliberal era pivoting around regulation and regime. This presents an innovative take on this particular temporal plot of the Anthropocene.

There is a tendency to investigate capitalism as a homogenous history, however, this invisibilises demarcations across this history identifying distinct eras. Noting these distinctions facilitates a more thorough critique of each period. It is what distinguishes these mid-range eras that is the key to this project. I suggest that this is different regulatory architectures and different national and transnational regimes of accumulation, more specifically, different models of development.

In particular, I want to conceptualise the effect that regulation has on our food regimes of accumulation. Dominant agricultural practices contribute to the fire that Thunberg (2019) decries. Thus, I want to investigate existing agricultural practices and ways of life that provide an alternative to dominant forms of agriculture. Employing a revised regulation theory, I want to consider the link between agricultural practices (emerging in regimes of

accumulation) and regulation in the present era. Furthermore, I consider how food regimes of accumulation could be regulated differently in the future in the name of environmental and social justice. Thus, I consider how we might conceptualise this particular era of capitalism, paying heed to the impact of regulation on agricultural practices around the world. In sum, this thesis conceptualises the defining food regime of accumulation and regulatory architecture of the neoliberal era – defined as the neoliberal model of development in agriculture – and considers how we might conceptualise the next post-neoliberal era.

This research focus is underpinned by a motive to engage the agency of numerous groups at various levels, from the community, to the national, to the transnational, to actively conceptualise the next era of capitalism. It is a cry to attend to the crises of the prevailing neoliberal era and actively engage in a praxis approach that is grounded in theory informing practice and change. That is, let us theorise the contemporary era, thoroughly conceptualise it as a marked era, and attempt to address the failings of this era in the conceptualisation of the next era that is premised on the (not yet seen) subordination of capital.

Major theoretical debates and bodies of work engaged with

Building on Marx's (1976/1990) long-range view and innovations of mid-range views given by The French Regulation School (Aglietta, 1979; Boyer, 1991; 2005; Lipietz, 1988), Neilson (2012; 2020), Friedmann (1987; 2009), and McMichael (2005; 2009a; 2009b; 2013), I here work towards applying revised key concepts to the agricultural sector. Critically extending the orthodox French Regulation School use of 'regime of accumulation,' 'regulation', and 'model of development' I investigate the process of social reproduction defined by production, distribution, consumption and investment, in the agricultural sector. That is, I consider '*food regimes of accumulation*' and how they link to regulation. This develops into my conceptual innovation, a 'model of development in agriculture'.

There are two key theoretical debates which are pivotal to the positioning of my research. The first pertains to regulation theory and in particular the tendency for orthodox French Regulation School thinkers to rigidly maintain the boundaries of early generations of their thinking. This lack of malleability restricts the contemporary applicability of their key theory. This means that the French Regulation School have not provided an analysis of the

contemporary era. Following Neilson (2012; 2020), I adopt his third-generation revisions which invigorate contemporary applicability and permit not only critique of the contemporary era, but conceptualisation of the next. I also make some further revisions to account for the deficit of sector analysis in orthodox thinking.

Secondly, I address a related contemporary impasse in food regime theory. Scholars in this school of thought have largely split into two camps that separates the two 'parents' of this literature – McMichael and Friedmann. This divide rests on the existence or lack thereof of a third food regime. A food regime has been defined in orthodox literature as a demarcated period in capitalist accumulation that is defined by food circuits that underpin particular global food relations. There is ongoing debate about whether there is currently a fully developed food regime, or simply remnants from the previous food regime. The current third food regime is described by McMichael (2005, 2009b, 2013) as the 'corporate food regime', beginning in the late 1980s and based on the neoliberal world order. Friedmann (1987) on the other hand suggests that we merely have the remains of the previous food regime. This ongoing debate has resulted in an inability to thoroughly describe and explain the contemporary era.

Intervening in this debate, I build on McMichael's (2005, 2009b, 2013) position which I argue most closely defines what is unique about this present neoliberal era. I rework McMichael's position to argue that whilst there is indeed a present third food regime, to make this argument stronger it is necessary to pull the embedded regulation theory to the fore. Given that regulation theory underpins food regime theory conceptually, it is no surprise that food regime theory remains at an impasse because the orthodox French Regulation School thinkers themselves are in the same position. This lack of contemporary applicability has been inherited from the French Regulation School, albeit emerging in a different problematic.

Extending on McMichael's (2005, 2009b, 2013) position within food regime theory not only brings to the fore a critical revision of regulation theory but also challenges the narrative of world capitalism given by world systems theory as outlined by Robinson (2011). World systems theory and regulation theory underpin food regime theory, so by virtue of critically extending food regime theory I also engage with some of the core premises of world

systems theory. World systems theory defines global relations based on the uneven divide between the global North and global South and centres the nation-state as the organising principle of world capitalism (Robinson, 2011). The development of a conceptual framework that recentres regulation within food regime theory also demonstrates that in the present neoliberal era we are moving beyond a nation state hegemon towards abstract regulation as the organising principle. Yet, those proponents of food regime theory who, contrary to McMichael (2005, 2009b, 2012, 2013), do not see a present food regime are still looking for the nation state hegemon to define that food regime. At the 25th conference for the Agri-Food Research Network in Brisbane in late 2018, following McMichael's keynote speech one audience member mentioned that everyone was still looking for the political anchor or hegemon to point to the third food regime.

The absence of a clear nation state hegemon is noted by McMichael (2005, 2009b, 2012, 2013) as he defines the present third food regime by corporate or neoliberal hegemony, which differs from the British and American hegemony defining the previous two food regimes. However, McMichael (2005, 2009b, 2012, 2013) does not delve into an explanation of this distinction, which I do in this thesis. Furthermore, at times McMichael (2020) retreats to the world systems theory narrative. In considering a future food regime trajectory beyond the corporate food regime McMichael explores the potential for China to become the next nation state hegemon (McMichael, 2020).

Recentring a critically revised regulation theory in food regime theory gives room to consider the organisation of world capitalism in agriculture beyond the world systems theory narrative which hinges on a nation state hegemon. Thus, I also engage with and move beyond Amin's (1976) work which, though enabling the capacity to consider the complexity of the global terrain upon which capital asserts its prerogative, rests on a simple distinction between core and peripheral nation states. Instead, I consider how abstract regulation becomes the organising principle and that the prevailing neoliberal model of development now drives processes of uneven development as opposed to national empires. Thus, I inevitably engage with world systems theory and suggest extending beyond the empire logic of this theory which usefully explained the long capitalist history before the Fordist era and present neoliberal era.

To consider actual agricultural practices – or actual food regimes of accumulation – I turn to the literature on labour process theory; from Marx to Braverman and beyond, into the literature that emerges from the International Labour Process Conference. Engaging in this literature to investigate how regulation impacts the labour process turns out to be a decidedly difficult task, namely because this link is substantially under theorised both in labour process theory and in regulation theory. This absence becomes the launching point for establishing a necessary link. It is within this space that I am able to present a third-generation regulation theory neo-Marxist perspective that recentres regulation in labour process theory and beyond.

Methodology

My theoretical investigation involves a literature-based research methodology to interrogate existing theory. This involves text analysis that mobilises a version of Marx's praxis that is premised on using ideas to create change. That is, I pursue an active interpretation of theory in order for this to inform practice. The theorisation I carry out to revise and revitalise key theories is not simply for descriptive purposes so that we might appropriately conceptualise this era of capitalism and distinguish it from the long history of capitalism (although this is important in its own right). Beyond these descriptive purposes, this theoretical invigoration is also pursued to begin creating a new world, hastening in a new era of post-neoliberal capitalism.

The empirical research undertaken involves in-depth semi-structured interviews and participant observation. My empirical research hones down on 'local food regimes of accumulation', which I define as regimes of accumulation occurring at the community level involving individual operators within a specific context of regulation and regime. Investigating actual local regimes of accumulation enables the postulation of an 'ideal-type' construct that can help to conceptualise post-neoliberal food regimes of accumulation. This forms part of the more ambitious project, beyond the scope of this research, to form an alternative model of development that moves beyond indirect regulation to directly engineer post-neoliberal food regimes of accumulation as part of the next era of capitalism.

Contribution

The OECD, IPCC, FAO, *some* world leaders, and many people at the local level are identifying that the environment is in crisis (see OECD, 2019; IPCC, 2018; FAO & IFAD, 2019). Relatedly, peasantry existing in both old and new forms face continual threats to their livelihoods and ways of life (FAO & IFAD, 2019; McMichael, 2013). This thesis by no means solves these crises but offers the beginnings of the tools needed to begin a dialogue between the various groups who can together mobilise a national-transnational regulatory project to do just that.

Key to such a project is understanding how existent regulation affects food regimes of accumulation and how regulation might be mobilised to mitigate the problematic impacts of neoliberal forms of conventional agriculture and encourage the flourishing of non-neoliberal alternatives. At present, prevailing regulation exacerbates the issues of the neoliberal form of conventional agriculture. As OECD (2019) suggest “Many of the undesirable impacts on the environment and on human health stem from the intensification of farming practices to meet growing global food demand (e.g. excessive use of fertilisers, pesticides and antibiotics). [Furthermore,] The food system is a major contributor to climate change, responsible for around 30% of global GHG emissions” (p. 162). Understanding the link between regulation and food regimes of accumulation permits of a thorough critique of the dominance of neoliberal accumulation regimes and provides solutions for addressing this by mobilising regulation differently to achieve post-neoliberal food regimes of accumulation.

Massey (2017) paints the picture

There is no free lunch – no matter what food is grown and how it is processed and transported to the consumer, there is an impact on the planet. This impact creates consequences for individuals, societies and communities, and although this is not a difficult idea to grasp, it is harder to quantify the scale of the impact. It is harder still to decide what to do about it and how to make the best choices as individuals, within communities and for a country. But it is one which we all have a responsibility to grapple with to the best of our ability, for the sake of our grandchildren and those who follow them (p. 16).

I do not claim to have provided the answer to questions about our impact on the planet resulting from our food regimes of accumulation. However, I do provide some key tools with which to grapple with this enduring problem. These tools can be mobilised to consciously and deliberately regulate food regimes of accumulation in a socially and environmentally appropriate direction. At a more abstract level this thesis provides a revitalised praxis for anyone on the Left who feels paralysed by the intersecting crises befalling our world.

The theory I posit here provides the theoretical tools to consciously and deliberately conceive of a world where capital's prerogative is subordinated via regulation achieved through multi-level collaboration that prioritises social and environmental prerogatives. That is, I extend the concept of 'regulation' to define indirect and direct regulation. Direct regulation subordinates capital's long held autonomy to organise the labour process to a democratic collaboration. Counteractive forms of regulation constrain the core logics and relations of capitalism thus humanising the objective form of the capitalist mode of production. However, together, *direct and counteractive* regulation functions to produce a regulatory architecture conducive to the success of alternative local food regimes of accumulation.

The main premise of my work is to bring direct regulation to the productive core as expressed in the agricultural sector to constrain emerging regimes of accumulation under certain environmentally and socially driven prerogatives. Engaging in praxis makes it possible to construct an alternative model of development that directly regulates local food regimes of accumulation in order to produce environmentally and socially just futures. Of course, there is always a tension between what emerges in practice and the ideal that drove that practice. Nevertheless, this imaginative preconception is incredibly important in the ongoing dialectic that occurs as we attempt to understand the world and then change the world.

Key findings

Though laden with potential the key theories that inform this thesis – regulation theory and food regime theory – are at a contemporary impasse that renders their powerful conceptual innovations impotent. Developing and embedding a critically revised version of regulation theory into food regime theory addresses the contemporary impasse of both theories. Thus,

when revised the key concepts that emerge from these schools of thought, namely, 'regulation', 'model of development', and 'food regime', offer great capacity to carve out and define this era as a model of development. The conceptual framework developed here enables me to identify McMichael's (2005; 2009a; 2009b; 2013) third food regime as the neoliberal model of development in agriculture. Beyond this, I am also able to discuss a possible democratic, counter-hegemonic post-neoliberal model of development in agriculture.

The present neoliberal model of development mobilises indirect and proactive regulation, implying that capital's historic prerogative to assert power over the labour process and maintain formal and real subordination (Neilson, 2007) is exacerbated. This plays out in specific ways in the agricultural sector, and by bringing a revised regulation theory to the fore of food regime theory, one is able to see that a food regime is the particular form of the model of development as it applies to agriculture. In this way I am able to link prevailing regulation to the agricultural sector and then in turn consider how this affects labour processes as part of existing and potential local food regimes of accumulation. I extend the notion of regulation to include what I call direct regulation. Direct regulation subordinates capital's long held autonomy to organise the labour process to a democratic collaboration which produces a labour process model that directly regulates the organisation of the labour process. The conceptualisation of direct regulatory forms that could be mobilised in a space long reserved for capital is a key tool to challenge the neoliberal project of our times.

Food regimes of accumulation are often dichotomised into conventional or alternative agriculture. However, these are trans-era terms removed from place and time. Thus, I locate specific instances of conventional agriculture in this era as the neoliberal form of conventional agriculture which emerges as the neoliberal global food regime of accumulation. It is in opposition to this that specific alternatives emerge in this era, namely, in the form of local food regimes of accumulation. The latter resists the globally dominant forms of neoliberal regime and regulation. In this way, non-neoliberal alternatives hold the seeds for a post-neoliberal era.

In local food regimes of accumulation around the world traditional peasantry exist under, and resist, the constant threat of neoliberal led global capitalism. New forms of peasantry

also exist, emerging in direct response to the neoliberal model of development in agriculture, and yet also are continually under threat. This is not an argument for the continuity of a long and homogenous capitalist history. Rather, this is an argument that notes the disjuncture with the past by considering how this tale of two peasantries emerges in an era of capitalism marked by neoliberal led uneven development. I demonstrate the impact of neoliberal regime and regulation that has changed the global playing field since the 1980s.

Overview

In this thesis I have drawn on empirical work completed in 2016 as well as work I completed in 2018 and 2019 specifically for this thesis. I begin by outlining the methodology behind both.

Chapter one has a two-fold purpose. Firstly, as something of a literature review I outline the state of the art of the two key theories that inform my thesis – regulation theory and food regime theory. I then revisit these narratives before revising them to invigorate contemporary applicability. It is from here that my conceptual toolbox is created with which to describe and explain this particular era of capitalism and conceptualise the next.

Chapter two builds on the conceptual innovations of chapter one. Here, I unpack the earlier defined ‘neoliberal model of development in agriculture’ to specify the neoliberal global food regime of accumulation and neoliberal regulatory architecture. This chapter temporally specifies descriptors that are often used in a trans-era sense. That is, agricultural practices are often described as either conventional or alternative. However, in different eras these emerge in specific forms which should be associated with the prevailing model of development in agriculture. In this way I define the neoliberal form of conventional agriculture as the global food regime of accumulation. In turn, I define its alternative in the prevailing era as local food regimes of accumulation.

Chapter three employs my conceptual framework to investigate the relationship between regulation and the labour process – the actual process of work. This gives space to consider the prerogative of capital to organise the labour process but also consider how regulation affects this. To do so, I extend the concept of regulation to consider the ways in which regulation might frame, either through enabling or constraining, capital’s power.

Furthermore, I consider the ways in which regulation might do more than simply frame capital's power but rather subordinate that power.

Chapter four brings in elements of my empirical work in Italy and New Zealand and investigates the existence of traditional forms of peasantry and qualitatively new forms of peasantry who emerge in response to the neoliberal model of development in agriculture. This is an important question given the prevailing dominance of the capitalist mode of production that is proactively stimulated under the prevailing neoliberal model of development. Given orthodox tales that deem the peasantry a fixture of a pre-capitalist time, a historic feature that would not endure given the spread of the capitalist mode of production, this apparently contrary reality needs to be investigated. Drawing on a regulation inspired reading of Marx's (1976/1990) work, I offer an explanation for this complex picture and engage in literature pertaining to contemporary processes of primitive accumulation.

Chapter five focuses on the empirical work I completed in Italy and New Zealand presenting specific forms of alternatives to the neoliberal global food regime of accumulation. The case studies explored here demonstrate the organic development of local regimes of accumulation that resist both the neoliberal global regime of accumulation and the regulatory architecture of the neoliberal model of development in agriculture. This chapter points to alternatives that hold the seeds of a post-neoliberal era.

In the final chapter, chapter six, I problematise the emancipatory potential of alternative local food regimes of accumulation whilst subordinated in the prevailing neoliberal model of development in agriculture. I argue that to enable the transformative potential of alternative local food regimes of accumulation we must couple them with local, national and transnational regulatory forms conducive to their success. Namely, we must see alternative regime and regulation aspects cohere in an alternative model of development. This is the challenge and the task for the future.

This thesis reworks the theoretical foundations of the Left to provide the tools necessary to conceptualise this era, delineating it from the long capitalist history and thus identifying it as particularly problematic in specific ways. Revitalising key theory to analyse the contemporary era also opens up the possibility for mobilising agency to begin constructing

the next era of capitalism that should be centrally premised on direct, counteractive regulation that subordinates capital's power and moves the world closer towards a non-capitalist alternative. The power rests in multi-levelled actors engaging their agency and coupling this with a practical project which can intentionally address the failings of the present (and no less intentional) neoliberal regulatory project and construct a world in which many worlds can fit.

Methodology

Theoretical methodology

Lipietz (1992) most eloquently states that “Sophocles could not have foreseen the day when the ‘grey ocean’ was awash with oil-spills, and the ‘ageless Earth’ would tire of ‘the sweat of [man’s] [sic] brow... [there is] no more land or sea not worn out from digesting our waste... crimes against nature are on the increase, and every crime against nature is a crime against humanity” (p. 50-51). As McMichael (2012) points out “humanity has now overshoot the earth’s biocapacity” (p. 9), and furthermore “Three of the nine planetary operational boundaries have been crossed already – climate change, biodiversity, and the nitrogen cycle – while others such as fresh water use and oceanic acidification are at serious tipping points” (McMichael, 2012, p. 11). Shall we say,

Too bad if... the soil is depleted by soya and sugar cane after staple food crops and small farmers have been displaced. Or if burning land in the Amazon sends carbon gases into an atmosphere already saturated by cars and factories in the North. After us, let the heavens fall! Or, as Keynes said, ‘In the long run, we are all dead’” (Lipietz, 1992, p. 54)

Or should we rather engage in Marx’s praxis, using our knowledge to change the world?

Alongside many of those who followed Althusser, Aglietta (1979) dismisses Marx’s praxis, suggesting that although “*History is initiatory*...it is only possible to construct a theory of what is already initiated... The object of theory cannot be to prescribe what is going to happen or what must happen in this creation” (p. 68). Albeit the inevitable tension between the preconceived ideal and the end result, Marx’s praxis can be applied in a direct and profound manner in order to be politically active. Dismissing praxis has the inevitable result of political paralysis. As Marx suggested in his ‘Theses on Feuerbach’ “the philosophers have only interpreted the world in various ways; the point, however, is to change it” (cited in Glendinning, 1999, p. 359). That is, the point of theory is to understand the world and then change it. This is a reading of Marx’s praxis that centres on the power of ideas to transform the world. As Marx (2011) states “A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of the bees is this, that the architect

raises his structure in imagination before he erects it in reality” (p. 198). We must deal with the inevitable tension between the preconceived idea and the reality. Nevertheless, *we must imagine what will be, and actively construct this.*

The methodology behind the theoretical work in this thesis embodies this politically active praxis, namely, using knowledge to change the world. The methodology behind my theoretical work has largely been an investigative literature review. Seeking theory which can be mobilised to make change in this world revealed some holes in existing theory and literature which became the purview of this thesis to fill. In a process of reading theory to apply theory I discovered room to revise and invigorate existing theory. This is a project of looking back at key theory in order to look forward into a new era. Whilst empiricism has the crown of the moment, the importance of theory to unpack our empirical reality cannot be ignored. In pursuing a methodology based on reviewing key works and revising these to enable contemporary applicability I have also developed an innovative toolbox with which to investigate that reality.

Empirical methodology

The research presented comes from two different research projects, one completed in Italy in 2016 and one in New Zealand in 2018/2019. Both studies were approved by the FASS Human Research Ethics Committee under delegated authority of The University of Waikato’s Human Ethics Committee.

The methodology behind both empirical research components was qualitative. Both my Italian and New Zealand case studies centred largely on semi-structured interviews. I also carried out participant observation in one New Zealand case study.

The interviews were face-to-face and semi-structured and on average 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 or moved the conversation in a different way.

Italy, 2016

In undertaking my Masters in Sociology in 2016 I sought out alternative agricultural practices. To do this, I contacted Professor Philip McMichael, of the Department of Development Sociology at the University of Cornell, New York. McMichael has written extensively on food regimes, food sovereignty movements and agrarian questions. I enquired as to where Professor McMichael thought would be appropriate to do empirical research. Of the options that were suggested, I selected Rome, Italy. Professor McMichael gave me the contact details of Dr Maria Fonte who is with the American University of Rome. After establishing contact with Maria, she confirmed that she would be able to assist me with my research in Rome at the time I hoped to be over there.

I undertook field research in Rome from the 13th of April to the 1st of May 2016. My case study focussed on one Gruppi di Acquisto Solidale (GAS) – “groups of households that cooperate in purchasing food and other goods directly from producers” (Fonte, 2013, pg. 230). GAS are numerous and occur all over Italy, but I focussed on GAS Testaccio Meticcio. I then interviewed three local producers from peri-urban Rome who supplied GAS Testaccio Meticcio. These producers were Salvatore Carbone of La Nuova Arca, Mauro Ventura of Barikamà and Angelo Savioli of Il Papavero. Maria was integral in selecting these producers to interview, establishing contact with those involved, and also assisting me in meeting them and helping me to carry out the interviews; in one case translating. Maria also advised me to establish contact with X who would in turn put me in contact with those involved in the GAS movement. X helped me to establish meetings with both Uta Sievers and Alfredo Gagliardi involved in GAS Testaccio Meticcio. Thus, I employed the method of snowball sampling to recruit potential participants.

I carried out in-depth interviews with a total of six people involved in either local food production at La Nuova Arca, Barikamà or Il Papavero, or local consumers involved in GAS Testaccio Meticcio, and one participant who preferred not to be identified. Prior to the interviews all participants received an information sheet (see appendix A) and a consent form (see appendix B). After the interview all participants were able to choose how they wanted their identity and affiliation to be represented.

Only one of my participants did not speak English. In this case, Maria accompanied me to the interview and translated the information sheet, consent form, and following this, the interview itself. All except one participant gave their permission for the interview to be audio-recorded and transcribed and for me to take hand-written notes during the interview. The one participant who did not wish the interview to be audio-recorded did give permission for me to write hand-written notes during the interview.

New Zealand, 2018/2019

Building on the research I had completed in Italy in 2016, I wanted to find some examples of alternative agricultural practices in New Zealand. I reflected that a Farmers' Market might be of interest. I selected the Tauranga Farmers' Market as it is the nearest market under the umbrella of 'Farmers' Markets NZ' to my home. The proximity of the market made arranging interviews and carrying out participant observation easier.

I contacted the market manager of Tauranga Farmers' Market, Trixie Allen, via a publicly available email link (<http://www.taurangafarmersmarket.co.nz/About-Us/Contact-Us#>). Trixie was incredibly receptive to helping me begin my research at the market and continued to be supportive throughout the process. Trixie established my presence at the market via a market newsletter that was sent to all stall holders, in which she identified my purpose at the market. This enabled me to arrange meetings with the stall holders with ease. Trixie displayed photographs of me at the market, thus making it easier to approach consumers as I had become a familiar face. Trixie also introduced me to regular consumers which made the process of interviewing consumers decidedly easier. Thus, I employed the method of snowball sampling to recruit potential participants.

I began my interviewing in June, 2018. I subsequently interviewed four stall holders at the Tauranga Farmers' Market; Rachel of Six Toed Fox Organics, Kath of Kath's business, Joe of Belk Road Farm and Nicki of Nicki's Eggs. I interviewed the chairperson of the market, Lyn, who is also a stall holder herself, to discuss the administrative side of a farmers' market. I also interviewed consumers at the market; in total I spoke to 17 consumers, some of whom were in a group setting.

All participants received a relevant information sheet (see appendix C, D or E) and consent form (see appendix G) prior to the interview. There was variation in the length of the

interview based on the role of each participant. For the producers engaged in the Tauranga Farmers' Market I thought it best to offer two approaches for the interview style. I suggested that we could carry out the interview as a face-to-face, semi-structured interview of approximately 40 minutes long and could be held outside of market hours, at the direction of the producer; alternatively, we could have the interview as a more informal conversation, held at the market, whilst the producer carried out regular market business. All of the producers choose the first option. Thus, I carried out four face-to-face, semi-structured interviews at locations that the participants had selected. Again, similar to my research in Italy, I brought an interview guide to these qualitative interviews, however, I attempted to engage largely in responsive interviewing which left the conversation more open. Nevertheless, I did return to the guide at times throughout the interviews. The same method was used for the interview with the chairperson of the Tauranga Farmers' Market, Lyn.

For the seventeen consumers at the Tauranga Farmers' Market I held much shorter, structured, interviews. This was out of necessity given that the consumers were there to do their shopping or socialise and I wanted to ensure my presence caused as little disruption as possible. I asked three short questions and found that these were usually answered fairly quickly. The interviews with consumers took no more than ten minutes including the time for reading through information sheets (see appendix E) and obtaining consent (see appendix G), with the exception of a couple of participants who continued the conversation themselves. The purpose of these interviews was simply to understand why the consumers chose to purchase food from a farmers' market, what proportion of their food needs were met through this method and if they would prefer to buy more local food.

I also employed the method of participant observation at the Tauranga Farmers' Market. I frequented the weekly market once a month in Winter 2018, Spring 2018 and Summer 2018/2019. This totalled nine visits. I meandered around the market for an hour each month, purchasing some produce for myself whilst observing methods in action, the relationships between people involved, and the general demographic of both producers and consumers. The chairperson of the market gave me permission to use a field work diary, in which I was permitted to take notes that were written up in more detail after the observation was complete. I thematically analysed the field notes from the participant

observation. To obtain permission to carry out the participant observation it would have been impractical and quite intrusive to approach every person that entered the market and talk them through a consent form and an information sheet. Thus, instead, I provided the chairperson of the market with the information sheet (see appendix F) and consent form (see appendix H). In order to ensure that I was identified as an outsider, and therefore there in some sort of 'other' capacity, I wore my university t-shirt. It was helpful that my photo was displayed on numerous signage around the market. In the same vein, in order to behave unobtrusively I attempted to carry myself in the manner of any other customer at the market and only engaged in conversation with consumers when it was appropriate or when I was approached. I observed the activities in an open manner in the sense that I attempted to be transparent about my note taking and, when appropriate, engaged with the participants about the content of my notes.

I selected my second New Zealand case study – a self-proclaimed peasant model of agriculture – because Jim's unique endeavour was known to my chief supervisor. My chief supervisor explained my research to Jim on the basis of their pre-established relationship and obtained Jim's permission to provide me with his contact details. From there Jim and I arranged a suitable meeting time at which I carried out a semi-structured qualitative interview that again was based on responsive interviewing (Rubin and Rubin, 2012). Prior to the interview Jim received an information sheet (see appendix I) and consent form (see appendix J).

All of the participants in both New Zealand case studies gave permission for the interview to be recorded. All were given the option of how they wanted their identities represented and some did decide to select pseudonyms.

Chapter One

Looking at the world with both eyes open: Reframing key theory

Introduction

At present, we have yet to see a consciously developed practical project that can challenge the prevailing neoliberal model of development. I argue that this absence can in part be accounted for due to conceptual limitations in key schools of thought which could contribute to the development of such a project. Marx's praxis suggests that "the philosophers have only interpreted the world in various ways; the point, however, is to change it" (as cited in Glendinning, 1999, p. 359). However, attempting to pursue praxis is difficult when the theory that can inform practice, i.e., 'change the world', is limited. To fully understand the present era, and for that matter, past, and, crucially, future eras, and develop a project with which to confront the neoliberal project, key concepts need to be revised. This chapter revises key theory producing a new conceptual framework which I argue provides the foundations for understanding capitalist developments in agriculture across eras. Furthermore, this conceptual framework has the potential to form a key part of a prospective project to challenge the prevailing model of development.

In this chapter I argue that the neoliberal model of development marks a particular period across the long history of capitalism. Being able to periodise this history permits specific critiques that distinguish the neoliberal era as something qualitatively different from what has gone before. In tangibly distinguishing this era as a model of development – in the revised sense of the concept – we are able to grab hold of a pivotal cause of crises in the contemporary era. Investigating the contemporary era with both eyes open is of vital importance for the health of both people and planet. Capitalism, as we are experiencing in the current era, is failing. Crises are rampant, the environment is suffering, and individuals are enduring a competitive and precarious experience. To demonstrate, as McLaren (2017) notes,

Scientists have proposed the concept of planetary boundaries as a step towards identifying priorities for action to reverse the destabilisation of the Earth's systems, and have outlined nine processes that are being modified by human activities. For four of these processes (climate change, biochemical flows, land-system change, and

the genetic diversity subcategory of biosphere integrity), the 'safe operating space' has already been exceeded (p. 131).

This is an era in which governments have to pander to transnational capital more than ever before as nation states and individuals are faced with the threat of capital flight implying that social and environmental prerogatives, which may impede profitability, are deprioritised (Brecher & Costello, 1994).

The globalisation of capital in this era of neoliberal led global capitalism, whilst exacerbating the power of capital has been "disastrous both for the people of the poor countries, for whom it has been a sentence of poverty and often premature death, and for those of the industrialized countries, who have lost markets for their products and had to face competition from impoverished workforces" (Brecher & Costello, 1994, p. 179). Brecher & Costello (1994) aptly suggest that "globalization in its present form is leading to a pillage of the planet and its people" (p. 33). These characteristics of the present era imply that it would be useful to treat it as a distinct era in capitalist history. That is, we are seeing a qualitatively different form of globalisation that is causing compounding environmental and social crises which are usefully explained by noting the differences between this and previous projects, and the differences across the long unfolding logic of capitalism since its advent in the 16th century.

Thus, to investigate this era as exactly that, an era, it is necessary to have the theoretical tools to demarcate eras across the long run of capitalist history. In this chapter I develop such a tool in the form of a conceptual framework that enables the capacity to periodise, interrogate and conceptualise the contemporary neoliberal era. Distinguishing between different eras is key to a mid-range perspective, as opposed to a methodology that just sees the unfolding of the long durée of an uninterrupted capitalist history. There are two key theories, regulation theory and food regime theory, that provide the foundations of the conceptual framework I develop and mobilise in this thesis.

In terms of existing regulation theory, I look at that which emerges from The French Regulation School. The French Regulation School has been pivotal for generating a mid-

range perspective and is also responsible for the core discovery of 'regulation' which is vital to this entire thesis. Regulation is applied in orthodox literature to examine the advanced capitalist nation states in the period from the 1940s to the 1970s, defined as the Fordist era. Regulation is defined in orthodox understandings to be rules or mechanisms that govern and stabilise the social process of reproduction – production, distribution, consumption and investment – defined as a regime of accumulation. These rules or mechanisms are suggested to counteract the fundamentally unstable logics and relations of capitalism (Aglietta, 1979; Lipietz, 1988a; 1988b). This is a theory that builds on the Althusserian notion of overdetermination. That is, the economic base (capitalism, as a mode of production) should be considered over-determined by a political and ideological superstructure. The French Regulation School presents regulation as an overdetermining political structure that counteracts the unstable logics and relations of capitalism and permitted the humanisation of capitalism that was seen in the Fordist era identified by full employment, strong unions and wage levels rising with productivity.

Food regime theory analyses periods of capitalist accumulation in agriculture by looking at how food circuits underpin particular nation state power that defines marked periods across the long capitalist history. That is, food regime theory provides a mid-range perspective *in agriculture*. Food regime theory provides the capacity to consider how the production and consumption of food is structured differently in different eras across the long run of capitalist history. A food regime has been defined in orthodox literature as a demarcated period in capitalist accumulation that is defined by food circuits that underpin particular global food relations. The first food regime is identified as spanning from 1870 to the 1930s. This is considered the British-centred food regime and was based on British colonial power (McMichael, 2013). That is, this is a mid-range era identified in the long history of capitalism that is defined by the hegemony of Britain. This hegemony was argued to be underpinned by the import and export relation between colonial Britain and the imposition of specific production within its settled colonies (McMichael, 2013). The second food regime, occurring between the 1950s and 70s, was argued to be based on the power of the United States in its war against communism. The hegemony of the United States was defined by the food circuits tied to the distribution of food aid as the United States attempted to develop partnerships against communism (McMichael, 2013). The existence of a third food regime is

contested. McMichael (2005; 2009a; 2009b; 2013) defines the third food regime as the corporate food regime premised on neoliberal hegemony and beginning in the 1980s. In contrast, others argue that we merely have the hangovers of the previous food regime.

As they stand, both The French Regulation School theory and food regime theory are not equipped to deal with the contemporary situation. At present, both theories, though laden with potential for demarcating periods and thus focussing specific critique, are at an impasse and thus have been unable to remain relevant with contemporary developments. That is, these theories cannot be applied to the contemporary because they are looking at the world with one eye closed. I propose revisions to each of these theories developing a new conceptual framework, with a view to giving a fuller picture of this era of neoliberal led global capitalism. This framework enables a prescriptive element, so that the theories become not simply theories of interpretation, or description – albeit this being incredibly important in itself – but theories that can create change and conceive of the potential next era of capitalism.

After outlining the orthodox understandings of The French Regulation School, I propose revisions that enable contemporary applicability. I build on revisions made by Neilson (2012; 2020) which move beyond the ‘methodological nationalism’ of orthodoxy, challenges the standard position that defines regulation as solely ‘counteractive’, and invigorates praxis. Building on this I also suggest that it is necessary to centralise the relationship between the labour process/labour process model and regulation, a consideration hitherto side-lined in theorisation. Relatedly, I point out that The French Regulation School pays inadequate attention to sectors, such as the agricultural sector, and their relationship to ‘regulation’ writ large. Given that certain forms of agriculture are contributing to the environmental and social crises of this era it is necessary to consider the relationship between the agricultural sector and regulation.

I turn to food regime theory to account for the absence of sector analysis in The French Regulation School. However, food regime theory itself, while providing a mid-range perspective concerning capital accumulation and food, is also not fit to be taken off the shelf and readily used for contemporary analysis. After presenting the standard account of food regime theory, I then suggest revisions to this theory too. These revisions are necessary

largely due to an insufficient incorporation of regulation theory in food regime theory which I argue is key to understanding the contemporary impasse. That is, in order to move beyond the impasse, I redirect attention to the theories that inform food regime theory. Food regime theory emerged from regulation theory and world systems theory. Regulation theory underpins my thesis in its own right, but also importantly forms part of the conceptual foundation of food regime theory. By pointing out the deficiency of regulation in food regime theory and rectifying this, the contemporary applicability of the theory is mobilised. That is, by bringing to the fore a critically revised regulation theory in food regime theory the present impasse in scholarly debate can be passed. The conceptual innovation made here addresses the impasse by defending and extending on McMichael's (2005, 2009b, 2013) position.

Exploring and revising orthodox French Regulation School thinking and food regime theory enables the development of my conceptual framework which is premised on the confirmation of a present food regime, however, better understood as the coupling of regime and regulation, or a model of development in agriculture. Thus, I reinvigorate food regime theory by developing a revised conceptual framework that enables consideration of what is distinct and problematic about this era. It also invites the possibility of considering and actively constructing what the next era might look like. It enables consideration of how we might regulate capitalism and particular sectors in more environmentally and socially just directions that negate the pillage of people and planet occurring in the current era.

The French Regulation School

State of the art

Offering a mid-range perspective delineating particular eras across the long run of capitalist history regulation theory, in particular The French Regulation School, presents powerful conceptual innovations. The French Regulation School is a school of thought that has produced a research programme centred largely around the core discovery 'regulation'. 'Regulation' is understood to counteract the core logic and relations of capitalism which are considered fundamentally unstable (Aglietta, 1979; Lipietz, 1988a; 1988b). Regulation is thus thought of as a counterforce, the weapon of democracy and the means by which to harmonise social progress with stable accumulation. This is argued to be implemented through the concrete national institutional framework exemplified by the post WWII

advanced capitalist countries through the period of the 1940s to the 1970s. In orthodox French Regulation School understandings three concepts emerge. Namely, 'mode of regulation', which is distinguished from, 'accumulation regime', while their coupling is treated as a 'model of development'. Subject to revisions, these concepts are pivotal to this thesis and the capacity to conceptualise and interrogate this present neoliberal era.

Orthodox arguments suggest that it was the introduction of non-capitalist ideas, counter-active regulation and the many social protections associated with the Fordist era into the coercive, unstable logic of capitalism that humanised and domesticated it, characterising the Fordist experience of capitalism from the 1940s to 1970, i.e., the Fordist model of development. 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. As such, the advanced capitalist nation states which adopted counteractive regulation enjoyed stabilised regimes of accumulation which characterised a particular period across the long history of capitalism. In contrast, it is argued that without counteractive modes of regulation, which stabilise regimes of accumulation, there is no model of development. Thus, The French Regulation School scholars deem the period since the Fordist experience as 'out of regulation' (Boyer, 2005). Therefore, there is argued to be no model of development because regulation is not counteractive and as such regimes of accumulation are not stable.

Key French Regulation School scholars vary slightly in their definitions of the standard concepts. To begin with I will here consider orthodox definitions of a 'mode of regulation'. For Boyer (1991), 'mode of regulation' is defined by the combination of five institutional forms outlined as "the nature of competition, the type of monetary constraints and management, the institutionalized compromises between state and citizens, the mode of support for the international regime and finally the forms of wage labor relation" (p. 5). Boyer (1991) argues that these institutional forms, which are a set of social relations, create structural constraints that guide individual behaviour.

The mode of regulation differs from regulation itself which Boyer (1991) suggests "indicates the adjustment of macroeconomic activity by means of budgetary or monetary

contracyclical interventions” (p. 43); or put another way “factors that reduce or delay the conflicts and disequilibria inherent in the formation of capital, and which allow for an understanding of the possibility of periods of sustained growth” (Boyer, 1991, p. 44). Here we can see how in The French Regulation School regulation is typically framed as a counter force to the inherently unstable logic and relations of capitalism. Concerning regulation, Boyer (1991) also states that “at a primary level, a form of regulation denotes any dynamic process of adaptation of production and social demand resulting from a conjunction of economic adjustments linked to a given configuration of social relations, forms of organization and structures” (p. 43). Boyer (1991) also puts forward the definition of regulation as “a conjunction of mechanisms and principles of adjustment associated with a configuration of wage relations, competition, state interventions and hierarchization of the international economy” (p. 45).

Aglietta contrasts his position with that maintained by neoclassical scholars. Aglietta (1979) points out that neo-classical theorists who ascribe to orthodox economic theory suggest that “regulation is nothing other than the set of overall properties of general equilibrium” (p. 10). For Aglietta (1979), diverging from this standard neoclassical perspective, speaking “of the regulation of a mode of production is to try to formulate in general laws the way in which the determinant structure of a society is reproduced” (p. 13). This theory of so called ‘social regulation’ runs completely differently from that proposed by neo-classical theorists (Aglietta, 1979). For Aglietta, it is important that “The study of capitalist regulation, therefore, cannot be the investigation of abstract economic laws. It is the study of the transformation of social relations as it creates new forms that are both economic and non-economic, that are organized in structures and themselves reproduce a determinant structure, the mode of production” (Aglietta, 1979, p. 16).

Lipietz (1992) in his turn defines a ‘mode of regulation’ as involving

all the mechanisms which adjust the contradictory and conflictual behaviour of individuals to the collective principles of the regime of accumulation. At the basic level, these means of adjustment are simply the extent to which entrepreneurs and workers are in the habit of conforming, or are willing to conform, to these principles, because they recognize them (even reluctantly) as valid or logical. At another level,

institutionalized forms are more important – the rules of the market, social welfare provision, money, financial networks. These institutionalized forms can be state determined (laws, executive acts, public finances), private (collective agreements) or semi-public (a social security system such as the French one)” (p. 2).

Across Boyer’s, Aglietta’s, and Lipietz’s standard definitions of a mode of regulation consistencies are apparent. Regulation is considered to adjust the behaviours of actors to maintain a stabilised accumulation regime. Regulation is interventionist and counteractive to the inherent crises in capitalism and as such, stabilises capitalism, permits growth and in turn regulates the mode of production.

Let us now turn to the orthodox definitions of ‘regime of accumulation’. For Boyer (1991), a ‘regime of accumulation’ can be thought of as “the form of articulation between the dynamics of the productive system and social demand, between the distribution of income between wages and profits on the one hand; and on the other hand the division between consumption and investment” (p. 44). A regime of accumulation is argued to be stabilised by the mode of regulation. For example, Boyer (1991) discusses a specific regime of accumulation, suggesting that, “After World War II an accumulation regime without precedent is instituted – that of intensive accumulation centred on mass consumption... known as Fordist and channelled through monopolist type regulation” (p. 45).

Aglietta (1979) defines a regime of accumulation as “a form of social transformation that increases relative surplus-value under the stable constraints of the most general norms that define absolute surplus-value” (p. 68). Aglietta (1979) defines two regimes of accumulation, one which he calls predominantly extensive, and the other predominantly intensive. Referring to the extensive regime of accumulation Aglietta (1979) suggests that in this, “relative surplus-value is obtained by transforming the organization of labour; the traditional way of life may persist or be destroyed, but it is not radically recomposed” (p. 71). By way of defining the intensive regime of accumulation Aglietta (1979) states that it “creates a new mode of life for the wage-earning class by establishing a logic that operates on the totality of time and space occupied or traversed by its individuals in daily life” (p. 71).

For Lipietz (1992), a regime of accumulation is understood as

The logic and laws of macro-economics [which] describe the parallel development, over a long period, of the conditions of production on the one hand (productivity of labour, degree of mechanization, relative importance of the various branches of production) and, on the other hand, the conditions under which production is put to social use (household consumption, investment, government spending, foreign trade)” (p. 2).

The regime of accumulation in orthodox understandings then is conceived of as being a process of reproduction in which production, distribution, consumption and investment are considered and, given the economic base of capitalism, in which surplus-value is produced.

As indicated earlier, in orthodox understandings, it is the coupling of ‘mode of regulation’ and ‘regime of accumulation’ that defines a ‘model of development’. Lipietz (1992) defines a development model as consisting of three aspects, what he considers a tripod; a ‘labour process model’, a ‘regime of accumulation’ and a ‘mode of regulation’. His definitions of the latter two are provided above. However, he gives the following definition for ‘labour process model’:

A labour process model (or ‘technological paradigm’ or ‘industrialization model’, depending on the writer, and from slightly different perspectives). This involves the general principles governing the labour process and the way it evolves during the period when the model is dominant. These principles cover not only how the labour process is organized within firms, but also the division of labour between firms. There may be, of course, whole sectors or regions which remain outside the model, but it remains a ‘model’ in that the most ‘advanced’ sectors in terms of these principles determine how others will evolve (Lipietz, 1992, p. 2)

Thus, Lipietz (1992) suggests that “a regime of accumulation is the macro-economic result of the way the mode of regulation functions, with a labour process model as its basis. It is the whole of this which constitutes a ‘development model’” (p. 2-3). For Boyer (1991) a model of development is defined as “the conjunction of the mode of regulation and the accumulation regime” (p. 45).

Revisions

Although The French Regulation School provides some powerful theoretical tools with which to approach the delineation of eras across the capitalist history which in turn can enable one to grasp what is distinctive and/or problematic about particular eras, at present these tools are not applied to the contemporary era. Nevertheless, the latent potential in this theory is immense, because it gives that mid-range perspective that enables the capacity to accurately critique difference rather than simply seeing long existing and unfolding capitalist logics. Also, the core discovery of regulation provides a tool to see the way in which human agency overdetermines the logic of the capitalist mode of production; how rules, mechanisms and general laws can frame and alter the logics and relations of capitalism. Thus, it is well worth investigating how to restore contemporary applicability to this theory to consider what is driving the crises in this particular era, and to tangibly critique the ways that the logics and relations of capitalism are being framed and altered. The key concepts that require revision to achieve this contemporary applicability are 'regulation' and 'model of development'; alongside a recentring of new considerations of the relationships between the labour process and regulation and sectors and regulation.

The first set of revisions which are necessary to invoke the latent potential in The French Regulation School theory are those made by Neilson (2012; 2020) which are adopted in this thesis. Neilson (2012; 2020) attends to the contemporary impasse by addressing a) the methodological nationalism of The French Regulation School, b) the definition of regulation as counteractive and c) the invisibilisation of praxis.

Revising the methodological nationalism of The French Regulation School

In orthodox French Regulation School the site of regulation is only conceived of as being the nation state, and furthermore, only the advanced capitalist countries are considered in any real depth. Neilson brings into consideration the transnational as a site of regulation. Neilson (2012; 2020) moves beyond the methodological nationalism constraining The French Regulation School to understand the regulatory aspect of a model of development as a national-transnational nexus. Neilson distinguishes between domestic and external components of a national regulatory template, which, when widely adopted by many nation states, engenders a particular *transnational* environment, which in turn constrains the possibilities of national development. In something of a dialectic, the widespread

institutionalisation of the national regulatory template intentionally generates a transnational environment which in turn reinforces the national template. For example, Neilson encourages us to consider how the transnational environment created by the implementation of the Fordist national template, that was proposed by Keynes at Bretton Woods in 1944, put pressure on the nation state to remain committed to the Fordist project. Defining the regulatory aspect of a model of development as a national-transnational nexus is central to my work in contemplations of this era of capitalism.

The foundations for Neilson's (2012; 2020) revision can be found in the work of Lipietz (1992). Lipietz (1992) states that "We need to distinguish... between the development model as applied in nation-states... and the global order or 'international configuration' which makes these national compromises possible" (p. 1). This lays the foundations for the transnational element which Neilson (2012) develops, distinguishing between the national regulatory template and the transnational framework. 'The global order' or 'international configuration making national compromises possible' that Lipietz (1992) speaks to is specified in what Neilson (2012; 2020) defines as a dialectic between the national and transnational environment. This dialectic forms the national-transnational regulatory nexus which facilitates national-transnational regimes of accumulation that together defines a model of development in the revised sense. Lipietz, of all the orthodox French Regulation School scholars, thus makes the most advancements towards contemporary applicability by appearing to move beyond the methodological nationalism which plagues orthodox thinking.

However, Lipietz fails to apply this idea. He suggests that during the Fordist model of development, there was "no multinational agreement... no international collective agreements... no international treaty... there was no effective international mode of regulation" (p. 19). Lipietz fails to see the collective agreement reached by Keynes and parties at Bretton Woods; a collective agreement that facilitated a degree of consistency in the national regulatory templates which were adopted across the advanced capitalist countries from the 1940s to the 1970s. In turn, this ignores that the consistency in the adoption of the national regulatory template across the advanced capitalist countries transformed the transnational terrain, and the actions of international actors and organisations, to create a transnational regulatory site. This dialectically engaged with the

national regulatory template to produce the Fordist era of stable accumulation, which worked well for that era. As such, Lipietz too remained methodologically nationalist, necessitating Neilson's (2012; 2020) revision.

Nevertheless, Lipietz does understand the necessity of a *widespread* adoption of the national template of the model of development. A model of development is only successful if there is consistency in the adoption of a national regulatory template across most nation states. Lipietz (1992) similarly suggests that "solidarity and local initiative can develop only by extending their horizon to the whole world... There can be no local solidarity without national and international solidarity" (p. 110). For example, Keynesianism, defining the Fordist era, would not work in only one country. This proved to be part of the downfall of the Fordist era and the Fordist model of development. That is, the 'newly industrialising countries' provided much more profitable operational grounds for multinational companies who soon abandoned the counteractive Keynesian regulation of the advanced capitalist countries and pursued profits in countries not adhering to the national template of the regulatory nexus of the Fordist model of development.

Revising the definition of regulation as counteractive

To enable the contemporary relevance of orthodox French Regulation School thinking the definition of regulation as *only counteractive* must be revised. In orthodox thinking regulation is defined as rules, general laws or mechanisms that *counteract* and stabilise the unstable logics inherent in the capitalist mode of production. As such, a model of development, understood as the coupling of a regime of accumulation and mode of regulation is therefore only argued to apply when it adopts counter-active regulation. For example, the Fordist model of development is argued to define the era of capitalism spanning from the 1940s to the 1970s which is argued to have "actively weighed down capitalism" (Aglietta, 1998) by counteracting the core logics and relations of capitalism. If regulation is not counteractive then the regime of accumulation is argued to be unstable and therefore there is argued to be no model of development. Thus, the argument goes, the current era is 'out of regulation' (Boyer, 2005). In other words, the contemporary era is not defined by a model of development because counteractive regulation is not the prevailing norm.

Neilson (2020; Neilson & Stubbs, 2016) challenges this, arguing that indeed the regulatory nexus of a model of development may be defined by counteractive regulation however it can also be defined by *proactive regulation* (see Table 1); regulation that encourages and exacerbates the core logics and relations of capitalism and includes pro-market and pro-capital regulation, *which though unstable* in its consequences is still regulation (Neilson & Stubbs, 2016).

Proactive regulation (<i>Neoliberal model of development</i>)	Counteractive regulation (<i>Fordist model of development</i>)
<i>Pro-market regulation</i> Activating market mechanisms that coordinate capital accumulation	<i>Counter-market regulation</i> Counteracting market mechanisms to promote stable capital accumulation
i) External component: – Trade liberalization – Financial liberalization	(i) External component: – Trade protectionism – Financial controls
(ii) Domestic component: – Privatization – Market coordination of private enterprise	(ii) Domestic component: – Public investment – State coordination of private enterprise
<i>Pro-capital regulation</i> Facilitating capitalist power over labour in work and employment – Enterprise autonomy and flexible labour markets – Individual employment relations – Retrenched and commodified welfare	<i>Counter-capital regulation</i> Protecting labour from capitalist power in work and employment – Labour rights and participation in the workplace – Collective employment relations – Extended and de-commodified welfare

Table 1 Forms of regulation (Neilson & Stubbs, 2016, p. 126)

In practice, the national regulatory template of a model of development 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). That is, those nations who are proving to be more successful competition states can adopt some counteractive regulatory measures in order to further nation state development whether in terms of domestic business or social concerns – welfare, education, healthcare etc. Nation states who are losing the game of global competition have little power to adopt counteractive regulatory measures which run counter to the interests of capital.

Neilson and Stubbs (2016) move regulation theory towards a new generation of thinking “by extending the regulation concept to include, not only forms of regulation that contain capitalism, but also those that facilitate capitalism” (p. 125). Brecher and Costello (1994) point out that “The treaty establishing the WTO, while portrayed as a vehicle for eliminating

regulation, runs to more than 22,000 pages and weighs 395 pounds” (p. 60). One can see here that such a treaty certainly does not eliminate regulation, it is simply not *counteractive regulation*, but rather *proactive*. Regardless of whether the mode of regulation exacerbates or, as The French Regulation School 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 politically overdetermined (Neilson, 2012; Neilson & Stubbs, 2016). This challenges French Regulation School orthodoxy and in doing so defines this era as a model of development. The prevailing model of development is 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).

Although not going as far as Neilson and Stubbs (2016) who extend on the concept of regulation, Aalbers (2013) states that “neoliberal practice was never about total withdrawal of the state; it was about a qualitative restructuring of the state, involving not so much less state intervention as a different kind of state intervention, not aimed at the benefit of the population at large but at the benefit of a few” (p. 1084). The proactive forms of regulation implemented in the neoliberal era are coercively hidden beneath the neoliberal ideology of choice, free markets and being masters of ones’ own destiny. Proactive regulation intensifies the esoteric core of capitalism (Neilson & Stubbs, 2016). This revised regulation theory terminology may not always be mobilised, but scholars do recognise this distinction. For example, Le Heron (2003) notes the mid-range differentiation across the long durée of capitalist history. He suggests that while “The highly regulated and undifferentiated world of state-subsidised agriculture... dominated the second half of the 20th century in New Zealand...The neoliberalising reforms introduced different regulatory conditions” (p. 113).

What needs to be further extended on here is to consider a generic definition of regulation that can then be applied as counteractive or proactive (Neilson, 2020). Regulation in a general sense is part of the political and ideological sphere. It emerges from values and discourses that permeate forums and institutions that we adopt to specify the way that the overdetermination of the mode of production/economic base occurs. Regulation refers to the rules through which we coordinate and overdetermine the basic economic structures.

All economic structures are overdetermined by rules that emerge from values and discourses which guide, constrain and determine how actors behave. That is, even proactive regulation, which is argued to stimulate capitalism, is not a mirroring of the capitalist structure or the economic base, rather it is a set of rules that animates that mode of production.

Revising the invisibilisation of praxis

The final revision that Neilson (2012; 2020) makes addresses the notion that the model of development is a 'chance discovery'. For example, Boyer (1991) suggests that "even in the more perfect Fordist configuration, the compromises are always partial and local by nature, leading to *unintentional* results at the macro-level" (p. 15) [Italics added]. These orthodox understandings suggest that the Fordist model of development was a 'chance discovery', which unfolded across the advanced capitalist countries generating an international configuration conducive to a harmonious coupling of stable growth and social progress. That is, it is argued that this model of development was not consciously planned or pursued. For example, Lipietz (1992) suggests that it is a mistake "to think that the network of regulatory devices was instituted *with the intention* of making Fordism work... Fordism grew out of...coincidence" (p. 7-8). This has wider implications for the methodology behind The French Regulation School, namely, an absence of praxis – theory informing practice.

Neilson's (2012; 2020) revision brings *agency* into the equation, in particular that of Keynes in the Fordist era, who invested in the design and implementation of the Fordist model of development. This draws to the fore the conscious and intentional will behind a model of development. Recognising the intentionality behind the Fordist generation of growth and social progress challenges the idea that the Fordist model of development was a chance discovery. This translates into a recognition of the intentionality behind the prevailing neoliberal model of development. 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. As Marx said, "The materialist doctrine concerning the changing of circumstances and upbringing forgets that circumstances are changed by men... the philosophers have only interpreted the world in various ways; the point is to change it" (as cited in Lloyd-Hughes, 2005, p. 299). That is, although interpretation is incredibly

important, it is through the application of ideas and theory in the real world that change will come. It is not enough to simply interpret the world; we must then apply these ideas. The use of 'model of development' based on Neilson's (2012; 2020) revisions enables the conceptualisation of an alternative model of development, which should then be applied in practice (as Keynes' negotiated vision was) to hasten in a new socially and environmentally just era of capitalism.

Revisions to the relationship between regulation and labour process & sectors

In anticipation of the themes in chapter three I also want to highlight a further revision that is key to the project of this thesis; to consider how sectors, and labour processes within, are regulated. To a large extent the labour process has been theoretically side-lined in regulation theory. Concurrently, theorisation of the relationship between regulation and sectors is largely inadequate. A brief reprieve of this absence is given by regulation theorists du Tertre (2002) and Allaire and Mollard (2002). Allaire and Mollard (2002) suggest that "Transformations in farming and the food industry... converged with and complemented Fordism" (p. 214). This argument draws to the fore sectorial divergence. As du Tertre (2002) suggests "Even if the Fordist wage-labour nexus was the driving force during the period of growth, affecting all productive activities, work retains a meso-economic specificity. This was clearly marked by aspects of the work process or production configurations and by the place of the difference spheres of production in the macroeconomic dynamic" (p. 213).

Acknowledging sectorial distinction is key to my project as I conceptualise the distinct effect of regulation in the agricultural sector. Here du Tertre (2002) and Allaire and Mollard (2002) present the foundations of my argument which recognises the distinct regulatory effect of the model of development on different sectors. The national-transnational regulatory nexus of a model of development is not simply reflected across all sectors, but rather unfolds differently across different nation states and within them different sectors. Nevertheless, there is a diverging convergence as agriculture and service sectors, along with industry, are transformed by the model of development. This diverging convergence also refers to variations in the form of the labour process and labour process model within sectors. I more concretely link the form of the labour process and prevailing labour process models to the model of development in chapter three.

Revisions summation

Neilson's (2012; 2020) revisions restores contemporary analytical power to the core French Regulation School concepts. That is, the current era can be defined as being 'in regulation' (proactive) and thus as a model of development. This is an observable demarcation across the long run of capitalist history defined by a qualitatively different project than what has gone before. The prevailing neoliberal model of development can thus be tangibly critiqued with the implicit purpose of conceptualising the next era.

At the start of this chapter I referred to the failings of this era of capitalism. Employing the use of the revised French Regulation School theory, I argue that this is a direct result of a liberalised global market that has not arisen spontaneously, but rather from a deliberately enacted model of development and its regulatory nexus. That regulatory nexus can be understood as a consciously developed and intentionally implemented regulatory blueprint for the national level which has been widely adopted around the world. Widespread adoption of the national regulatory template has engendered a particular transnational regulatory environment, that in turn defines the present limits and possibilities of national development (Neilson, 2012; 2020). This regulatory nexus facilitates an attendant accumulation regime largely pivoting around a global market. It is the coupling of a national transnational regulatory architecture and a particular regime of accumulation that defines the model of development in the revised sense.

The widespread adoption of the neoliberal national regulatory template 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). That is, power has been removed from the local and the imperatives of capital have become dominant. Edgell (2006) points to this transformation, also indicating similar thoughts in Beck (2000) and Castells (2009) work. Beck (2000) notes, "capital is global, work is local (p. 27); Castells (2009) concurs, "At its core, capital is global. As a rule, labour is local" (p. 506). As Lipietz (1992) phrased it, we have "the model of the free-running fox in the free-range chicken pen" (p. 29).

This is a model of winners and losers. As Lipietz (1992) states "the market gives everyone with enterprise and fighting spirit the chance to 'win'; not to 'win something', but simply to win, to beat other people...Of course, there have to be losers as well" (pg. 32). The winners

of the competition, “the rich, the powerful, the decision makers, the bruisers... will benefit from the advantages of the technological revolution... at the bottom, a mass of ‘job seekers’ will be buffeted between casual work and unemployment” (Lipietz, 1992, p. 35). It is not only workers who are subject to the logic of competition, but firms too – and those “which are unable or unwilling to globalize are at a great disadvantage, since “The more the economy is globalized, the more it is accessible only to companies with a global reach” (Brecher & Costello, 1994, p. 54). For the purposes of this thesis, what is particularly problematic is that small-scale producers are rendered uncompetitive and have less global reach in this proactively stimulated global capitalism.

Key to my argument, contrary to orthodox French Regulation School understandings, I argue that the current era can be defined as being ‘in regulation’, just not ‘in regulation’ as this is traditionally understood to mean “containing the economically and socially destructive effects of capitalism’s generic relations and logic” (Neilson & Stubbs, 2016). To reiterate, these considerations and conceptualisations are made in pursuit of the long-term goal of conceptualising and implementing an alternative model of development with social and environmental justice at its core. However, in its entirety that is a project well beyond the scope of this research.

Thus, I focus on the agricultural sector in aid of addressing the threat to small farmers around the world, and the subsequent wholesale destruction of food sovereignty. With environmental crises happening apace, and the contribution of agriculture to environmental decay, this focus is imperative. As Campbell, Beare, Bennett, Hall-Spencer, Ingram, Jaramillo, Ortiz, Ramankutty, Sayer and Shindell (2017) suggest “The profound, and almost omnipresent, impact of agriculture on the environment is well documented” (p. 1). Focusing on the relationship between regulation and the agricultural sector is simpler than the conceptualisation of the whole alternative model of development because it appears as more concrete and specific. However, concrete specificity only makes sense whilst simultaneously bearing in mind the model of development writ large. Neilson’s (2012; 2020) revisions to French Regulation School orthodoxy form the first part of the conceptual framework I develop in this thesis to unpack this era of neoliberal led global capitalism in

agriculture. To explore the relationship between regime, regulation and the agricultural sector I now turn to food regime theory.

Food regime theory

State of the art

Using largely a neo-Marxist world systems theory lens food regime theory enables a mid-range perspective on the transformations of capitalism *within agriculture*. Friedmann and McMichael are the parents of this “retrospective reinterpretation of global history through an agri-food lens” (Friedmann, 2009, p. 337). Friedmann contributed her analysis of the global wheat complex and farming change based on relations of production and McMichael his knowledge of the global political economy approach. Friedmann and McMichael’s 1989 seminal piece ‘Agriculture and the state system: the rise and fall of national agricultures, 1870 to the present’ spurned a literature which has “moved food from the periphery to the centre of wider theories about society and interpretations of the history of capitalism” (Campbell & Dixon, 2009, p. 261).

Identifying distinct periods of capitalist accumulation within agriculture, or ‘food regimes’, is a sectorial analysis largely underdeveloped in the theories which underpin food regime theory. Two key schools of thought inform food regime theory, namely Wallerstein’s world systems theory and Aglietta’s French Regulation School. Wallerstein’s world systems theory was widely accepted as an approach to investigate world capitalism by the late 1970s (Robinson, 2011). World systems theory considers the uneven development of nation states around the world and focuses on the international division of labour between the core and peripheral nation states (Robinson, 2011). Robinson (2011) points out that according to world systems theory, “as long as there is world capitalism the nation-state/inter-state system must be its organising principle... and there must be a hegemonic nation-state centre or a would-be centre” (p. 276). This same principle structures food regime theory understandings of world capitalism.

Food regime theory also inherits token elements from The French Regulation School, i.e., a mid-range perspective, language of regime and regulation, and a fixation on periods of stability interspersed with periods of transition or crisis. As Atkins and Bowler (2001) discuss, the concept of a food regime is used to identify three historical periods similar to

those identified within The French Regulation School: pre-World War I, the 1940s-1970s, and from the 1980s to the present. This is reiterated by Friedmann (2009) herself who suggests that food regime theory “wrote into the world-systems perspective—in which capitalism begins with colonial expansion in 1500—a focus on the shorter and more recent periods defined by the French Regulation School” (p. 335). McMichael (2013) suggests that from The French Regulation School food regime theory draws the idea of

a stable regulatory arrangement of international food relations supporting a particular form of accumulation...[while] The world system strand focused on the construction and reconstruction of the international division of labor and the geopolitics of international food provisioning in each period. The food regime concept combined these strands (p. 11).

However, the core narrative of food regime theory is based on world systems theory i.e., the organisational role of particular nation states and their associated hegemony in world capitalism. Food regime theory takes the world systems theory narrative and inserts an agricultural dimension, unpacking the relationship between hegemony and food circuits. At the 25th conference for the Agri-Food Research Network in Brisbane in late 2018, following McMichael’s keynote speech one audience member mentioned that everyone was still looking for the political anchor or hegemon to point to the third food regime. Thus, the narrative of world systems theory has clearly taken root in the thinking of food regime theory proponents.

Having world systems theory dominate the food regime narrative does positively move food regime theory away from the methodological nationalism of orthodox French Regulation School thinking outlined above. Friedmann (2009) suggests that food regime theory “shifted Regulation School focus from national states to the system of states” (p. 335). This system of states that Friedmann (2009) refers to is made up of specific nation states, so the problem is not referring to these as such, but rather ignoring the transnational or the wider relations between nation states, as The French Regulation School do. In contrast, world systems theory offers an understanding of the process of uneven development across a system of nation states and the relations between them.

However, the key implication of the dominance of world systems theory in food regime theory is that the regulation theory of The French Regulation School, which also underpins food regime theory, is insufficiently theorised. I argue that it is this absence of regulation theory that drives the contemporary impasse in food regime scholarly application. That is, it is the lack of regulation theory that both blinds those who cannot see the existence of a present third food regime, and which binds those who do see the third food regime to a narrative defined by world systems theory. This is problematic because world systems theory is not able to see how regulation qualitatively shifts the nature of global relations between nation states. As such, world systems theorists are not able to see how since Bretton Woods there has been a qualitatively different scenario, beyond the empire narrative which had usefully explained the long-run of capitalism until the 1940s. The French Regulation School provides concepts to move beyond the empire narrative and using regulation, provide a mid-range perspective to delineate the long run of history. It is the absence of this perspective in food regime theory that proves limiting.

To begin with it is necessary to consider orthodox definitions of the ‘food regime’ concept. The two ‘parents’ of food regime theory define ‘food regime’ in the following ways. McMichael (2009a) argues that 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). Evidenced here is both token elements of The French Regulation School and the dominant world systems theory narrative. Of the former note that the production and circulation of food speaks to a regime of accumulation in the agricultural sector and that these are ‘stabilised’ points to the orthodox understandings of counteractive modes of regulation which stabilise regimes of accumulation. The idea of periods of stabilised accumulation draws on French Regulation School thought, however the mode of regulation argued to be necessary in orthodox French Regulation School thinking to stabilise accumulation is not fully theorised here. Of the latter, that is world systems theory, McMichael points to the hegemony of particular nation states in world capitalism e.g., Britain and America.

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, pg. 251). The regime of accumulation is employed following an orthodox French Regulation School approach. Friedmann (2009) states that herself and McMichael “linked ‘international relations of food production and consumption’ to ‘periods of capitalist accumulation’” (p. 335). Thus, they created a link between the regime of accumulation and how it plays out in the agricultural sector. This addresses a deficiency in regulation theory, namely a marginalisation of sectorial analysis, however, the regulation theory implicit in that link is not sufficiently theorised by food regime theorists.

According to food regime literature both the first and second food regimes are focussed on instances of state-centric hegemony in the global order, premised on rule-instituted stabilised accumulation. While the idea of stabilised accumulation is inherited from The French Regulation School, the primacy given to the hegemony of the nation state demonstrates the dominance of the world systems theory narrative underpinning food regime theory. Within food regime literature there are two non-contested food regimes: The first food regime is identified as occurring between 1870 and the 1930s. This is considered the British-centred food regime and was based on British colonial power (McMichael, 2013), i.e., an era of capitalist development that was defined by the hegemony of Britain established through particular agro-food complexes or food circuits (of particular importance the world wheat market (Friedmann, 2005)). Britain imported tropical products and basic grains and livestock from the colonies while it outsourced basic food production to its settled colonies, imposing mono-cultural production in these states taking advantage of the “virgin soil frontiers” (McMichael, 2013). Similarly, Friedmann identifies the first food regime from 1870-1914 which she argues provisioned an expanding working class in Europe and European settlements and markedly increased the amount of basic foodstuffs on the market (Friedmann, 1987).

The second food regime, occurring between the 1950s and 70s, was argued to be based on the power of the United States in its war against communism (McMichael, 2013). 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 (McMichael, 2013). 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). It is in the second food regime that Friedmann and McMichael (1989) note the “transnational restructuring of agricultural sectors” (p. 105). Within the agricultural sector linkages are described as complex, commercial and international (Friedmann & McMichael, 1989). Friedmann and McMichael (1989) point out that the agricultural sector has been disaggregated into minute divisions which are then reintegrated “into a complex web of inputs and outputs to increasingly complex and differentiated food products” (p. 112).

The third food regime is the source of the contemporary debate and present impasse of food regime theory. The existence of a third food regime is a contested point and has proved to be divisive amongst food regime scholars. Friedmann (1987) suggests that what we have are merely the remains of the previous food regime, which causes disorder in international trade because of heightened export competition and in the underdeveloped world causes “the destruction of the peasantry as a viable social and economic structure and the accompanying growth of impoverished rural and urban populations” (p. 253).

Though Friedmann has not ceased to investigate the possibility of a third food regime she argues that we are presently without one. Bernstein (2016) points out that

In 2005, Friedmann suggested that ‘We are due for a new food regime, if there is to be one’, and asked ‘is a new food regime emerging?’ She considered ‘changes that might constellate into a new food regime’ which she named ‘the corporate-environmental food regime’: After a quarter century of contested change, a new round of accumulation appears to be emerging in the agrofood sector (p. 625).

Nevertheless, Friedmann does not extend on this tentative exploration, nor assert that there is a third food regime, stating “‘No conclusion: the contest continues’” (Bernstein, 2016, p.626).

On the other hand, McMichael (2005; 2009a; 2009b; 2013) suggests that indeed we are experiencing a food regime which began in the 1980s. The current, or most recent, food regime is described by McMichael (2005; 2009b) as the 'corporate food regime'. McMichael (2009b) argues that the corporate food regime is based on the neoliberal world order. He suggests that the corporate food regime contains

atavisms of the previous regime, and [is] 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).

Evidenced here is McMichael's inclusion of world systems theory, central themes of which include the international division of labour and process of uneven development.

The debate pertaining to the existence of the third food regime extends beyond Friedmann and McMichael. Pritchard describes *hangovers* from a failing regime, and new *elements* rather than a new food regime, due to a "failure to institutionalize new relationships, rules, and norms (Friedmann, 2009, p.340). Campbell and Dixon also still seek the third food regime, looking at "possible agri-food constellations since the early 1970s" (Friedmann, 2009, p. 340). Campbell posits two contending food regimes with the *potential to develop* into a new food regime (Friedmann, 2009). However, "Pritchard, Campbell, and Dixon, each in a distinct way, see the outcome as still open" (Friedmann, 2009, p.336). On the other hand, Burch and Lawrence (2009) argue that a third food regime exists, calling it the financialized food regime.

McMichael's (2005; 2009a; 2009b; 2013) position becomes the launching pad for the conceptual framework I develop and mobilise in this thesis. Namely, in agreement with McMichael I identify a third food regime. However, I argue that there is an inadequate

incorporation of regulation theory in food regime theory which both hampers McMichael's position attempting to defend the existence of the third food regime and emboldens those who suggest there has not yet been a third food regime. Thus, food regime theory must be revised by bringing (*a revised*) regulation theory to the fore. This revision rehabilitates the contemporary applicability of food regime theory and enables me to consider how the model of development applies in agriculture.

Revising the imperative of stability

The first step to reinvigorate food regime theory is to defend McMichael's (2005; 2009a; 2009b; 2013) position that there is indeed a third food regime. I suggest that central to those who negate this position is a narrative of stability. That is, those who deny a present third food regime suggest that a regime of accumulation is predicated on stability. As Friedmann (2009) argues, "If there is not an identifiable set of stabilized tensions, the food regime optic suggests another transitional period— or perhaps the end of regime cycles" (p.336). 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). Friedmann describes history as a cyclic pattern of regime and transition (2009). The first food regime, spanning from 1870-1914, is argued to have been followed by unstable transition lasting 33 years, before the second food regime began in 1947, finishing in 1973. She argues that "It has been less than 40 years since 1973, when food regime analysts agree that a contested and experimental period began. There is no consensus on whether it has already ended or how it might issue into a new food regime" (Friedmann, 2009, p. 335). Defining 'in regime' Friedmann refers to the "shared ideological or discursive aspects of an *operative* regime, that is, one whose historical tensions are, as McMichael puts it, 'stabilized.'" (p. 335). Whilst being 'in transition' refers to "a period of unresolved experimentation and contestation [...] we can ask whether or not there exists a sufficiently stable constellation of agrifood relationships so that states, individuals, corporations, social movements and other actors can predict the outcome of actions" (p.335).

The imperative of stability Friedmann maintains is inherited from The French Regulation School. 'Stability' is a requirement which is inherent in *orthodox* understandings of 'mode of

regulation' and 'regime of accumulation'. Remembering that in orthodox French Regulation School understandings regulation is understood to counter the unstable logic of capitalism thus leading to stable and coherent accumulation. That is, a regime of accumulation assumes a *stability* of the economy through the organisation of capital in production, distribution, consumption, and investment. The mode of regulation supports and coordinates the accumulation regime and provides guidelines which the accumulation regime should follow in order to promote *stability* and counteract capitalism's core and inherently *unstable* tendencies, leading to *stable and coherent* accumulation. The counterpoint to regulation is described in The French Regulation School as crisis (Boyer, 1991). Thus, when Friedmann and others within food regime theory refer to the cyclic nature of history marked by *stable* periods of regime and *periods of instability and crisis* they are drawing on orthodox French Regulation School understandings of stability and crisis. Based on this, Friedmann (1987) argues that we are without a regime, merely experiencing left-overs from the previous regime or in transition to a new one.

Contrary to Friedmann and in defence of McMichael's position, 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. I suggest that we are either in an unstable period of transition as the neoliberal accumulation regime (see chapter two) falls and a new regime begins, or Friedmann and others need to shake off the trappings of early French Regulation School thinking. That is, Friedmann and similar theorists who have not seen the emergence of a third food regime due to an inherited fixation on the imperative for stability need to consider 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, observe that there is still an accumulation 'configuration' though not stable and coherent, so not 'in-regime' in the orthodox sense either. I argue that the requirement of stability predicated on the idea that regulation is only counteractive that is inherited from French Regulation School orthodoxy hinders the dynamism of food regime theory. Thus, Neilson's (2012; 2020) revisions to key French Regulation School concepts outlined above also benefit food regime theory. That is by revising the orthodox understandings of regulation to also include regulation which encourages and exacerbates the core logics and relations of

capitalism, *which though unstable* in its consequences is still regulation, I argue that an accumulation regime need not be stable for its considered existence.

The point is that Friedmann follows French Regulation School 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) and a regime of accumulation, (i.e., a 'stable and coherent accumulation configuration'), interspersed with unstable periods. In pointing out the inherited fixation on stability present in those food regime scholars who contest the third food regime it becomes clear that this is holding these scholars hostage. Then, based on earlier revisions to orthodox French Regulation School thinking, this trapping is released by virtue of extending the concept of regulation to include proactive regulation. As such, stability should not be the anchor on which the existence of a food regime hinges because regimes of accumulation can be unstable as a result of the deployment of proactive regulatory forms.

Revising conceptualisations of the 'third food regime'

After defending the existence of the third food regime, I now want to extend McMichael's (2005; 2009a; 2009b; 2013) theorisation of the third, 'corporate', food regime. While McMichael (2005; 2009a; 2009b; 2013) identifies the key aspect of the neoliberal accumulation regime in the present neoliberal era, centrally the neoliberal led global price assault on small producers (McMichael, 2013), his theorisation needs to be supplemented with a critically revised regulation theory. McMichael (2009b) suggests that the corporate food regime has embedded processes that began in the previous food regime. Whilst there is continuity between food regimes, what is important to note is the *distinctions*. It is in the distinction between food regimes that a thorough analysis of the contemporary is revitalised.

The key distinction is apparent in McMichael's (2009a) definition of a food regime, which I will revisit here. He argues that 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). Here McMichael appears to be mixing categories by proclaiming the forms of hegemony to

be British, American and corporate/neoliberal across different regimes. British and American hegemony hark back to the world systems theory origins of food regime theory and the necessity of a nation state hegemon; but corporate/neoliberal hegemony speaks to something different. This is positive insofar as McMichael is noting the qualitatively different project we have encountered in the neoliberal era but is insufficiently theorised such that McMichael appears to unproblematically accept a shift from nation state hegemony to corporate/neoliberal think tank hegemony. This shift must be accounted for and addressed rather than simply stated as a shifting of hegemony.

The shift from nation state hegemony towards what McMichael calls corporate/neoliberal hegemony is important as it demonstrates that the world is shifting away from the empire logic of world systems theory towards *abstract regulation*. A post-empire regulatory framework is taking the place of a nation state hegemon in the present era. McMichael's definition seems to just accept that the national hegemon is no longer central without explanation. Although McMichael (2013) notes that in this era the political structuring of the capitalist economy is exercised through the rule of corporate hegemony and "neoliberal state administration" (p. 25), speaking to why that shift has occurred is imperative to understanding the contemporary.

This notion of abstract regulation is key to understanding both the previous Fordist model of development, the prevailing neoliberal model of development and future potential models of development. That is, understanding that the national model is now a theoretical regulatory template, not simply a nation state example as when empire logic was prevalent. Corporate hegemony is really underpinned by the widespread adoption of the national regulatory template by nation states around the world and the corresponding transnational regulatory terrain that dialectically engages with the national, i.e., the regulatory nexus of the neoliberal model of development. By bringing the revised French Regulation School understanding of regulation to the fore I argue that we are moving away from nation state exemplars towards an abstract regulation which nation states adopt more or less depending on their competitive position in this international terrain. Corporate hegemony and neoliberal state administration, in contrast to British or American hegemony, needs to be grounded in regulation in order to give both explanatory and descriptive capacities.

McMichael (2013) argues that the respective hegemonies across the food regimes were founded on universal organising principles. In the corporate food regime McMichael (2013) suggests the organising principles are institutionalised by the World Trade Organisation (WTO) and are about trade liberalisation and enterprise. The role of such transnational institutions in this era which put pressure on nation state development demonstrates the move away from an empire logic and the dominance of a nation state hegemon. That is, neoliberal hegemony instituting organising principles through the WTO indicates a substantial shift in the nature of global capitalism.

Although McMichael (2009b) recognises a shift beyond nation state hegemony and defines key aspects of the accumulation regime in the current era, because of the theoretical absence of regulation the conception of the corporate food regime falls short. Furthermore, in considering future food regime trajectories beyond the corporate food regime McMichael (2020) considers China's "growing political economic power" (p. 116). This direction of thought retreats from an acknowledgement of a distinct shift beyond empire logic in the present neoliberal era back towards a world systems theory prioritisation of a nation state hegemon as the organising principle of world capitalism. Although McMichael (2020) concludes by suggesting that it is premature to define a new food regime configuration defined by China's hegemony he does suggest that "China may emerge as a commanding pole in a food regime of the future" (p. 120). This demonstrates the dominance of world systems theory in food regime theory which marginalises key aspects of regulation theory.

World systems theory has dominated the narrative of food regime theory, while the secondary foundational theory provided by The French Regulation School has provided merely tokenistic elements. What has become clear is that the organisation of global capitalism is now more clearly predicated on the national-transnational regulatory nexus of the neoliberal model of development. An abstract regulatory template for the nation state is being adopted, more or less, around the world, in turn generating a transnational site of regulation that confines the limits of national development. It is this abstract regulation that underpins what McMichael calls the corporate food regime. This can only be acknowledged by bringing the revised version of the French Regulation School theory to the fore of food regime theory. This explains the decreasing hegemony of any one particular nation state

and the emergence of abstract regulation as the organising principle of world capitalism in the neoliberal era.

Bringing regulation theory to the fore does not imply a corresponding withdrawal of world systems theory from food regime theory. Rather, what I am arguing here is that in largely invisibilising regulation theory food regime theorists have done themselves a disservice by hamstringing their theorisation to the conceptualisations afforded by the dominance of world systems theory. We need a synthesis of regulation theory and world systems theory within food regime theory to permit the best of both foundational theories to reinvigorate contemporary analysis using food regime theory. This synthesis will be considered more deeply in future work, for the purposes of this thesis I focus on the imperative first step, which is bringing regulation theory to the fore.

In speaking of the corporate food regime McMichael (2009b) articulates that

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 (p. 148).

The preserving of subsidies for Northern powers alone, while indeed important and problematic, is a secondary point. Firstly, we must consider that the current era is characterised by hyper competition which has caused the more powerful countries to employ *regulatory tools* like subsidies to preserve their competitive advantage. The key point is that this era is defined by the global competition that emerges with the opening up of previously protected countryside across the world as a result of adoption of the neoliberal national regulatory template. Neoliberal globalisation has fundamentally changed the nature of the uneven divide between the global North and South. The point is that global competition implies direct competition between industrialised and non-industrialised countries and within and beyond these boundaries, direct competition between different agricultural players; both globally free transnational agribusiness and small-scale local producers and peasantry. In this space the global South are squeezed much more explicitly

as a result of that competition which is engendered through the widespread adoption of the national template of the regulatory nexus of neoliberal model of development. This can only be theorised by the invocation of a revised regulation theory which enables us to see the regulatory change which results in the liquidation of peasantry modes as competition renders their produce unviable compared to that produced by industrialised agricultural firms.

Furthermore, McMichael's (2009b) position that within the corporate food regime "farm subsidies [are preserved] for the Northern powers alone" (p. 148), without clarification, seems to imply that if there was actually a genuine level playing field, then the situation would be rectified. This logic plays into the neoliberal rhetoric of less state, and a 'genuinely' free market. It is not enough to suggest that there is an unfair exchange relationship between the core and periphery states. By pursuing the abstract regulation of the national template of the regulatory nexus of the neoliberal model of development, states have to play the game of global capital. The widespread competition generated by this proactive regulation is fundamentally at the core of this issue; it is not simply about unequal exchange being further embedded. Nevertheless, and this is where the synthesis between regulation theory and world systems theory is important, in pursuing the incorporation of regulation theory to provide fuller conceptualisation, one must not lose sight of the logic of uneven development which does impact which nation states produce, distribute and import and export which products. The dynamics of relations between core and peripheral nation states are still part of the narrative here. In the neoliberal era, which can only be conceived of fully by bringing in regulation theory, there is a different form of uneven development driven by the capacity for peripheral nation states to grow and break out of unequal exchange and uneven development by mobilising low wages as a source of growth and a point of competitive advantage (see chapter four).

The neoliberal model of development in agriculture

Here I explicitly bring a revised regulation theory to the fore of food regime theory in order to develop the conceptual framework that I mobilise throughout this thesis. The first step is to reconfigure orthodox understandings of 'food regime' in line with *orthodox* French Regulation School understandings of 'model of development'. To reiterate, State of the Art French Regulation School distinguishes 'mode of regulation' from 'accumulation regime',

while it treats their 'coupling' as a 'model of development'. While it is widely acknowledged that food regime theory has its conceptual origins in The French Regulation School, there are linkages that can be made *much more* explicit that help invoke dynamism within food regime theory.

I argue that the concept 'food regime', is actually another way of defining 'model of development' *as it applies to the agricultural sector*. The two key concepts given in The French Regulation School orthodox definition of 'model of development' – 'regime of accumulation' and 'mode of regulation' – were not applied specifically to a particular sector. I argue that the concept 'food regime' addresses this deficit in the agricultural sector. 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 is virtually equivalent to the orthodox French Regulation School view which sees the coupling of the regime of accumulation and mode of regulation as the model of development. That is, the coupling in The French Regulation School giving the model of development, is equivalent – in the agricultural sector – *to the coupling giving the food regime in food regime theory*.

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 orthodox French Regulation School concepts, the 'governing rules' Friedmann refers to can be understood as the mode of regulation (Boyer, 1991; Aglietta, 1979). While the language 'production and consumption of food' clearly has its conceptual origins in orthodox French Regulation School's 'regime of accumulation'. Thus, Friedmann couples the mode of regulation and regime of accumulation, she just fails to make the link between food regime and model of development.

To reiterate, for Lipietz (1992), a 'mode of regulation' "involves all the mechanisms which adjust the contradictory and conflictual behaviour of individuals to the collective principles of the regime of accumulation" (p. 2). Compare this to Friedmann's more extensive definition of food regime "as referring to a relatively bounded historical period in which complementary expectations govern the behaviour of all social actors, such as farmers,

firms, and workers engaged in all aspects of food growing, manufacturing, distribution and sales, as well as government agencies, citizens and consumers” (Bernstein, 2016, p. 614). Friedmann’s discussion of the expectations governing the behaviour of social actors is akin to Lipietz’s discussion of mechanisms that adjust the behaviour of individuals. We know that The French Regulation School distinguishes ‘mode of regulation’ from ‘accumulation regime’, while it treats their ‘coupling’ as a ‘model of development’. We know that food regime theory essentially refers to ‘mode of regulation’ and ‘regime of accumulation’ in defining ‘food regime’ (though failing to theorise those concepts adequately). *The final step of theorisation is to see ‘food regime’ as akin to ‘model of development’ as it applies to the agricultural sector.*

This conclusion is invisibilised not the least because food regime literature conflates the regime of accumulation and mode of regulation; demonstrated most explicitly by Friedmann (2009) stating that “Regime means regulation” (p. 336). This conflation not only causes theoretical ambiguity and impoverishment, but also invisibilises the conceptual link between ‘food regime’ and ‘model of development’ that I am here attempting to tease out. The ability to render the regime of accumulation and mode of regulation conceptually distinct and then consider their coupling as defining the model of development, and in the agricultural sector, the model of development in agriculture is the key to my conceptual framework. Mobilising this conceptual framework enables me to unpack the current era and conceive of the next.

Speaking to the previous food regime Friedmann (1993) 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). This provides the opportunity to give a concrete example demonstrating the food regime as the model of development in agriculture. The food regime defined in this quote refers to the era characterised by the Fordist model of development by The French Regulation School. The Fordist era was typified by counter-active regulation in the advanced capitalist countries that harnessed the power of capital to the nation state. This involved the deployment of counteractive regulatory forms such as tariffs, taxes and subsidies that protected domestic business and farming and nation state development. This regulatory architecture of the

Fordist model of development facilitated successful national regimes of accumulation that protected domestic producers. I argue that unpacking the food regime as the coupling of the regime of accumulation and mode of regulation *in the agricultural sector* enables a clearer conceptualisation of different capitalist eras and what was uniquely problematic or successful in each. Thus, building on McMichael, I argue that *food regime* should be understood as *the model of development in agriculture*. This is my key innovation which I use to conceptualise this era throughout this thesis.

Friedmann (1993) suggests that “transnational agrofood corporations have now outgrown the regime that spawned them” (p. 52). Once mobilising the conceptual framework developed here it becomes clear that the neoliberal model of development in agriculture (NMD in agriculture) *deliberately facilitates* the growth in power and mobility of transnational agrofood corporations. Thus, as opposed to Friedmann’s (1993) position that corporations have outgrown the previous regime that spawned them, I suggest their transnational growth is directly facilitated via the regulatory architecture of the prevailing model of development. In the agricultural sector, the regulatory nexus of the NMD in agriculture facilitates a regime of accumulation that enables transnational success through global commodity chains. The proactive regulation characterising this era of capitalism enables transnational corporations to flourish by making the world safe for capital and its movement.

I have argued that ‘food regime’ is essentially equivalent to the model of development as it applies to the agricultural sector. Remembering the revisions made to orthodox French Regulation School thinking that enable me to define the present era as a model of development, it then follows that we are currently experiencing a model of development in agriculture (what McMichael calls ‘the corporate food regime’). That is, there is a prevailing model of development which then plays out in sectors. Thus, I am able to conceptually reinvigorate McMichael’s argument that the ‘corporate food regime’, or what I call the NMD in agriculture, though more vulnerable and volatile than previous eras, is enclosing the world. Nevertheless, I also extend on McMichael’s position which does not sufficiently deal with the move beyond empire towards abstract regulation and in general is hamstrung by the lack of regulation.

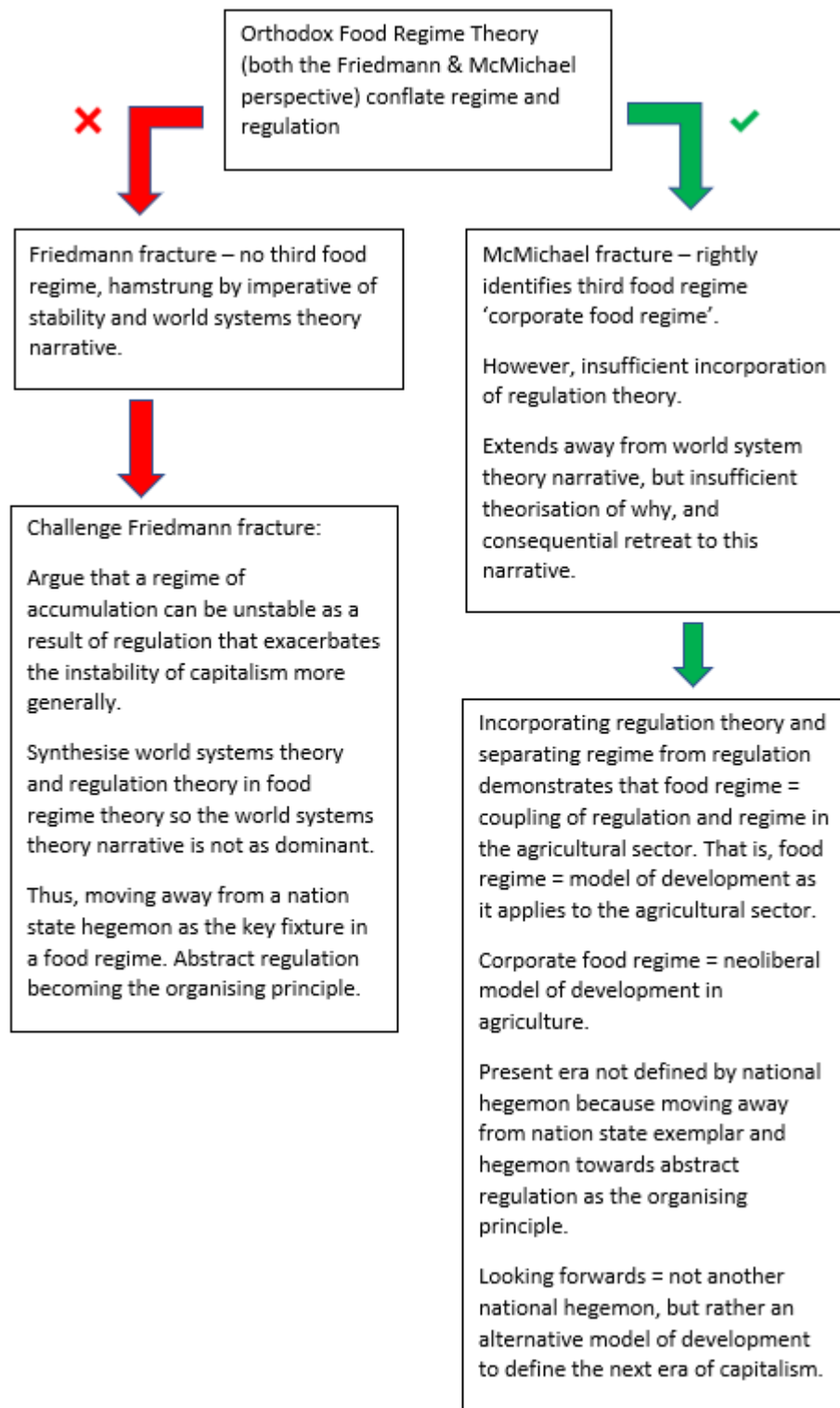


Figure 1 Summary of revisions to Food Regime Theory

Conclusion

Food regime theory builds upon both world systems theory and The French Regulation School, though world systems theory remains the core narrative underpinning the concept

of a food regime. That is, the dominance of a nation state, the hegemon of which is established through food circuits, defines particular eras across the long run of capitalist history. The dominance of this narrative, whilst positive in some respects, especially bringing into analysis both core and peripheral nation states and the process of uneven development, has left the regulation theory of The French Regulation School undertheorised in food regime theory. I draw attention to these conceptual origins of food regime theory, emphasising the need to bring to the fore a revised version of The French Regulation School theory. I pursue this theoretical revision in aid of instilling contemporary relevance to food regime theory and thus enabling an analysis of the current era of capitalist development in agriculture through a revised conceptual framework.

Two key concepts given in The French Regulation School orthodox definition of ‘model of development’ – ‘regime of accumulation’ and ‘mode of regulation’ – were not applied specifically to a particular sector. The concept ‘food regime’ addresses this deficit in the agricultural sector. Through my revisions and reinsertion of The French Regulation School in food regime theory I argue that ‘food regime’ should be understood as the model of development in agriculture. The model of development provides an umbrella under which nation states and sectors of the economy operate beneath. However, different sectors develop complexly and unevenly in the space of the prevailing model of development. This complex unfolding of the model of development in sectors is due to the position of the nation state in the global terrain of competition states, the internal dynamics of particular sectors, as well as interactions between sectors. The model of development in agriculture must be understood within the context of the prevailing model of development, however, some sectorial characteristics do not simply follow from the prevailing model of development. Nonetheless, the model of development sets the limits and possibilities of what can happen.

My focus within this chapter has been to develop a conceptual framework which can be applied to understand the contemporary neoliberal era and begin thinking about constructing the next post-neoliberal era. This conceptual framework gives the Left another tool in its arsenal with which to confront the neoliberal project. In the next chapter, I apply the conceptual framework to unpack the prevailing neoliberal era by considering both

regime and regulation aspects of the prevailing NMD in agriculture, and consider elements of an alternative.

Chapter Two

Critically building on McMichael's 'corporate food regime': The 'neoliberal model of development in agriculture' unpacked

Introduction

Numerous reports have stated the need for drastic change in the global food system to account for the double-edged sword of feeding a growing population within environmental/climatic limits. For example, the Food and Agriculture Organization of the United Nations (2019) points out that

Food systems face increasingly pressing challenges such as hunger and diet-related diseases, the need to provide a growing global population with sufficient and healthy food, the need to reduce food loss and waste, the depletion of natural resources, the increase of greenhouse gas emissions, environmental degradation, climate change and its related shocks and stresses (p. 12)

We remain unable to feed the global population, and yet as we fail in this mission we simultaneously “cause astounding environmental and social damage” (Baldwin, 2015, p. 1). To attend to the crises of the global food system we need to adequately explain its form in the present era. To do this I mobilise the conceptual framework developed in the previous chapter and explore the neoliberal model of development in agriculture (NMD in agriculture).

I argue that the negative planetary impact of our food system has been exacerbated by the prevailing NMD in agriculture. As explored in the previous chapter, and subsequently mobilised throughout the thesis, I define the prevailing era of capitalist development in agriculture as the NMD in agriculture. This is a revision and extension of McMichael’s position in food regime theory which most closely resembles my own. Namely, while McMichael (2005, 2009a, 2009b, 2013) defines this era as the corporate food regime, I define it as the NMD in agriculture in order to draw attention to the deficiencies of regulation in his position. I am recoupling a regime of accumulation with a regulatory architecture in the defining of this era. Here I explore the prevailing neoliberal regime of

accumulation and neoliberal national-transnational regulatory nexus in the agricultural sector that together define the NMD in agriculture.

To unpack the neoliberal food regime of accumulation I pull largely on the work by McMichael (2005, 2009a, 2009b, 2013) as he sufficiently theorises regime aspects. However, due to the absence of regulation in theorisation he fails to a) define the neoliberal regulatory architecture and b) its coupling with the neoliberal global food regime of accumulation which defines this era as a NMD in agriculture. As Le Heron (2003) mentions, “questions about New Zealand agriculture need to be re-examined initially, at the level of regulation. Only after the accumulation-regulation nexus has been clarified will it make sense to consider the nature of the institutional setting, which is evolving” (p. 122). It is the mobilisation of distinct regulatory forms that leads to the neoliberal global food regime of accumulation and its dominance in the prevailing era. McMichael (2005, 2009a, 2009b, 2013), though making vast steps beyond those food regime theorists who do not see a present food regime at all, fails to move beyond the conflation of regime and regulation that plagues food regime literature to the detriment of adequate explanation of this era and conceptualisations of future eras. With this in mind, I present a brief section on considerations of an alternative to the NMD in agriculture.

The neoliberal model of development in agriculture

When I refer to ‘agriculture’, I am referring to an entire food regime of accumulation – the entire process of production, distribution, consumption and investment. Various food regimes of accumulation operate at the community, regional, national and transnational level to differing degrees of viability or success. The viability of a food regime of accumulation is predicated on the prevailing regulatory architecture of an era. The coupling of a distinct food regime of accumulation and a specific regulatory architecture that facilitates that food regime of accumulation defines an era as a model of development in agriculture. In this contemporary era, all food regimes of accumulation at different levels confront the neoliberal proactive national-transnational regulatory nexus and the neoliberal global food regime of accumulation that this facilitates (see Figure 2). To reiterate, the national-transnational regulatory nexus refers to the regulation aspect of a model of development that involves the dialectic between the national and transnational sites of regulation. That is, the widespread adoption of a national regulatory template generates a

transnational terrain that in turn defines the limits and possibilities of national development. This regulatory nexus facilitates the dominance of a particular accumulation regime which together define a model of development.

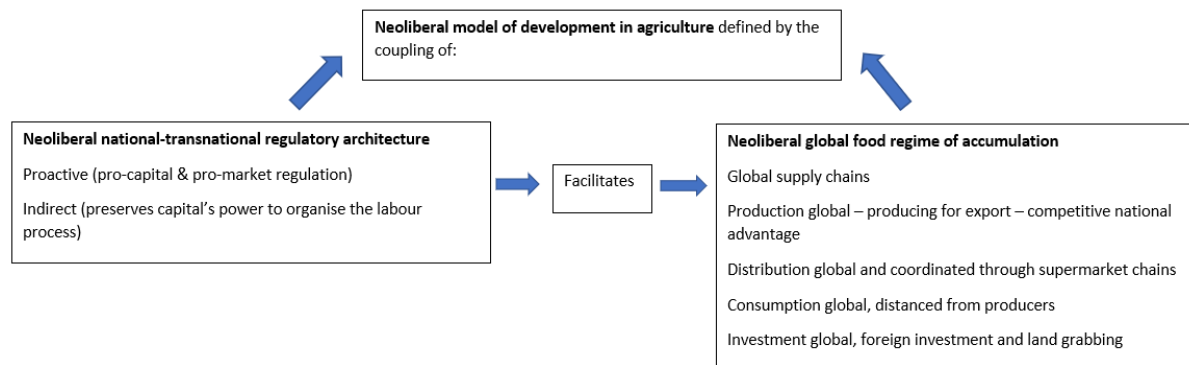


Figure 2 The neoliberal model of development in agriculture

As outlined in chapter one, in food regime literature there is consensus that there were two previous food regimes. To recap the core theory; a food regime has been defined in orthodox literature as a demarcated period in capitalist accumulation that is defined by food circuits that underpin particular global food relations. The first food regime is identified as spanning from 1870 to the 1930s and was based on British colonial power (McMichael, 2013). The second food regime, occurring between the 1950s and 70s, was argued to be based on the power of the United States in its war against communism (McMichael, 2013). The existence of a third food regime is contested, but defended by McMichael (2005, 2009a, 2009b, 2013), and rightly so.

Thus, McMichael (2013) argues that

the political-economic ordering of international food relations since the late nineteenth century has expressed three identifiable moments that have been institutionalized in forms of rule governed by the strategic goals of the dominant powers defining these moments, and legitimized by ruling ideologies, notably: British/free trade multilateralism; U.S./ foreign aid, development and free enterprise; and wto/free trade and market supremacy. In each instance, the world food trade has, through a governing world price, encompassed an ever-widening expanse of commodified agriculture (p. 22).

McMichael (2013) accurately speaks to the ever-widening expanse of commodified agriculture and demonstrates that there are carryovers across eras that I define as models of development in agriculture. However, I here want to explore how more than carryovers, there are distinct differences between those eras defined by models of development in agriculture. These distinctions are due to the coupling of an unfolding dominant regime of accumulation with a facilitating national-transnational regulatory architecture.

Thus, more than McMichael's (2013) suggestion that each food regime "is a successive part of an evolving historical conjuncture (the age of industrial agriculture)" (p. 21) I want to define the particular concrete form of the neoliberal global regime of accumulation that represents a distinct development in the industrialisation of agriculture. Whilst the cyclical episodes of food regimes indicate "the process of commodification of food and the elaboration of trading relations premised on the progressive conversion of agriculture to a world industry" (McMichael, 2013, p. 24-25), the NMD in agriculture distinctly creates that world industry *both through regime and regulation*. There are aspects of the prevailing neoliberal global food regime of accumulation which have been carried over from previous food regimes, albeit more deeply embedded. Nevertheless, beyond this position, I argue that the neoliberal form of the global regime of accumulation has developed beyond the regime of accumulation of the previous Fordist era and can be seen as quite distinct.

The distinction between food regimes of accumulation particular to distinct models of development in agriculture is missed in theory and in practice. This invisibility is heightened by describing food regimes of accumulation, or specific aspects of food regimes of accumulation, as either 'conventional' or 'alternative'. Simply distinguishing between conventional and alternative agriculture is a trans-era, long-range view, as it does not permit distinction between forms of agriculture which shift and embed in different eras defined by different models of development. Beus and Dunlap (1990) and Maye and Kirwan (2010) each respectively provide a tabled summary of the distinctions between conventional and alternative agriculture (Table 2 and 3 below).

Conventional agriculture	Alternative agriculture
Centralization	Decentralization

National/international production, processing and marketing	More local/regional production, processing and marketing
Concentrated populations; fewer farmers	Dispersed populations; more farmers
Concentrated control of land, resources and capital	Dispersed control of land, resources and capital
Dependence	Independence
Large, capital-intensive production units and technology	Smaller, low-capital production units and technology
Heavy reliance on external sources of energy, inputs, and credit	Reduced reliance on external sources of energy, inputs, and credit
Consumerism and dependence on the market	More personal and community self-sufficiency
Primary emphasis on science, specialists and experts	Primary emphasis on personal knowledge, skills and local wisdom
Competition	Community
Lack of cooperation; self-interest	Increased cooperation
Farm traditions and rural culture outdated	Preservation of farm traditions and rural culture
Small rural communities not necessary to agriculture	Small rural communities essential to agriculture
Farm work a drudgery; labor an input to be minimized	Farm work rewarding; labor an essential to be made meaningful
Farming is a business only	Farming is a way of life as well as a business
Primary emphasis on speed, quantity, and profit	Primary emphasis on permanence, quality, and beauty
Domination of nature	Harmony of nature
Humans are separate from and superior to nature	Humans are part of and subject to nature
Nature consists primarily of resources to be used	Nature is valued primarily for its own sake
Life-cycle incomplete; decay (recycling wastes) neglected	Life-cycle complete; growth and decay balanced

Human-made systems imposed on nature	Natural ecosystems are imitated
Production maintained by agricultural chemicals	Production maintained by development of healthy soil
Highly processed, nutrient-fortified food	Minimally processed, naturally nutritious food
Specialization	Diversity
Narrow genetic base	Broad genetic base
Most plants grown in monocultures	More plants grown in polycultures
Single-cropping in succession	Multiple crops in complementary rotations
Separation of crops and livestock	Integration of crops and livestock
Standardized production systems	Locally adapted production systems
Highly specialized, reductionistic science and technology	Interdisciplinary, systems-orientated science and technology
Exploitation	Restraint
External costs often ignored	All external costs must be considered
Short-term benefits outweigh long-term consequences	Short-term and long-term outcomes equally important
Based on heavy use of non-renewable resources	Based on renewable resources; non-renewable resources conserved
Great confidence in science and technology	Limited confidence in science and technology
High consumption to maintain economic growth	Consumption restrained to benefit future generations
Financial success; busy lifestyles; materialism	Self-discovery; simpler lifestyles; nonmaterialism

Table 2 Key elements bifurcating conventional and alternative agriculture (Beus & Dunlap, 1990)

Conventional	Alternative
Modern	Postmodern
Manufactured/processed	Natural/fresh
Mass (large-scale) production	Craft/artisanal (small-scale) production

Long food supply chains	Short food supply chains
Costs externalized	Costs internalized
Rationalized	Traditional
Standardized	Difference/diversity
Intensification	Extensification
Monoculture	Biodiversity
Homogenization of foods	Regional palates
Hypermarkets	Local markets
Agrochemicals	Organic/sustainable farming
Non-renewable energy	Reusable energy
Fast food	Slow food
Quantity	Quality
Disembedded	Embedded

Table 3 Contrasting networks of food provision (Maye & Kirwan, 2010)

These tables whilst descriptive do not identify these forms of agriculture in relation to any particular era. That is, there is a bifurcation in the various aspects of agriculture without linking those to time and space. The terms conventional and alternative are abstract trans-era descriptions of agricultural forms. This thesis is focussed on specifying particular eras in capitalist development in agriculture. As such, I suggest that the regulatory forms deployed in a particular era facilitate a specific form of conventional agriculture that becomes dominant (see Table 4 below).

I want to mobilise the distinction between conventional and alternative to consider how within the NMD in agriculture, specific aspects of agriculture emerge within food regimes of accumulation that are then rendered more or less viable due to the prevailing neoliberal national-transnational regulatory nexus. Namely, there is a neoliberal form of ‘conventional’ agriculture that emerges as the dominant neoliberal global regime of accumulation that is facilitated by the neoliberal national-transnational regulatory nexus. I want to embed the trans-era descriptors ‘conventional’ and ‘alternative’ in the mid-range theory I have mobilised in this thesis to describe the specifically neoliberal global regime of accumulation.

In other words, I want to consider the neoliberal regulatory facilitation of a specific neoliberal form of conventional agriculture.

Conventional = <i>neoliberal global food regime of accumulation</i>	Alternative = <i>local food regime of accumulation</i>
Global supply chains	Localised supply chains
Producer-consumer distanced	Direct producer-consumer relationships
Globalised accumulation	Localised accumulation
Supermarkets price givers and coordinators of global supply chains	Innovative consumer coordinators and sites of distribution
Competitive national specialisation for export	Cooperative local diversification for local markets
Global price	Negotiated local price
Large agribusiness	Small scale local practices
Consumers unaware of social relations of production or production practices	Consumers involved in social relations of production and concerned with production practices

Table 4 Concrete form of trans-era descriptors ‘alternative’ and ‘conventional’ agriculture in the mid-range neoliberal era

In the prevailing NMD in agriculture the specific regulatory forms facilitate a distinct form of ‘conventional’ agriculture. That is, whilst some aspects of conventional agriculture have carried over from the previous Fordist model of development in agriculture, and even from before that, others have emerged in a uniquely neoliberal form. For example, one of the characterisations of conventional agriculture is ‘modern’ (Maye & Kirwan, 2010) which should be understood to define the particular forms of agriculture in *both* the Fordist and present neoliberal eras. On the other hand, long supply chains were less developed in the Fordist era and can be distinctly associated with the NMD in agriculture. Beyond this, there are further distinctly neoliberal aspects of food regimes of accumulation that are not considered in these tables at all. The globalisation of accumulation and related issues of competitive specialisation for export and importing all else and the role of supermarkets as coordinators of long supply chains are distinctly neoliberal.

It is against this distinct neoliberal form of conventional agriculture emerging as the neoliberal global regime of accumulation that the presently alternative agriculture can be positioned. Namely, alternative agriculture emerges in the prevailing era as resistance to the NMD in agriculture. Maye and Kirwan (2010) suggest that “since the late 1990s, a growing

body of social science research... has been directed towards examining food systems that are regarded as being in some way 'alternative' to 'conventional' ways of food provisioning" (p. 1). I argue that these trans-era terms can be thought of as emerging in specific forms in different eras defined by distinct models of development in agriculture. In the prevailing NMD in agriculture the specific form of conventional agriculture that emerges is the dominant neoliberal global regime of accumulation. Some elements of the neoliberal global regime of accumulation are defined by the trans-era descriptors provided by Beus and Dunlap (1990) and Maye and Kirwan (2010); but beyond this there are elements specific to the neoliberal era that define the prevailing neoliberal form of conventional agriculture.

Other scholars have accurately observed the coupling of regime and regulatory aspects in a particular era. For example, Le Heron (2003) suggests that

New Zealand offers an especially valuable window on contemporary governance developments in the agrifood sector. For two decades the country has experienced continuing neoliberal reforms directed at transforming the country into an exemplary neoliberalising economic space. Obvious outcomes of this political project for the agri-food sector include the now virtual absence of assistance and subsidies, the recent dismantling of the producer board framework (Hayward and Le Heron, 2002), extension of flexible employment relations, increasing openness to international developments in trade, production and investment and an economic and institutional environment facilitating exploration of links into the globalising world food economy (Le Heron and Pawson, 1996) (p. 111).

This depiction of the neoliberal era describes key regime and regulatory aspects of what I conceptualise as the NMD in agriculture. Neoliberal reform speaks to the adoption of the national template of the regulatory nexus of the model of development which exposes nation states and all actors within to the logic of global capital. The widespread adoption of the neoliberal national regulatory template generates global competition which limits and constrains national development. Namely, regulatory tools like subsidies are used by more powerful nations to preserve their competitive advantage. At the same time, the regulatory impetus of the national-transnational regulatory nexus of the neoliberal model of

development encourages nation states to liberalise borders to promote the mobility of transnational capital and finance. As Le Heron (2003) points out, this results in increased linkages to the globalising world food economy. This regulatory impetus in turn facilitates the dominance of the neoliberal global food regime of accumulation in which labour processes increasingly involve flexible employment relations in order to preserve competitiveness on the global market in the face of changing demand.

In a similar position to my own, Le Heron (2003) identifies that

increasingly overt political interventions...have become a feature of New Zealand's neoliberalising agri-food scene. Indeed, as this paper argues, contrary to the 'roll back the state' rhetoric that trumpeted the neoliberal cause nearly two decades ago, the state, in various guises, is being reassembled anew, in order to enable New Zealand agrifood participation in the globalising world food system (p. 111).

Here Le Heron (2003) appears to be referring to New Zealand's competitive strategy within the terms of the prevailing neoliberal model of development that has generated neoliberal globalisation, i.e., the 'globalising world food system'. As per the neoliberal national template New Zealand is engaging in a state-developmental project to facilitate New Zealand's participation in the dominant neoliberal global food regime of accumulation via the deployment of proactive forms of regulation. This forms the "meta-regulatory context of geo-political and geo-economic changes within which New Zealand agri-food production is placed" (Le Heron, 2003, p. 112). Namely, there are key regulatory aspects of this neoliberal era that facilitate changes within national accumulation regimes.

The prevailing NMD in agriculture should be contrasted with the previous Fordist model of development in agriculture. The state support of the agricultural sector during the post-World War II era in New Zealand (Le Heron, 2003) was a key part of the counteractive regulation of the Fordist model of development in agriculture. It was part of the nationally deployed counteractive regulatory template to encourage national development and protect domestic capital. In contrast to this earlier era of capitalism, Le Heron (2003) goes on to note that

As part of a pro-neoliberal swing in New Zealand politics in the 1980s, the country entered a period (still proceeding) of state-led economic reform and restructuring. This has seen a dismantling of protective and stabilising institutions and the growing importance of supra-national organisations, resulting in changed conditions for its globalising agri-food industries (p. 115).

Here we can see the distinct shift in regulation from the counteractive regulation of the previous model of development in agriculture, to the proactive regulation of the prevailing neoliberal model of development in agriculture. Thus, demarcating particular capitalist eras in agriculture and qualitatively different regulatory projects facilitating the dominance of particular accumulation regimes.

Defining the neoliberal global regime of accumulation

Centrally, the specific neoliberal form of agriculture emerges as a global food regime of accumulation. Reflecting on Table 2 and Table 3, the neoliberal global food regime of accumulation can be characterised by trans-era features such as commercialisation, monocultural production, intensive chemical inputs, an emphasis on high yields and fossil fuel dependency. However, beyond this, specific to the present era, the neoliberal global food regime of accumulation is based on specialised export-orientation and is large scale and global in terms of both supply chains and consumer markets.

McMichael (2013) does account for a qualitative difference between regime aspects in this era and previous eras. In responding to Pritchard's (and others') concerns that we are merely experiencing the carryovers from the previous regime, McMichael (2013) argues that

What is distinctive about the corporate food regime is that it was the first time farmers universally were confronted with a world market price, so while there is certainly carryover in northern farm politics, the projection of such politics *globally* in a price-assault on smallholder cultures was hardly a carryover (p. 46).

Here McMichael (2013) nicely articulates the central effect of the NMD in agriculture; a key distinction between this era and the previous era which has deep implications for small

producers globally (explored in subsequent chapters). That is, the universally experienced world market price and global price-assault is a direct result of the NMD in agriculture. The national-transnational regulatory nexus of the NMD in agriculture which nation states both produce and are constrained by, creates a transnational terrain which farmers – whether subsistence, small scale, or transnational – must operate within and in turn navigate the constraint of a global price; with greatly disparate capacities to remain competitive.

McMichael (2013) describes the centrepiece of what he calls the corporate food regime as the displacement of “producers unable to compete with subsidized or monopolized market power” (p. 41). However, this is a *central effect* of the NMD in agriculture, *the centrepiece* of which I argue to be proactive regulation creating a world of global and hyper competition. This is what makes this era defined by the NMD in agriculture qualitatively different from previous eras. Due to the global competition generated by the neoliberal model of development, which inevitably impacts the NMD in agriculture, the nature of the divide between the global North and South has fundamentally shifted. Whether coercively or through choice, as the global South is opened through the adoption of the national regulatory template of the regulatory nexus of the NMD in agriculture, what results is direct and uninhibited competition between nation states around the world at situationally diverse positions.

The neoliberal global food regime of accumulation causes many environmental and social problems including loss of biodiversity, soil erosion, groundwater contamination, and threat to rural communities and peasant livelihoods (McMichael, 2012). The neoliberal global regime of accumulation dominates the agricultural space around the globe. This dominance is facilitated by the widespread adoption of the national template of the neoliberal model of development that has generated exposure of global capital to all, beyond the enclaves of development. This proactive regulation of regimes of accumulation stimulates the growth of a global food regime of accumulation and renders resistant localised regimes of accumulation, with labour processes at their base, increasingly uncompetitive and unviable.

It has been suggested that conventional agricultural practices notoriously ignore ‘externals’ (Beus & Dunlap, 1990; Maye & Kirwan, 2010; McMichael, 2012). This trans-era fact becomes

even more embedded in the neoliberal era as the global competition imperative imposes more incentive to ignore costly factors of production. As McMichael (2012) suggests there are “significant social and environmental impacts such as disruption of agrarian cultures and eco-systems, the deepening of dependency on fossil fuel, and modern agriculture’s responsibility for up to a third of greenhouse gas emissions (GHG)” (p. 9). Commercial agriculture “overrides natural limits with chemicals and other technologies that deplete soil fertility, hydrological cycles, and biodiversity” (McMichael, 2012, p.9). In this way “incorporating farmers in the “chemical treadmill”” (McMichael, 2012, p. 75). Furthermore, McMichael (2012) points out that “intensive agriculture annually loses 2 million acres of farm land to erosion, soil salinity, and flooding, in addition to consuming groundwater 160 percent faster than it can be replenished” (p. 71), not to mention the water pollution issues (McMichael, 2012).

Exclusion of external third-party effects from the exchange relation is generic to market competition under capitalism and to conventional capitalist agriculture. However, the global extension of market competition under the neoliberal model of development, including in the agricultural sector, makes it even more imperative that capital avoids being accountable for externalities in order to remain globally competitive. The global intensification of competition that has its regulatory root in the widespread adoption of the national template of the neoliberal model of development is thus centrally responsible for the exacerbation of the social harms of neoliberal forms of conventional agriculture.

The agenda of globally mobile capital coupled with the cheapening of the costs of production in global commodity networks affects everyone as the neoliberal model of development exposes all to the logic of global capital. Furthermore, the globalisation of capital, in this case in agriculture, also leads to an increasing amount of specialised export led production within nation states. Only those agricultural products that can be produced within the nation state at the level of global competitiveness can be sustained. All agricultural products that can be produced more cheaply elsewhere are imported. This locational competition further incentivises countries to be relaxed about ecological standards in order to attract capital. Thus, the viability of self-sufficient ecologically sustainable local agricultural production is deeply threatened by the NMD in agriculture. The problem is that as production for export is incentivised, support for production for the

domestic market is reduced – and not all producers can compete on the global market. Thus, small producers find themselves in a pinch between reduced support and a lack of competitiveness. This pinch threatens livelihoods and food sovereignty around the world.

Globalised supermarket chains command the global supply chains of the neoliberal global form of agricultural accumulation. The neoliberal global food regime of accumulation can also be characterised by the dominance of large-scale, mono-cultural, chemically driven GMO forms of industrialised agricultural production. The present neoliberal iteration of conventional agriculture generates two substantial issues: 1) Competitiveness (due to the massive scale of productivity with no attention paid to ecological implications) of large scale industrial agricultural production participating in the neoliberal global regime of accumulation which squeezes smaller local producers involved in local regimes of accumulation. 2) The share of agricultural production that goes to supermarkets further squeezes already tight margins for smaller local producers, implying a subsequent threat to the livelihoods of small-scale producers. As Cameron (2007) points out “The current trend in agriculture is to get big or get out... In New Zealand there has been a change from selling by auction to selling by contract, a system that favours fewer, larger suppliers. Growers get lower prices contracting directly with supermarkets compared to auctioning their produce” (p. 371).

Within the global form of the agricultural supply side chain under the neoliberal global food regime of accumulation “supermarkets are the predominant modern day food retailers” (Cameron, 2007, p. 377), the distributors. What is problematic about this is not simply that it favours big producers on a contract basis, as mentioned above, but also that, “The economies of scale fostered by a centralized retailing system, supported by good transport and effective scientific research, drove the price for sturdy horticultural commodities so low that small-scale producers and those in less favorable climate zones were being squeezed out of wholesale market channels” (Brown, 2001, p. 669). That is, the present NMD in agriculture results in traditional and neo-peasantry (and forms of conventional agriculture that while viable in the previous Fordist era, are no longer) coming under increasing threat. The regulatory architecture of the NMD in agriculture drives the growing dominance of its associated accumulation regime of agriculture, and the subordination of alternatives.

Le Heron (2003) suggests that

Because of the country's openness and its high dependence on international trade there are grounds to expect sensitivity in New Zealand to international and domestic pressures in the agri-food sectors... Such widespread ordering by international (and to some extent national) market and environmental expectations (and the many institutions that frame up and oversee such expectations) is an especially strong contemporary feature of the food sector." (Le Heron, 2003, p. 115).

This reflects both regime and regulation aspects of the prevailing NMD in agriculture. Namely, the high dependence on international trade that Le Heron (2003) refers to is demonstrative of the regulatory nexus of the neoliberal model of development that liberalises trade barriers that in turn facilitates a global regime of accumulation in which nation states lose national self-sufficiency. Nation states' management of national capital participating in the neoliberal global food regime of accumulation prioritises competitive advantage for export and simply imports all else. Sensitivities and vulnerabilities are inevitable in the neoliberal form of conventional agriculture emerging as a global regime of accumulation. The international and domestic pressures which Le Heron (2003) speaks to can be defined as the national-transnational regulatory nexus. That is, the widespread adoption of the neoliberal national template engenders a transnational environment that in turn constrains the possibilities of national development. This regulatory nexus thus facilitates the globally dominant neoliberal global regime of accumulation which proves more competitive than alternative regimes of accumulation. As such, this drives increasing convergence of production, distribution and consumption forms towards the neoliberal form of conventional agriculture emerging as the neoliberal global food regime of accumulation.

The distinct neoliberal global food regime of accumulation emerges as dominant in the prevailing era because the national-transnational regulatory nexus of the NMD in agriculture puts astounding pressure on nation states to maintain proactive regulation conducive to the global market civilisation desired by transnational capital. This problematically ensures a global imperative of competition that drives agriculture towards increasing industrialisation

to maintain competitiveness. However, the industrialisation of agriculture renders non-capitalist, non-industrialised forms of agriculture non-viable. Thus, the peasant mode of agriculture faces increasing threats from industrialised agriculture. Yet it is the peasant modes of agriculture around the world that still produce the most food for the global population (McKeon, 2015; McMichael, 2016) and often within those necessary environmental/climatic limits. On the other hand, the increasing dominance of neoliberal forms of industrialised agriculture in global commodity chains which arises from the globalisation of competition in a world where capital can move freely, push those limits and present as the contemporary dilemma to be solved.

‘Alternative agriculture’ as subordinated potentially post-neoliberal local food regimes of accumulation in the current era

Alternative agriculture is a trans-era concept that emerges in distinct forms in particular eras defined by models of development. That is, in the prevailing neoliberal era, defined by the NMD in agriculture, alternative agriculture emerges as local food regimes of accumulation that resist both regime and regulation aspects of the NMD in agriculture. Local food regimes of accumulation are an alternative to the neoliberal global food regime of accumulation. Alternative local food regimes of accumulation resist the impetus towards participation in the neoliberal global food regime of accumulation despite its dominance. This dominance is facilitated both through the regulatory architecture of the NMD in agriculture and the global competition imperative that arises due to the widespread adoption of the national regulatory template of the neoliberal model of development in general. Thus, in the prevailing era alternative agriculture concretely emerges as local food regimes of accumulation that resist the neoliberal global food regime of accumulation whilst also being globally subordinated to this neoliberal form of conventional agriculture (see Figure 3 below). Alternative agriculture represents the organic development of informal elements of a local alternative food regime of accumulation. These elements of an alternative local regime of accumulation are central to the conceptualisation of a national template alternative to the currently prevailing neoliberal national template.

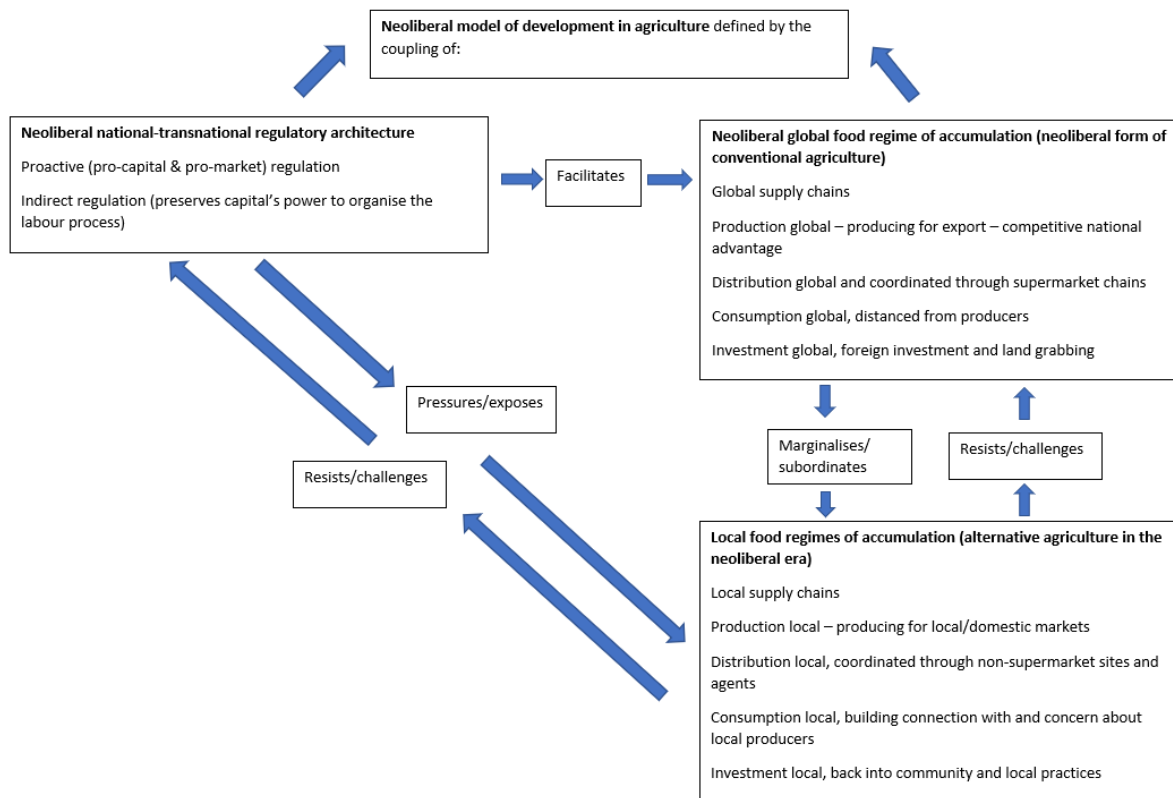


Figure 3 Alternative and conventional agriculture in relation to the NMD in agriculture

Elements of agricultural practice defined as alternative, such as those given in the tables above, usefully provide some general parameters that ground a diverse range of local regimes of accumulation in the neoliberal era. It is these alternative local food regimes of accumulation that hold the seeds for the foundations of food regimes of accumulation in a post-neoliberal world. Due to the global competition that drives the planetary spread of the neoliberal form of conventional agriculture, alternative agriculture (informal elements of a local regime of accumulation with actual labour processes at the base) is constantly under threat from the more competitive neoliberal global regime of accumulation. Nevertheless, these alternative local regimes of accumulation resist the particular form of the globalisation of agricultural accumulation that is facilitated by the regulatory impetus of this era and that increasingly dominates the specific form of conventional agriculture today.

To reiterate, I am defining the specific emergence of alternative agriculture in the prevailing era in contrast to a trans-era definition. For example, in defining alternative agriculture Crosson (1989) suggests that

Alternative agriculture, sustainable agriculture, organic farming, regenerative agriculture, and low-input agriculture are terms that loosely denote both a philosophy of farming and a set of farming practices... The farming practices consistent with the philosophy of alternative agriculture vary in their details, but they have an important feature in common: They are designed to drastically reduce, preferably to eliminate, the chemical pesticides and inorganic fertilizers that are key elements of conventional agricultural systems (p. 28).

Crosson (1989) is mobilising a trans-era concept that does not apply to any particular time and space and thus does not specify mid-range distinctions.

Madden (1989) falls to the same critique, defining alternative agriculture, as

a goal and a movement. Like every goal, alternative agriculture is rooted in value judgements. By their very nature, value judgements vary from person to person; they change slowly in good times, but they shift more abruptly in response to crises. The values that gave rise to the alternative agriculture movement include alarm over human health risk from exposure to agricultural chemicals in air, water, and foods; abhorrence of environmental degradation, severe soil erosion, and depletion of natural resources; concern over the future of the family farm; and a desire to protect the rights of future generations to an abundance of food, clean water, and a decent environment (pp. 32).

In presenting alternative agriculture as a goal and a movement Madden (1989) does open up space for considering the transformative and inherent resistance in alternative agriculture. However, this should be considered alternative in a particular era, e.g. consider in relation to what it is an alternative to. In the prevailing neoliberal era, alternative agriculture emerges as *local* food regimes of accumulation; *alternative to* the neoliberal form of conventional agriculture which emerges as the neoliberal global food regime of accumulation.

It is common in the literature to define agriculture using the trans-era non-specific terms 'conventional' and 'alternative'. In defining alternative food provisioning Maye and Kirwan

(2010) also fail to concretely specify what these alternative food provisioning networks (AFNS) are alternative to or how this changes in particular eras. They argue that AFNS

constitute organized flows of food products that connect people who are concerned with the morals of their consumption practices in some way with those who want a better price for their food, or who want to produce food in ways counter to the dominant (or conventional) market logic (Whatmore and Clark, 2006). These new and rapidly expanding food networks are typified by the growth in sales of fair trade, organic, local, regional and speciality foods, and of retail outlets such as farmers' markets (FMs)" (p. 1).

The dominant logic that Maye and Kirwan (2010) refer to is the current neoliberal form of industrial capitalist agriculture. It is in resistance to this that local regimes of accumulation emerge and can be called alternative in the prevailing era.

Alternative agriculture in the food sovereignty movement

As the neoliberal form of conventional agriculture becomes more global and more dominant, the inherent resistance in alternatives grows. The alternative local regimes of accumulation that have been increasingly threatened and subordinated in the prevailing era have cohered in a social movement of resistance, originating in the global South - the Via Campesina social movement. This is a politically motivated movement that calls out the failings of what I call the NMD in agriculture. McMichael (2016) discusses the food sovereignty movement as being

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 counter-movement, 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' (pg. 649-653)

Here we can see recognition of the emancipatory potential of alternative agriculture as resistance to the NMD in agriculture. McMichael (2016) is speaking to the contemporary mid-range form of the industrial capitalist mode of production. Identifying the imposition of market relations and commodification on every aspect of life is an integral part of McMichael's (2016) specification of the corporate food regime that aligns closely with my alternative conception of the NMD in agriculture. By addressing the specific neoliberal assault McMichael (2016) is delineating the current neoliberal era that is distinct from the earlier eras of industrial capitalist agriculture. There is a specific neoliberal form of industrial capitalist (i.e. conventional) agriculture in the prevailing era which McMichael (2016) defines though misses the coupling of this neoliberal global regime of accumulation with a neoliberal national-transnational regulatory architecture that facilitates this neoliberal form of conventional agriculture.

In outlining a Vía Campesina declaration McMichael (2013) is identifying the specific neoliberal global regime of accumulation against which alternative local regimes of accumulation and the actors who participate within them resist and mobilise. As cited by McMichael (2013)

At the time of the U.N. Rio+20 conference (2012), Vía Campesina declared: 20 years after the Earth Summit, life on the planet has become dramatically difficult. The number of hungry people has increased to almost a billion, which means that one out of every six people is going hungry, mostly children and women in the countryside. Expulsion from our lands and territories is accelerating, no longer only due to conditions of disadvantage imposed upon us by trade agreements and the industrial sector, but by new forms of monopoly control over land and water, by the global imposition of intellectual property regimes that steal our seeds, by the invasion of transgenic seeds, and by the advance of monoculture plantations, mega-projects, and mines. We should exchange the industrial agroexport food system for a system based on food sovereignty, that returns the land to its social function as the producer of food and sustainer of life, that puts local production of food at the

center, as well as the local markets and local processing. Food sovereignty allows us to put an end to monocultures and agribusiness, to foster systems of peasant production that are characterized by greater intensity and productivity, that provide jobs, care for the soil and produce in a way that is healing and diversified. Peasant and indigenous agriculture also has the ability to cool the planet, with the capacity to absorb or prevent almost 2/3 of the greenhouse gases that are emitted every year (p. 80-81).

That is, the prevailing neoliberal form of conventional agriculture culminates in a global regime of accumulation that is defined by large-scale, industrialised monocultural production, a monopoly of seed management, and global commodity chains that squeeze out small producers and expel them from the land. It is this form of neoliberal conventional agriculture that all must confront. The Vía Campesina movement is mobilising the inherent resistance in their alternative local food regimes of accumulation to fight for a post-neoliberal era.

The neoliberal form of conventional capitalist agriculture is dominant under the NMD in agriculture which proactively stimulates this global food regime of accumulation. Nevertheless, alternative local regimes of accumulation and actors within continue to exist and resist the neoliberal impetus towards the neoliberal form of globally dominant capitalist agriculture. The mid-range argument that I adopt focuses on how these practices challenge the particular mid-range neoliberal era, by offering embryonic elements of a counter-hegemonic alternative. That is, these practices are resisting the neoliberal form of the capitalist mode of production.

Articulation of the neoliberal global food regime of accumulation and alternative local food regimes of accumulation

Although I have specified the concrete emergence of the trans-era distinction between conventional and alternative agriculture in the prevailing neoliberal era, I want to problematise the 'hardening of categories' (Madden, 1989). This is because, for example, as Maye and Kirwan (2010) note, "Today... a significant number of AFN [Alternative food network] products are now sold in supermarkets. In the UK, for example, around 75 percent

of organic produce is sold through supermarkets. The simple distinctions... between 'alternative' and 'conventional' networks are therefore increasingly contested and becoming difficult to maintain in practice" (p. 1). That is because in practice, the emergence of alternative agriculture in the neoliberal era as local food regimes of accumulation are subordinated to the dominant exchange form of agriculture in this NMD in agriculture. The power of supermarkets is a key aspect of the neoliberal form of conventional agriculture which increasingly limits local producers' options for alternative distribution and consumption.

To provide a further example, employing trans-era elements outlined in the tables by both Beus and Dunlap (1990) and Maye and Kirwan (2010), perhaps a particular agricultural practice uses agrochemicals however is still small-scale or artisanal in method. Or as Maye and Kirwan (2010) point out, if production is organic and yet the produce is distributed through a supermarket, reaching consumers involved in large supply chains, again the dichotomised categories blur. This points to the hybrid forms of agriculture that combine alternative practices with current industrial agricultural forms. Hybridisation of alternative local regimes of accumulation with the neoliberal global food regime of accumulation points to the dominance of this neoliberal form of conventional agriculture that is facilitated by the regulatory architecture of the NMD in agriculture. Furthermore, it demonstrates the global competition imperative and pinch on small-scale producers participating in local food regimes of accumulation; their options are limited at which point hybridisation or the articulation of alternative aspects of regime with the neoliberal form become the only viable option.

Such articulation also offers a cautionary tale. That is, we cannot suggest wholesale that alternative local food regimes of accumulation entirely resist the prevailing neoliberal form of conventional agriculture and its related crises. This sentiment is echoed by others (Hinrichs, 2003; DuPuis & Goodman, 2005; Winter, 2003) For example, Winter (2003) suggests that localism should not be equated "simplistically with food safety and environmental issues" (pg. 30). That is, pursuing localism may not always be premised on a concern for the environment. 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" (pg. 30). This demonstrates how localisation

does not in and of itself imply that ecological approaches should be associated with the next post-neoliberal era.

For example, Rachel from Six Toed Fox Organics (one of my case studies to be discussed in chapter five) suggests that although she would like to think of the model she is a part of as being entirely distinct from what I call the neoliberal global food regime of accumulation which centres around export-orientated producers and supermarkets, she does not really think they are. She notes that “we can’t separate ourselves from those same regulations. We deal with two supermarkets at the moment” (personal communication, January, 2019). This could be interpreted as either: a) presently existing alternative forms of agriculture emerging as local food regimes of accumulation being appropriated by the neoliberal mode of global coordination of food consumption (supermarkets); or more positively as b) the subversion of the latter to localisation which is a key part of alternative local food regimes of accumulation. Either way, what emerges here is the articulation and hybridisation of neoliberal forms of conventional agriculture with alternative non-neoliberal agricultural forms.

Rachel points out that at the end of the day their goal is to distribute food locally, and that the supermarket is where people are buying food from (personal communication, January, 2019). Rachel suggests that the demographic who want to purchase local food does frequent the farmers’ market and the organic stores that they supply but that these consumers are not the majority of food shoppers (personal communication, January, 2019). As Rachel says, “The majority of people eating aren’t in that 10 to 20 percent of people” (personal communication, January, 2019). However, Rachel hopes that by selling their produce through the supermarket they will reach beyond this demographic and provide for the regular shoppers, enabling them to purchase “some food that’s good for the planet” (personal communication, January, 2019).

Problematically, extending into more conventional forms of agricultural distribution like the supermarket has meant that small-scale producers, like Six Toed Fox Organics, with far less means, are subject to the same regulations and constraints as large-scale producers, which Rachel identifies as a setback (personal communication, January, 2019). Rachel’s hope that supplying to supermarkets will enable more consumers access to alternatively produced

foodstuffs demonstrates the intentional subversion of this articulation between the neoliberal global regime of accumulation and the alternative local food regime of accumulation that Rachel participates in. It is a concrete example of resistance to the neoliberal form of conventionally produced agriculture. Nevertheless, this example also reflects that the articulation of the neoliberal form of distribution and consumption actually appropriates existing alternatives often through a lack of choice. For Rachel to distribute her food to the majority of food shoppers she must engage with the neoliberal global food regime of accumulation which centrally involves supermarkets.

In this same vein, Rachel notes that it is still the convenience foods that make their production viable (personal communication, January, 2019). To be appealing in a supermarket alongside a conventionally produced product their bagged products have to be convenient (Rachel, personal communication, January, 2019). Rachel bemoans the amount of plastic achieving convenience necessitates and identifies that it is part of the compromise to make local organic produce available to the majority of food consumers (personal communication, January, 2019). Rachel points out that if there was an alternative to plastic for their bagged convenient goods, they would use it. They have trialled about twenty different products to no avail mainly because the available alternatives increase their costs to a point where they cannot compete in the supermarket (personal communication, January, 2019).

The use of plastic is about what is cheaper and relates to the fact that as long as the NMD in agriculture's regulatory form promotes competition with few environmental restrictions, then local producers must adopt plastic to remain competitive. This is particularly necessary when alternative local producers are engaging in an articulation with the neoliberal global food regime of accumulation. Such an articulation implies they are competing with the neoliberal form of conventional production; namely, large-scale global producers minimising costs through global commodity chains that prioritise competitive specialisation.

The other issue Rachel notes is that "when you try alternative ways of presenting that product to the consumer, they often reject it. What they say is very different to how they actually behave... [At] both Fresh Choice and at the Farmers Market we offer a free choice self-serve salad. Fresh Choice tried it for like two months. I remember the produce manager

ringing me up one day, and she was like, “We can’t do this anymore. They’re all too lazy” (personal communication, January, 2019). The neoliberal form of conventional agriculture emerges as the neoliberal global food regime of accumulation. The continual, year-round supply of globally sourced, cheap, convenient products subordinate alternatives. Without internationally coordinated regulatory changes that take plastic out of the equation and focus on reframing convenience around local, seasonally convenient food packaged in an environmentally friendly way, then responsible alternative agricultural practices without plastic and convenience will be hard to sustain. That is, the extent to which alternative practices are constrained from growing within the competition constraints imposed by the NMD in agriculture will continue to frustrate movement beyond it.

An alternative to the NMD in agriculture

As the Food and Agriculture Organization of the United Nations (2019) state, “Family farmers, including peasants, indigenous peoples, traditional communities, pastoralists, fishers, mountain farmers, and many other groups of food producers, hold unique potential to promote transformative changes in how food is grown, produced, processed and distributed” (p. 12). The dichotomy between conventional and alternative agriculture, that applies across different mid-range eras of capitalism, is becoming more pronounced in this neoliberal era. That is, not only is the form of conventional agriculture becoming more global and more dominant, but alternative agricultural movements of resistance in both the South and the North are also proliferating. In bifurcating the neoliberal global food regime of accumulation and alternative local food regimes of accumulation it can be argued that alternative agriculturalists who are currently subordinated hold emancipatory potential for creating a post-neoliberal world.

This includes a tale of two peasantries (to be explored in chapter four) that corresponds with the distinction between the global South and North. The existence of the peasantry in both traditional and new forms, and the labour processes and more broadly the local regimes of accumulation that they are a part of, express potential solutions to the failings of the neoliberal global form of conventional industrial agriculture. That is, as so aptly put by McMichael (2013) when speaking of the corporate food regime, or what I call the NMD in agriculture, “With growing awareness of the “externalities” of the agri-food system (climate

change, ecosystem degradation, resource limits, biofuels, public health, slum expansion and so on) it is no longer sufficient to view the agrarian question simply as transition” (p. 79).

The crises of the present, more intensified and extended through the global form of neoliberal conventional agriculture, must be addressed through alternatives to this form of neoliberal agriculture. We can move beyond the peasant question as one of transition, and instead see the embodiment “or foreshadowing [of] an alternative agrarianism”

(McMichael, 2013, p. 80). Alternatives, which in the neoliberal era, emerge as local food regimes of accumulation both in the global North and South, could be enabled to flourish through the deployment of regulatory forms that support and facilitate such accumulation regimes in a post-neoliberal model of development in agriculture.

Alternative agriculture emerges in this era is an alternative to the NMD in agriculture, and its specific neoliberal accumulation regime. That is, alternative agriculture in the prevailing era represents the organic development of informal elements of a local food regime of accumulation. However, as I have argued, in order to realise the full emancipatory potential of this resistance, the elements of local regulation and regime need to be complemented by an alternative national-transnational regulatory framework that could sustain local accumulation-regulation frameworks. Namely, an alternative model of development needs to be conceptualised defined by alternative local food regimes of accumulation and an alternative national-transnational regulatory nexus that facilitates these.

Remembering that this thesis is driven by a methodology of praxis, that is, that the power of ideas or interpretation lies in their practical application to change the world, I now want to briefly put forward some key considerations pertaining to the conceptualisation of an alternative model of development. Firstly, an alternative national regulatory template that forms part of an alternative national-transnational regulatory nexus must be premised on flexibility. That is, in contrast to both the Fordist and prevailing neoliberal model of development, the national templates of which permit no flexibility for nation states to pursue development in line with diverse worldviews and ways of life, the alternative model of development must not become a similar top-down imposition. Nation states need to have the capacity to develop their own local regulation/accumulation projects cognisant of diverse cultures and communities within this imagined sovereignty. Nation states should

have the flexibility to develop in their own way, with their own priorities that speak to their specific circumstances. This is the flexibility that must be maintained within an alternative model of development, specifically, within the national template of the regulatory nexus of the alternative model of development. Nevertheless, there must be some universal features that will be common to all nation states and all diverse local regimes of accumulation to ensure that the environmental and social goals of the model of development are met and maintained. That is, place-based flexibility should be bound by environmental and social prerogatives that result in global cooperation rather than global competition.

In considering the establishment of a new model Lipietz (1992) suggested something similar, putting forward the need to maximise “the range of choice” (p. 28). However, building on this I suggest that rather than being afforded a range of options, one flexible national regulatory template should be adopted which allows for place-based variations at the local level. Lipietz (1992) too suggested that national choice should be tempered by “global sovereignty... where the simple realization of our ‘common humanity’ ought to make us recognize a ‘world law’ superior to national freedom of choice” (p. 28). This is necessary because the success of a model of development relies on tempered national choice. After all, as mentioned in the previous chapter, Keynesianism could not operate in one country. The Fordist model of development failed in part because capital could escape the weight of Keynesianism (Aglietta, 1998) in the newly industrialising countries. It is with the widespread adoption of the national template that the success of the model comes into fruition, through the engendering of a particular transnational environment that in turn limits some and enlivens other possibilities for the nation state. Thus, the national-transnational regulatory nexus of an alternative model of development should be defined by the dialectic engagement between a flexible national template and a transnational framework of regulation which frames the limits and possibilities of flexible and varying national development within prerogatives of global unity and global cooperation. Given the flexibility required of the national regulatory template, how this plays out in actuality at the national level entails a national or local regime of accumulation, and a consequential regulation and accumulation nexus at the local level. That is, an alternative model of development may engender local models of development defined by a regime of

accumulation and regulatory architecture at the local level, enabled by the broader model of development.

The second consideration pertaining to an alternative model of development that I want to consider is the need to safeguard the freedom of people from the power of capital. In the contemporary era people, domestic capital and nation states have decidedly less power in comparison to transnationally mobile capital. Although neoliberal rhetoric promotes being masters of our own destiny, we are actually confronted with a world in which all must pander to the needs of transnationally mobile capital. This is because of the capacity of capital flight and the success of transnational capital in the global competition that results from the widespread adoption of the neoliberal national template. The preservation of democratically determined choices requires the tempering of capital's power. Thus, the national-transnational regulatory nexus of an alternative model of development must subordinate capital's power to a democratic prerogative. How to achieve this subordination is explored in the next chapter.

Conclusion

In this chapter I have explored the specific form of the neoliberal global food regime of accumulation that couples with the neoliberal national-transnational regulatory framework to define the NMD in agriculture. To unpack the neoliberal food regime of accumulation I concretely specify what often remains trans-era. Namely, Beus and Dunlap (1990) and Maye and Kirwan (2010) each respectively provide a tabled summary of the distinctions between conventional and alternative agriculture (Table 2 and 3). However, this distinction fails to embed these descriptors in a concrete regime of accumulation that emerges in a particular era. As this thesis is focused on a mid-range position, I suggest that the regulatory forms deployed in a particular era facilitate a specific form of conventional agriculture that becomes dominant. In the prevailing era, within the NMD in agriculture, it is the neoliberal form of conventional agriculture that emerges as the dominant neoliberal global food regime of accumulation that is facilitated by the neoliberal proactive national-transnational regulatory nexus.

The neoliberal global food regime of accumulation is centrally defined by global commodity chains that extend worldwide and the growing power of the supermarket to coordinate and

distribute the consumption of globally produced, cheap products. Methods of production and the product itself are cheapened in the neoliberal global food regime of accumulation to maintain competitiveness on the global market. In this dominant neoliberal global food regime of accumulation small-producers are unable to remain competitive and are squeezed out.

In response to this, local food regimes of accumulation emerge as alternative and are defined by geographically embedded local production and consumption. Local food regimes of accumulation provide small-producers a viable alternative that remain distinctly cooperative as opposed to the competitiveness that defines and limits engagement in the neoliberal global food regime of accumulation. Local food regimes of accumulation demonstrate different elements that might promote social and environmental justice and can contribute to attending to the crises befalling our people and planet under the NMD in agriculture. To enable these presently alternative local food regimes of accumulation to flourish I suggest we need to define and implement a new regulatory form – direct regulation. In the next chapter I define and explore the notion of direct regulation which I argue is key to realising the full emancipatory potential of alternatives to the dominant neoliberal global food regime of accumulation. Beyond providing alternatives to the dominant neoliberal accumulation regime, mobilising direct regulation can invigorate resistance to the NMD in agriculture more broadly.

Chapter Three

Taking back production from capital: Power to the people!

Introduction

In the neoliberal era defined by the NMD in agriculture, people, domestic capital and nation states have decidedly less power in comparison to transnationally mobile capital. The proactive national-transnational regulatory nexus of the NMD in agriculture brutally exacerbates capital's power and facilitates the neoliberal global food regime of accumulation in which transnational capital's power dominates. At the base of regimes of accumulation are labour processes (understood as the actual process of work). In a trans-era sense capital has managed the organisation of the labour process. As such, the labour process under 'the watchful eye of the capitalist' is one in which people have very little power, despite instances of worker resistance. It is the capitalist's prerogative to organise the labour process. As work forms such a central part of peoples' lives this lack of power within the labour process spills into a lack of power beyond the workplace. In this chapter I explore a mid-range examination of the power of capital to organise the labour process in specific capitalist eras. Furthermore, I consider how regulation could be used as a tool to take back some of this power from capital and reassign it to workers through a collaborative process. This involves developing an extension of the concept 'regulation'.

In an orthodox sense regulation is argued to involve rules and mechanisms that govern and guide the behaviour of actors to maintain a stabilised regime of accumulation and counteract the fundamentally unstable logics and relations of capitalism (Aglietta, 1979; Lipietz, 1988). I have adopted a revised version of regulation (Neilson, 2012; Neilson, 2020; Neilson & Stubbs, 2016) defining rules that either counteractively constrain *or* proactively stimulate the core logics and relations of capitalism at both the national level and through transnational governing bodies such as the WTO and the UN. I further extend 'regulation' in this chapter, defining 'indirect' and 'direct' regulation to account for the different extents and dimensions of regulation which can be imposed on the labour process and beyond this, food regimes of accumulation in different eras across the capitalist history.

This is a project that ties into my proposition in the previous chapter for the need to conceptualise an alternative model of development. Here I am suggesting that an

alternative national-transnational regulatory nexus should deploy not simply counteractive regulatory forms but also *direct* regulatory forms to maintain the core directives of an alternative model of development. I argue that direct regulation of the labour process involves the collaborative construction of a labour process model between labour and their representatives, regulatory agencies and capital. This labour process model then becomes part of the national regulatory template of an alternative model of development. A labour process model defines the key parameters within which place-based variations emerge. That is, within the nation state, communities are able to devise locally appropriate labour process models organising actual labour processes on the principle of diversity. This locational diversity is subject to the universal constraints of an overarching labour process model that maintains articulation with the national regulatory template of the model of development and the social core of the model of development writ large.

In orthodox understandings 'regulation' was conceptualised as counteractive, as the weapon of democracy. Neilson's (2012; 2020; Neilson & Stubbs, 2016) revisions demonstrate how regulation could also be used as a weapon of capital in the form of proactive regulation. However, in considering the potential direct regulation of the labour process we are returning to that core idea of orthodox regulation theory, that regulation can be a weapon of democracy. This circling back is not to suggest we return to orthodoxy and forget the revisions that have been made. Rather this return is to emphasise two things: 1) Regulation can be employed for multiple purposes and different agendas and yet 2) Regulation can be employed once again as a weapon of democracy in the space of the organisation of the labour process.

Extending the concept 'regulation' allows us to more closely consider how labour process models/labour processes/the productive core of capitalism is regulated in this era and how this might be done differently in the future. This, in turn, enables an exploration of the potential to directly regulate the labour process to steer sectors, and in turn the wider capitalist economy, in more socially and environmentally just directions.

To make this argument I reflect on some of the existing literature in labour process theory. What I demonstrate is that although this literature speaks to the power of capital to organise the labour process and to some extent various responses and resistance to this, the

context is trans-era; based on a long homogenous capitalist history. Certainly, throughout the long run of capitalist history, and even through the more recent Fordist and neoliberal eras of capitalism defined by particular models of development, the organisation of the labour process has remained the prerogative of capital (Marx, 1976/1990). As Knights and Willmott (1990) suggest “Marx anticipates that the control over every aspect of work, experientially as well as technologically, will increasingly be determined by the priorities and demands of capital” (p. 3).

However, capital’s long held power to organise the labour process is affected by forms of what I call indirect regulation that are mobilised as part of the national-transnational regulatory nexus of models of development. That is, capital’s prerogative is altered across different eras throughout the long capitalist history. The autonomy of capital to organise the labour process has been *indirectly regulated* by the state and transnational organisations through trade laws, Health and Safety regulations, Union demands, or through the regulation of demand. This indirect regulation is deployed differently in conjunction with the Fordist counteractive and neoliberal proactive regulation defining different mid-range eras.

Nevertheless, while capital must take indirect regulation into account, indirect regulatory forms frame capital’s capacity for organising the labour process as much as a wooden frame boxes in sand. Thus, I want to extend the conceptualisation of regulation to include ‘direct regulation’ as a regulatory form that can be mobilised to subordinate the long-observed capital prerogative to a democratic prerogative of the people. That is, while indirect regulation frames capital’s organisation of the labour process, within that frame capital’s capacity to build sandcastles or tear them down has not been challenged. Production has remained the domain of capital through a lack of *direct regulation*. I am defining direct regulation as that which would make the organisation the labour process a democratic process, one defined by regulators working in collaboration with actors at multiple levels, not solely by capital.

Firstly, I provide an overview of the ‘labour process’ as defined by Marx (1976/1990), this provides my working definition of the labour process. However, Marx’s (1976/1990) focus is on the forms of the labour process under capitalism. The argument presented here is

concerned with consciously designing a labour process model. That is, not labour processes organised under the hand of the capitalist, but rather deliberately and intentionally designing a labour process model that emerges from a collaborative process with multiple agents. This collaborative process can account for local needs and ways of life and yet ensure that the labour process model is harmonised within a national template of regulation which in turn forms part of the national-transnational regulatory nexus of an alternative model of development. Thus, although Marx's (1976/1990) work provides the working definition of 'labour process', my argument extends his work to consider distinctions in the organisation of the labour process across different eras in the capitalist history. I then present a brief section on Braverman (1974) which demonstrates that he too only presents a discussion of forms of the labour process under capitalism that assumes capital's autonomous prerogative and does little to move beyond this.

There is an extensive literature dealing with the labour process since Marx (1976/1990) and Braverman (1974). This literature emerged to a large extent from the International Labour Process Conference (ILPC). Beginning nine years after the emergence of Braverman's *Labour and Monopoly Capital*, and now in its 28th year, the ILPC continues to present an engagement of scholars and policy makers investigating developments in the organisation of work (Smith, 2008). This literature is fraught with debate; however, this debate is still concerned with the form of the labour process under capitalism. It is not the purview of this chapter to review the extensive literature on this (for this see Smith, 2015; Jaros, 2005). Rather, this section further demonstrates the lack of movement beyond considerations of the labour process under the autonomous prerogative of capital. Thus, this chapter inserts my revised and extended regulation theory into labour process theory. In doing so I enable the conscious design of the labour process beyond capital's prerogative.

The project is centred on the notion of giving power back to the people in the space of the labour process through 'direct regulation'. Regulators positioned as part of a democratic prerogative provide a regulatory context for the way work is organised via the labour process model. In achieving this, the organisation of the labour process is removed from the sole dominion of capital. This direct regulation of the labour process must form part of the abstract regulatory blueprint for the nation state in the form of a labour process model as part of the construction of an alternative model of development. An alternative model of

development might perhaps provide a practical project that can avoid the crisis path and inevitable environmental and social implosion of the present neoliberal model of development.

Marx on the ‘labour process’

Labour process in the abstract

Methodologically, Marx (1993) encourages us to begin with “the general, abstract determinants which obtain in more or less all forms of society” (p. 108). Thus, to define the labour process, which is at the core of this chapter, I begin with the abstract. Separating the labour process in the abstract from its concrete expressions enables us to distinguish constant and unchanging from historically specific features, i.e., it “fixes the common element” (Marx, 1993, p. 85). According to Marx (1976) “the simple elements of the labour process are (1) purposeful activity, that is work itself, (2) the object on which that work is performed, and (3) the instruments of that work” (p. 284). The outcome of the labour process is a use-value, emerging in the form of a product (Marx, 1976). In sum

The labour process, as we have just presented it in its simple and abstract elements, is purposeful activity aimed at the production of use-values. It is an appropriation of what exists in nature for the requirements of man... it is common to all forms of society in which human beings live (Marx, 1976, p. 290).

Thus, we have the labour process, understood in its abstract sense as the actual productive core of human effort. That is, *intentional activity acted upon nature in order to meet human needs; involving the object which is being worked on and the instruments necessary to act on that object.*

However, it is important to remember that this process of abstraction is only one that can occur within concrete reality. As Marx (1993) suggested “the most general abstractions arise only in the midst of the richest possible concrete development, where one thing appears as common to many, to all” (p. 104). Identifying key elements of the labour process common to all epochs is the necessary point of departure for considering historically specific technical and social forms of the labour process, e.g., the labour process under specifically capitalist conditions. In this way we are able to think of the labour process in the abstract as

a universal process that is “always socially organised within different historical modes of production” (Knights & Willmott, 1990, p.2). As Smith (2016) articulates

All political economies or modes of production have labour processes – feudalism, slavery and capitalism for example. Different modes of production create different labour processes, involving distinct ways of combining human producers, instruments, raw materials and purposes (p. 206).

Beyond this, I argue that the labour process is socially organised within different *eras* across the capitalist *epoch*/history. That is, beyond distinguishing between epochal forms of the labour process (e.g., feudal and capitalist) my focus is on investigating specific forms of the labour process in different capitalist *eras*; i.e., within the *neoliberal* form of the capitalist labour process. The organisation of the labour process is affected in different ways by forms of indirect regulation being deployed alongside either counteractive and/or proactive regulation.

The capitalist form of the labour process

To begin with I investigate the specific form of the labour process in the capitalist *epoch*. Historically specific to the capitalist social form of the labour process are two characteristics of labour-power’s commodification:

First, the worker works under the control of the capitalist to whom his labour belongs... Secondly, the product is the property of the capitalist and not that of the worker, its immediate producer (Marx, 1976/1990, p. 291-292).

Marx (1976/1990) argues that from the capitalists’ point of view

the labour process is nothing more than the consumption of the commodity purchased, i.e. of labour-power; but he can consume this labour-power only by adding the means of production to it. The labour process is a process between things the capitalist has purchased, things that belong to him. Thus, the product of this process belongs to him (p. 292).

The labour process under the eye of the capitalist is not simply about the production of use-values, although use-values are produced. Use-values are only produced because they bear

exchange-value. The capitalist is not interested in producing, for example, bottles, for the sake of producing bottles as a use-value, but rather bottles as they are destined to be sold as a commodity. Furthermore, this commodity should be greater in value than the total value needed to produce it. The means of production and the labour-power that were used in the labour process should be of lesser value than the value of the product that results from the labour process. Thus, for the capitalist the labour process is the means by which not just use-values are created, nor simply exchange-values, but surplus-value is created (Marx, 1976/1990). In the pursuit of surplus-value capitalists expect of labour-power a unique value. That is, labour-power is “a source not only of value, but of more value than it has itself” (Marx, 1976/1990, p. 301).

To further illustrate this point, Marx (1976/1990) suggests that

Capitalist production is not merely the production of commodities, it is, by its very essence, the production of surplus-value. The worker produces not for himself, but for capital. It is no longer sufficient, therefore, for him simply to produce. He must produce surplus-value. The only worker who is productive is one who produces surplus-value for the capitalist (p. 644).

The toil of the worker turns labour into capital for the benefit of the capitalist.

Marx (1976/1990) argues that “Capitalist production is the first to develop the conditions of the labour process, both its objective and subjective ones, on a large scale – it tears them from the hands of the individual independent worker, but develops them as powers that control the individual *worker* and are *alien* to him” (p. 1056). Marx’s (1976/1990) focus on the forms of the labour process under capitalism provides a thorough exposition of the power of capital to organise the labour process through a two-stage process of subordination. Formal subordination refers to the process through “which people lose their independent means of subsistence, and become compelled as a matter of survival to enter into exploitative wage-labour relations with capital” (Neilson, 2007, p. 94). Once engaged in the wage-labour relation with capital labour is then subject to the process of real subordination; “achieved only by the machine system that replaces the skill, autonomy and individuality of the worker. The form and intensity of work is driven by the machine system itself, and workers are harnessed to the machine’s ‘unvarying regularity’ (Ure, cited by

Marx, 1976: 549), and incorporated ‘as its living appendages’ (Marx, 1976: 548)” (Neilson, 2007, p. 94).

Marx’s (1976/1990) focus on the power of capital to organise the labour process and subordinate labour produces a relative absence of counter-capitalist regulation in discussion; though his considerations on the class struggle at the point of production, i.e., the power of organised labour, does provide some foundations for thinking in this way. I suggest that the power of organised labour is a form of indirect regulation which frames capital’s power and could even hold latent potential as direct regulation, namely, that which involves a collaborative process between workers, regulators and capital. However, beyond the class struggle discussion, in *Capital* Marx (1976/1990) is really laying out the objective logics and relations of capitalism. In the pursuit of that purpose Marx therefore pays reduced attention to how the power of capital is overdetermined by the political and ideological superstructure. Central to, and emerging from, this political and ideological superstructure is regulation. Thus, I am arguing that Marx does not pay sufficient heed to the ways that regulation affects the organisation of the labour process through indirect forms. Furthermore, there is no indication of how regulation might be deployed *directly* to subordinate the power of capital. That is, Marx (1976/1990) does not entertain the possibility of capitalism’s progressive reform as regulation. This is a theme which continues in the subsequent literature which I will explore in later sections.

Indirect and direct regulation

Here I want to hone in on and explore my definition of indirect and direction regulation. The French Regulation School offers the core discovery of ‘regulation’ which is understood in orthodox understandings to counteract the core logic and relations of capitalism which are considered fundamentally unstable (Aglietta, 1979; Lipietz, 1988). In previous work Neilson and Stubbs (2016) extended the notion of regulation to include that which is *proactive*, i.e., regulation which exacerbates and encourages, rather than counteracts, the core logics and relations of capitalism (see Table 1). Here I want to extend the concept further, defining *indirect* and *direct* regulation. Employing this theorisation enables me to flesh out the relationship between regulation and the labour process in past and present capitalist eras. Beyond this, it enables consideration of the next era of capitalism and the sort of regulatory

forms that must be deployed to achieve the goals of an alternative model of development defining a new era.

Mobilising notions of direct and indirect regulation directly pertains to Neilson's (2012; 2020) revised conceptualisation of 'model of development' that I adopt throughout this thesis. To reiterate, a model of development is defined as the coupling of a dominant accumulation regime with a facilitating national-transnational regulatory nexus. The regulatory nexus defines an abstract regulatory template for the nation state, which, when widely adopted around the world, engenders a particular transnational environment that in turn constrains the limits and possibilities of national development. The national regulatory template has both domestic and external components (see Table 1) and is adopted more or less fully by nation states depending on their competitiveness in the global terrain. Nation states' position in the global terrain as either a powerful or weak competition state determines its capacity to have more indirect *counteractive* regulatory influence over the labour process.

I define *indirect* regulation as the parts of the national template, and more broadly of the transnational regulatory framework of the model of development that whilst *constraining or enabling* of capital's organisation of the labour process, do not directly define the labour process model nor the labour process itself. That is, indirect regulation does not directly challenge capital's power to define the labour process, this remains capital's prerogative. It remains the purview of capital "to redesign the labour process in order to secure the extraction of surplus value" (Knights & Willmott, 1990, p. 4-5).

However, capital's power is not absolute in that indirect forms of regulation, including either proactive or counteractive forms, characteristic of different models of development influence the dimensions and extent (constraining or facilitating) of that prerogative. That is, the regulatory framework of the prevailing model of development sets the limits and possibilities for the regime of accumulation at the base of which is the labour process. Thus, the model of development encourages certain production principles which in turn modify existing, or develop new, labour processes specific to particular eras. Furthermore, the uneven adoption of the national template of the model of development across nation states implies further variation in the extent of capital's power to organise the labour process.

Capital's prerogative to organise the labour process, whilst dominant, remains nuanced across different capitalist eras and within those across different nation states; limited or extended in different dimensions and to different extents through the mobilisation of *indirect proactive or indirect counteractive* regulatory forms.

For example, in the prevailing neoliberal model of development, one of the domestic components of the national regulatory template is privatisation. This is a form of indirect proactive regulation, for as much as privatisation enables capital to more easily organise production to the end of creating surplus-value, rather than to the end of providing a public good, this regulatory component of the national template does not directly define the labour process model nor the labour process itself.

To provide a further example, regulation passed by a government pertaining to the length of the working day does not ultimately challenge capital's power to direct and organise how use-values are produced within that working day. But that indirect regulation does limit the extent to which the labour process can be organised flexibly or not. If indirect regulation is employed at the national or sectorial level that impedes capital's capacity to hire and fire at will based on changing demand capital's capacity to flexibly organise the labour process is hindered. For example, union requirements can negate the flexibilisation of the work force. Indirect regulation thus plays an important role in framing capital's power, either exacerbating it in proactive forms, or constraining it in counteractive forms. As such, although capital maintains prerogative over the labour process sphere, indirect regulation and other forms of control e.g., existent technology and the demography of the workforce may indirectly constrain or enable the power and autonomy of capital to define the form of the labour process in different eras.

Indirect regulation frames and provides regulatory context for capital, yet the actual organisation of the labour process has remained overwhelmingly (with small exceptions, such as the Japanese approach considered below) the purview of capital. Indirect forms of regulation e.g., union demands, health and safety laws etc. do frame capital's organisation of the labour process. Although this does not change the fundamental social relations of production that define the capitalist mode of production, centrally involving the formal and real subordination of labour to capital, and within that the unilateral power of capital to

organise labour processes, it does have a framing effect. That is, for example, health and safety regulations do impose restrictions on how capital can organise the labour process which have to be taken into account. As such, indirect regulation still has significant effects on how the labour process can be organised, but the actual capacity for organisation is not challenged by these sorts of regulatory forms. The deployment of specific forms of indirect regulation coupled with either counteractive or proactive regulation defines specific capitalist eras, distinguishing marked differences across the long capitalist history.

A prevailing model of development *encourages* a certain labour process model (e.g., Taylorism/ Toyotaism in the Fordist model of development) that in turn, to greater or lesser extents, changes labour processes themselves. The regulatory architecture of the model of development encourages certain principles of production, through the constraint or enabling of capital's power via counteractive or proactive forms of regulation respectively, which affects the labour process. That is, the model of development encourages specific production principles, understood as a labour process model, which in turn modifies the labour process; thus, we can expect to see labour processes specific to each mid-range period.

For example, the prevailing neoliberal model of development, both in terms of its national template and in terms of the imperatives of neoliberal globalisation, facilitates indirect, *proactive* regulatory forms that increase capital's power. As such, all labour processes across all sectors are subject to the convergent effects of global competition that has been unleashed by the neoliberal model of development. The point is that in this era all labour processes confront the neoliberal accumulation regime and neoliberal regulatory nexus and as such face the competitive threat of the neoliberal global regime of accumulation as well as the indirect proactive regulatory forms that facilitate that regime. It is in the context of distinct models of development defined by regime and regulatory aspects that particular labour process models emerge.

For example, the labour process model of 'lean production' (Smith, 2015, p. 216) emerges due to the capacity for capital flight permitted by the widespread adoption of the national template of the neoliberal model of development. The neoliberal national regulatory template includes trade and financial liberalisation (see Table 1) which puts pressure on

nation states themselves, along with small firms and workers, to remain competitive to attract globally mobile capital. Labour process models such as lean production emerge as a result of this hyper competition embodying the combination of scale and scope. The prevailing model of development encourages specific production principles, i.e., a specific labour process model, which therefore to some extent modifies labour processes themselves. However, particular national modes of regulation, i.e., variable adoption of the national regulatory template of the neoliberal model of development, results in different indirect regulation of those labour processes. That is, the framing of the sandpit, or capital's power differs in different nation states, and within those, different sectors. In this way we can see the differences between the American and Japanese Fordist experiences defined by different labour process models, Taylorism and Toyotaism respectively.

Regulation (consciously conceptualised and intentionally implemented), in conjunction with technological developments, set the limits and possibilities for development of the model and practice of the labour process. No matter how much counteractive influence a state, or other regulatory bodies, may have on modifying the labour process, what we have largely seen so far is *indirect regulation*. Labour processes or the productive core of capitalism have only been either indirectly proactively enabled or indirectly counteractively constrained. That is, capital's power to organise and control the organisation of work has remained largely unchallenged across the two eras defined by a model of development, namely the Fordist and present neoliberal era. These two eras can be largely characterised by indirect regulation, though coupled with counteractive and proactive regulation respectively.

Indirect regulation should be understood to frame capital's power in the organisation of the labour process, it is simply that proactive indirect regulation loosens that frame, whilst counteractive indirect regulation tightens it. The prevailing proactive indirect regulation of the neoliberal model of development permits even greater authority of capital over labour. That is, the model of development indirectly regulates the labour processes of a particular era. Meaning, we should not simply consider e.g., capitalist labour processes, but rather, for example, *neoliberal* capitalist labour processes. This considers, not simply the "distinct ways of combining human producers, instruments, raw materials and purposes" (Smith, 2016, p.

206) given by the capitalist mode of production, but also the regulatory context which defines mid-range capitalist eras and distinctly enables or constrains capital's power.

While the deployment of indirect regulation when coupled with counteractive or proactive regulation constrains or enables capital's power in the organisation of the labour process *direct* regulation intervenes in this power through collaboration with other actors e.g., the state and labour. That is, *direct* regulation is that which directly specifies organising principles for the labour process model, in turn modifying labour processes. The labour process and the labour process model are integrally connected. For example, consider how Frederick W. Taylor wrote the book which provided the paradigm or principles on which Henry Ford based his production methods. That is, Ford's assembly line production process is about the application of a new technology to Taylor's model of the detailed division of labour. The conceptualisation of direct regulation enables a particular kind of regulationist praxis that seeks capitalism's transformation by identifying that the organisation of the labour process has for the most part only been (both counteractively and proactively) indirectly regulated thus far; and how truly emancipatory a collaborative deployment of direct counteractive regulation might be. The direct counteractive regulation of transnational, national and local food regimes of accumulation at the base of which is the labour process would mobilise a democratic element largely unseen in the past and present eras.

The present power of capital in the labour process detracts from peoples' power to control their ways of life at work and beyond. Direct regulation offers the capacity to shift the scope of regulation in the labour process from merely forming the frame of capital's power (i.e., indirect regulation) to the form of the labour process itself. In doing so, organisation of the labour process becomes the purview of regulators and the workers themselves. Regulators include those appointed via democratic election but also unelected public servants who have roles in national and transnational regulatory institutions. In conjunction with different agents and organisations, centrally including workers and their representation alongside capital, regulators could collaborate to construct a regulatory template for the labour process. In this way local participants would be involved in determining and defining labour

processes. As such, local ways of life can flourish, and local knowledge and methods of production are validated.

One of the most well-known deployments of direct regulation can be seen in the Japanese developmental state approach. Here I am referring to the Japanese labour process model – Toyotaism. Toyotaism was argued to be a superior labour process model due to the encouragement of the responsible autonomy of the labour force (Lipietz, 1997). This labour process model is described as a model wherein “Japanese corporations create and manage high dependency relationships, both internally and between themselves and their environment...[and is characterised by] high levels of employee involvement” (Wood, 1991, p. 571-572). This labour process model resulted from collaboration between the state, labour and capital. Thus, a process of collaboration directly intervenes in the space historically reserved for capital; namely, the organisation of the labour process via a collaboratively constructed labour process model. However, this particular form of direct regulation has been coupled with proactive regulation, namely pro-capital regulation. That is, this instance of direct regulation has, through the associated deployment of proactive regulation in the national regulatory template, extended capital’s prerogative. The direct collaboration with capital in this case actually facilitated greater power, prerogative and efficiency of capitalist production.

This is a cautionary tale demonstrating how an alternative model of development must be characterised by *direct, counteractive* regulation to achieve the wholesale subordination of capital’s power and autonomy to a democratic collaboration. It is through direct, counteractive regulation that the emancipatory potential of alternative local food regimes of accumulation can be released. Labour processes at the base of these local regimes of accumulation can be directly regulated in the next era in order to enable the flourishing of such practices achieved through a subordination of the power of capital. The idea is to facilitate, via a new regulatory architecture, the construction of diverse local regimes of accumulation with labour processes at their base that build on diverse existing practices.

Both indirect and direct regulation have the potential to be adopted in a model of development defined in part by either a proactive or counteractive regulatory nexus. For example, in the Fordist model of development, defined in part by a *counteractive* regulatory

nexus that weighed capital down (Aglietta, 1998), indirect regulation constrained capital's organisation of the labour process but did not actually define the labour process model or the labour process itself, nor directly challenge capitals' final prerogative. At the same time, the potentiality existed for direct regulation of the labour process in the Fordist model of development that could have directly defined the labour process model and therefore directly regulated the labour process itself, which could have subordinated capital's autonomy.

Conversely, indirect regulation in the prevailing neoliberal model of development, defined in part by a *proactive* regulatory nexus, further enables capital's capacity to structure the labour process model and therefore the labour process itself. However, this indirect regulation coupled with proactive regulatory forms does not directly define the labour process model nor the labour process. Direct regulation which outright defines the labour process model and therefore directly modifies the labour process to capital's end is possible alongside proactive regulation (consider the Japanese model based on state-capital collaboration to define the labour process model).

Nevertheless, a counteractive regulatory nexus is better suited for the deployment of direct regulation insofar as counteractive regulation weighs capital down anyway and thus collaboration is more likely. To provide an example consider the power of Trade Unions. Under the Fordist model of development the national-transnational regulatory nexus harnessed the power of capital to the nation state, i.e., was defined by counteractive regulation. Thus, in the Fordist era Trade Unions had more power to negotiate the labour process model, i.e., the principles of production, and therefore affect change on the labour process itself. As such, incorporating direct regulation to ultimately challenge capital's capacity to organise the labour process is aligned with the general counteractive regulatory nature of the Fordist model of development. However, under the prevailing neoliberal model of development capital mobility, and therefore power, is facilitated through the national-transnational regulatory nexus implying that governments have to pander to the interests of capital in order to avoid capital flight; in turn, Trade Unions have less power and in such a regulatory environment direct regulation is less likely.

The conceptualisation of direct regulation forms part of a project that is premised on moving towards a transformational praxis that considers how to consciously design an emancipatory alternative. Part of this alternative should be the mobilisation of direct regulation of (agricultural) labour processes that subordinates capital's power to a democratic collaboration of various actors from various levels. This would instil a democratic prerogative within the organisation of the labour process and more broadly, food regimes of accumulation. Achieving this practically requires a complex regulatory formation involving forms of both indirect and direct regulation at local, regional, national and transnational levels facilitated through the collaborative efforts of different agents including academics, state representatives, unions, workers, community organisations and capital.

Direct regulation should emerge in a labour process model that forms part of the national regulatory template of the regulatory nexus of an alternative model of development premised on counteractive regulation. That is, I argue that in order to meet social and environmental concerns we must consider thinking about the direct theoretical construction of an alternative labour process model and instigate this as part of the regulatory template for the nation state in an alternative model of development.

An alternative labour process model will account for and recognise the importance of the coexistence of different forms of control of the labour process beyond capital's autonomy. This will involve liberating alternative forms of control, creating a context of local viability and self-sufficiency. Rather than labour process models such as Taylorism or Toyotism which are adopted 'as per the book' and are deployed as a rigid top-down imposition, it is necessary to conceptualise a model that enables for place-based flexible adoption, within environmental and social limits. The actual process of work is central to humanity's existence and yet capital has enjoyed ultimate power to determine how this process is organised. This power negates the rich variety of ways of life that emerge on the basis of work. Enabling the flourishing of a variety of labour processes around the world embedded in culturally and historically unique spaces must be a key priority of the conceptualisation of an alternative labour process model. Thus, the organisation of the labour process becomes an unfolding process between multiple actors that nevertheless is directly regulated

through this collaborative process and challenges the historic control over the labour process wielded by capital.

Whilst ensuring that an alternative labour process model flexibly develops specific theory and practice that is consistent with local conditions it must be harmonised within national and transnational regulatory forms that maintain the key principles and priorities of the alternative model of development. Locally realised labour process models must be directly regulated by a labour process model that operates as a meta-framework and forms part of the regulatory template for the nation state. This meta-framework is necessary to set the limits and possibilities conducive to a harmonious coupling with the social and environmental goals of an alternative model of development. Direct regulation of the labour process via the labour process model is to some extent prescriptive of the actual forms of production including ensuring safe and rewarding forms of work i.e., ensuring that workers' needs are met in the workplace. However, this labour process model will balance overarching prescriptions with a principle of flexibility which enables place-based flexibilisation and local viability, around which a rich variety of ways of life coalesce.

In conceiving of direct regulation that is premised on the subordination of capital's power, power is returned to the people and the viability of local food regimes of accumulation is restored. That is, as explored in the previous chapter, in this era, local food regimes of accumulation emerge as alternative to the dominant neoliberal global food regime of accumulation. Directly regulating labour processes at the base of food regimes of accumulation in an alternative model of development in agriculture is key to facilitating the viability of alternative local food regimes of accumulation. By indirectly and directly facilitating *local* food regimes of accumulation (with labour processes at their base) we can ensure global cooperation based on local viability. Direct regulation towards local, sustainable viability, also helps to insulate local food regimes of accumulation from devastating global events such as COVID-19. This is a practical theorisation of Le Heron's (2003) idea that "Food futures... are created out of political as well as scientific projects" (p. 121).

This mobilisation of direct, counteractive regulation to actively regulate labour processes presents as an important alternative to the prevailing regulatory architecture of the NMD in

agriculture. That is, all local labour processes at the base of local food regimes of accumulation emerge as an alternative to the neoliberal form of industrial capitalist production and the neoliberal global food regime of accumulation. However, the latter is facilitated by the neoliberal regulatory nexus which implies a regulatory architecture conducive to its success. In contrast, labour processes at the base of alternative local food regimes of accumulation must confront the more competitive neoliberal global regime of accumulation and a regulatory context inhospitable to their viability.

Whilst, as the owners of small plots of land, family farmers, small farmers, or peasant farmers do maintain the prerogative to organise the labour process, they must contend with their lack of competitiveness in the global market to which all are exposed through the widespread adoption of the neoliberal national regulatory template. The regulatory architecture of the NMD in agriculture renders local labour processes both in the global North and South in direct competition with transnational agribusiness and corporate agriculture, which, given the regulatory terrain, reign dominant in the neoliberal global food regime of accumulation. That is, the prevailing indirect, proactive regulation of the regulatory nexus of the neoliberal model of development facilitates the modification of labour processes in line with neoliberal globalisation. Namely, indirect, proactive regulation sets the limits the possibilities of production and encourages the adoption of labour process models that will be most competitive, thus in turn modifying the nature of the labour process. This results in labour processes that participate in alternative local food regimes of accumulation being rendered unviable.

The French Regulation School and the ‘labour process’

Given my extension of The French Regulation School core discovery ‘regulation’ it is important to revisit what has been said about the relationship between regulation and the labour process in orthodox French Regulation School literature. Not all scholars of this school attend equally to the labour process or labour process model and the relationship to regulation writ large. What remains clear is that due to the failings of orthodox thinking (attended to in chapter one), as a school of thought The French Regulation School is not able to fully theorise the impact of regulation in present indirect, proactive forms, nor future potential democratic forms of direct, counteractive regulation.

Boyer (1991) uses the language of 'work organization' though does not extensively investigate the relationship between the model of development and work organisation/labour process. Aglietta (1979) at times uses the language of 'work organisation' as Boyer does. He suggests that "Fordism became the dominant form of work organization in the United States. We know that in this type of labour process individual jobs lose their autonomy and independence" (Aglietta, 1979, p. 147). Aglietta's analysis thus centred on the labour process under the Fordist period of capitalism defined by "semi-automatic assembly-line production" (Aglietta, 1979, p. 117). Aglietta (1979) argues that "the labour process is transformed under the impulse of the struggle for surplus-value" (Aglietta, 1979, p. 111). This argument pretty much accepts Braverman's (1974) analysis that suggests 'the' capitalist labour process will become dominant – implying a homogeneity of the labour process. Furthermore, like Braverman (1974), Aglietta (1979) does not view the labour process as subject to (counteractive) regulation.

For example, Aglietta (1979) suggests that major transformations of the labour process "involve changes in the general principles of work organization in all domains of production when the latter becomes capitalist" (p. 113). This reads similarly to Marx's (1976/1990) argument about the general subsumption of existing labour processes by capital and invisibilises regulation entirely. Furthermore, Aglietta (1979) argues that underlying major transformations of the labour process is what he calls the

"principle of mechanization", which incorporates in its mode of operation the qualitative characteristics of those concrete labours previously performed by the dexterity of workers. The machine system is a complex of productive forces in which a series of tools is set in motion by a mechanical source of energy, the motor, via an appropriate transmission system. The relationship between workers and means of labour is thus reversed. Instead of wielding tools, the workers become appendages of the machines...mechanization reduces labour to a cycle of repetitive movements...All modifications in the organization of work represent a further expression of this principle (p. 113).

Such a description of the transformation of the labour process seems to point to Marx's (1976/1990) original argument that workers become appendages of the machine. In this

aspect Aglietta really just follows Braverman (1974) who viewed Taylorism as the representation of the capitalist labour process. Such an argument pays no heed to the role that regulation has in transforming the labour process.

Missing from both Boyer (1991) and Aglietta's (1979) account of the labour process is a clear explication of the link between regulation and the labour process. In discussing transformations of the labour process the model of development and the subsequent regulatory effect, differentiating mid-range eras, are not considered. In contrast, I argue that under the Fordist model of development, indirect counteractive regulation constrained capital's prerogative to organise the labour process and thus indirectly regulated the labour process itself.

Of the key French Regulation School thinkers, Lipietz makes the most advances in terms of considering the relationship between regulation and the labour process and emphasises the importance of a labour process model. Lipietz (1992) defines a *labour process model* as a 'technological paradigm' or 'industrialization model' involving

the general principles governing the labour process and the way it evolves during the period when the model is dominant. These principles cover not only how the labour process is organized within firms, but also the division of labour between firms.

There may be, of course, whole sectors or regions which remain outside the model, but it remains a 'model' in that the most 'advanced' sectors in terms of these principles determine how others will evolve (p. 2).

This 'labour process model' is then incorporated into his definition for a model of development. For Lipietz (1992) "a regime of accumulation is the macro-economic result of the way the mode of regulation functions, with a labour process model as its basis. It is the whole of this which constitutes a 'development model'" (p. 2-3). Thus, Lipietz (1992) explicitly demonstrates that regulation of the regime of accumulation integrally includes the labour process. Whilst the revised conception of the model of development I adopt following Neilson (2012; 2020) goes beyond the orthodox definition embodied in Lipietz's (1992) work, Lipietz does provide a foundation for considering the link between a prevailing model of development, a labour process model and the labour process itself that I have built on here. That is, by considering the ways regulation is a general organising principle of

labour and the labour process model, Lipietz (1992) provides my point of departure to define indirect and direct regulation.

The deployment of indirect regulation as part of the national-transnational regulatory nexus of the model of development enables and constrains the labour process form which unfolds unevenly across different sectors. That is, the model of development in agriculture reflects the unfolding of the model of development in the agricultural sector which constrains the labour process form in particular ways. Nevertheless, in a process of diverging convergence, sectors, and labour processes within, begin to reflect the logic of the dominant accumulation regime of the model of development that is facilitated by the regulatory nexus of the model of development. For example, speaking of the previous Fordist era, regulation theorists Allaire and Mollard (2002) point out that in agriculture “The work process was... affected by Fordist production norms: labour intensification, specialisation and deskilling of tasks, standard techniques and, more generally, a heteronomous work process” (p. 217). Fordist production norms, I argue, were transmitted to the agricultural labour process via the Taylorist/Fordist labour process model which was indirectly regulated by the Fordist model of development and thus constrained the labour process form across sectors.

The convergence of sectors towards the neoliberal form of the labour process in the present era is leading more clearly to a situation closer to that which Marx (1976/1990) articulates. That is, while the Fordist era indirectly counteracted capital’s power over labour; the neoliberal counter revolution reversed the counteractive indirect regulation and employed proactive indirect regulation that facilitated even greater capital autonomy. The global form of market competition, or neoliberal globalisation, that is the direct consequence of the widespread adoption of the neoliberal national template, is driving a convergence of labour processes across all sectors towards greater homogeneity. This present situation aligns more closely with Marx (1976/1990) and Braverman (1974) who discussed how competition between capitalist firms encouraged convergence in the form of the labour process under capitalism.

Nevertheless, despite this diverging convergence, as Allaire and Mollard (2002) note, “the agricultural sector shows great diversity in terms of modes of organisation and production. There is therefore a danger of describing the whole of the agricultural sector with excessive

generalisation” (p. 218). That is, “Different social, national or local configurations provide different means of modernisation, and varying models for the organisation of farm and food production” (Allaire & Mollard, 2002, p. 218). This is an important point and recognises the varied lived realities that emerge in labour processes in agriculture. However, it should not invisibilise the general regulatory context in which all actors operate. This is where Allaire and Mollard (2002) fall short. Sector heterogeneity speaks to the complex reality and nuanced terrain across which indirect proactive and counteractive regulation is deployed.

Brenner and Glick (1991) fail to see the qualitatively different regulation projects defining different capitalist eras. They critique ‘Regulationists’, suggesting that it is difficult to see why Fordism “should be viewed as more than an extension of the processes of transforming technology and the labour process that have characterized capitalist production for at least a century (or perhaps two)” (p. 99). This critique fails to see that the labour process model, whilst indeed maintaining some aspects that emerged at the advent of capitalism and which represent the gradual mechanisation of manufacturing in the pursuit of creating surplus-value, has been transformed both by the advent of technological advances, *but also by the prevailing model of development.*

Observations such as “a partial break with Taylorism and Fordism from the mid–1980s onwards relied primarily on a qualitative intensification of labor” (Thompson & Harley, 2007, p. 159) can be more deeply theorised by considering that the neoliberal era began in the 1980s. It was in the 1980s that neoliberal think tanks achieved their goal of creating a world safe for capital through offering a competing model of development as the Fordist model failed. The shift in the organisation of the labour process from the 1980s onwards is a result of the indirect proactive regulation of the neoliberal model of development. It is important to see not merely the continuities, but the distinctions that can be made across the long durée of capitalist history. Distinctions can be observed across the long run of capitalist history because of specific models of development that mobilise counteractive or proactive regulation that indirectly regulate the labour process model, and in turn to greater or lesser extents, the labour process.

Tomaney (1994), whilst not critiquing regulation theory directly, echoes Brenner and Glick's (1991) concern, suggesting that

the argument that the capitalist labour process has been characterized by sharp discontinuities in industrial practice - expressed in the transition to Fordism and from Fordism to post-Fordism - is difficult to sustain. Ever since the Industrial Revolution the capitalist labour process has undergone continuous transformation, the nature of which is not captured by simple dichotomies such as Fordism and post-Fordism. Fordism, as defined by the new orthodoxy, consisted of the twin processes of the fragmentation of tasks (Taylorism) and the growth of mechanization around dedicated machinery. However, the extent to which these developments represented a radical departure from existing tendencies in the transformation of the capitalist labour process is dubious. Marx, for instance, drawing on the work of Charles Babbage and Andrew Ure, analysed the emergence of large-scale industry (machinofacture) in the nineteenth century, precisely in these terms (p. 176-177).

The development of the capitalist labour process involving trans-era, long-range tendencies cannot be denied, capitalism does have an objective logic that is thoroughly explored in Marx's (1976/1990) *Capital*. As such the capitalist labour process has unfolded since the advent of capitalism in the 16th century. However, capitalism as a mode of production is politically and ideologically overdetermined by mid-range models of development that mark distinctions in this long history and affect the unfolding of 'the capitalist labour process'. Capital must take local, national and transnational regulatory forms into account when organising the labour process. Indirect regulation does not alter the core logics and relations of capitalism. Nevertheless, indirect regulation proactively stimulates or counteractively constrains those core logics and relations which shapes the form of distinctly Fordist capitalist labour processes and distinctly neoliberal capitalist labour processes.

Furthermore, as I have argued, through the Fordist and neoliberal eras regulation has largely been indirect, rather than direct. This implies it is still capital's prerogative to organise the labour process despite counteractively constraining, or proactively enabling, regulatory forms. The maintenance of capital's prerogative lends itself to the argument for a

homogenous and continuous capitalist labour process across the long capitalist epoch. A dominance of direct regulation would more easily be compartmentalised into discrete regulatory eras as it would form part of the national regulatory template through collaboration.

Nevertheless, existent models of development have had an indirect regulatory effect on labour processes. There have been constraints on or extensions of that organisational power of capital that differ between mid-range eras and can be accounted for by acknowledging the link between regulation and the labour process. Acknowledging this link enables us to see the continuities, as Brenner and Glick and Tomaney (among others) wish to, but importantly, the differences between labour processes across different mid-range eras e.g., Fordism and neoliberalism. That is, both the features of the capitalist labour process that are consistent across all its eras and the features that vary with paradigmatic and technological innovation, and as an effect of the different regulatory architectures of different models of development, can be recognised.

Inserting a revised regulation theory in wider literature

I argued above that Marx (1976/1990) does not pay sufficient heed to the ways that regulation affects the organisation of the labour process. This is a deficiency carried forward within the literature pertaining to the labour process. I briefly want to explore this absence and the focus on the organisation of the labour process under capitalism which misses the important mid-range distinctions I make here; distinctions which are necessary to consider the regulatory forms that should be mobilised in an alternative model of development.

Galvanising and building upon the work of Marx (1976/1990) who went before him, Braverman (1974) did extensive work on the (American) capitalist form of the 'labour process' in the 20th century. It is suggested that "the foundations of labour process theory laid by Marx (1976/1990) had comparatively little impact upon the study of work before the publication of Braverman's *Labor and Monopoly Capital*" (Knights & Willmott, 1990, p.1; Beverungen, 2011). For the purposes of this thesis, Braverman's (1974) work highlights a) that the organisation of work or the labour process continues to be largely under the purview of the capitalist. That this organisation has been and continues to be a space

reserved for capital and b) that nevertheless, theories looking at this power of capital in the space of labour process organisation fail to see how indirect regulation does enable or constrain that organisation in particular ways, albeit not challenging the power of capital and thus c) not seeing how regulation might be more democratically mobilised to directly regulate the labour process and in so doing subordinate the unilateral power of capital to organise labour processes.

Braverman's work was based on analysing "what he considered to be the degrading effects of technology and scientific management on the nature of work in the twentieth century" (Smith, 2015, p. 224). This analysis was based on Marx's concept of 'real subordination' under the machine system (Neilson, 2007). Braverman (1974) identifies four aspects of the 'labour process': labour power, the objective conditions of labour especially including the means of production, the activity of labour and the products of labour. In considering the scientific-technical revolution Braverman (1974) discusses how the entirety of the labour process, constituting all four of these elements is transformed by the infiltration of new technology in combination with new methods of production that are bound by high managerial authority. The degradation of work which Braverman (1974) argues is bound up in the transformation of work in the twentieth century is centred on the transfer of worker knowledge to capital leading to labour's deskilling and loss of control.

As summarised by Knights & Willmott (1990),

Building upon Marx's analysis of the dynamics of capitalist development, Braverman explores how the application of modern management techniques, in combination with mechanisation and automation, secures the real subordination of labour and deskilling of work in the office as well as on the shop floor... More specifically, he suggests that the separation of the conception (management) from the execution (labour) of tasks, including the tasks of management, provides the driving motive for the modern organisation and control of the labour process... The removal of all forms of control from the worker, he asserts, is 'the ideal towards which management tends, and in pursuit of which it uses and shapes every productive innovation furnished by science' (p. 7).

For Braverman the transformation of the labour process under Taylorism completed the process of real subordination (Littler & Salaman, 1982); i.e., was the explicit representation of the capitalist labour process.

Braverman's (1974) analysis focuses on capital's unmediated power over labour. That is, capital's organisational capacity to determine the labour process is assumed. Braverman is not altogether wrong. That is, the power to organise the labour process has been reserved for capital, and capital continues to exercise this power to this day. Be that as it may, this organisational power has not been completely without tempering. Such tempering comes in the form, I argue, of indirect regulation. Indirect regulation involves, for example, the role of class struggle through organised labour and union representation. If successful these forms of indirect regulation could become direct regulation (involving a collaborative process between labour, regulators and capital to organise the labour process in ways that produce safe and satisfying work environments).

Forms of indirect regulation do not challenge or negate capital's power in this space, but nevertheless implies some framing that capital has to take into account in the organisation of labour processes – whether this framing constrains or enables capital's prerogative (i.e., whether the regulation is proactive or counteractive). Thus, I am moving beyond Marx (1976/1990) and Braverman's (1974) position to consider not simply the existent power of capital in this space, but how this might be directly negated by subordinating capital's capacity to organise labour processes to the power of a progressive state and an organised labour movement (working together).

This argument builds on an existing critique which suggests that Braverman fails “to appreciate how contradictions and resistance are not merely a consequence of efforts to deskill work but have a significant effect in shaping and directing the selection and pursuit of alternative strategies of accumulation” (Knights & Willmott, 1990, p. 11). For example, the collectivisation of worker resistance, via the Trade Union movement, does restrain managerial autonomy. I argue that it is from this organic base of worker resistance that formalised indirect regulation emerges, such as that pursued by unions and left leaning governments. Formalised, indirect regulation does not ultimately challenge capital's organisational power, though does (in this case) restrain and constrain it. Braverman (1974)

does not examine the counteractive power of labour's organisation in Trade Unions or pro-worker governments, or other forms of indirect counteractive regulation, nor indirect proactive regulation. Moreover, Braverman's (1974) critique of the capitalist form of the labour process does not lead him to consider an alternative labour process model that could include both indirect and direct counteractive regulation.

Beyond the Braverman (1974) approach which assumes capital's reasonably unfettered organisational capacity to determine the labour process, bringing regulation to the fore demonstrates that worker resistance and compromise are central to an explanation of the Fordist era (1940s-1970s) which constrained the autonomy of capital, albeit only indirectly. Furthermore, it gives deeper nuances to his theory that the state is external to the actual organisation of and control over the labour process which through the long *durée* of capitalism has remained the purview of capital.

Braverman's (1974) Marxism suggests that the labour process "can be structured only by capital and not by the state" (Strinati, 1990, p. 214). Braverman holds that the state only has an external role in the labour process, and therefore, can only intervene in the labour process that is already constituted (Strinati, 1990). However, I argue that indirect regulation in the Fordist era came in the form of health and safety legislation, employment guarantees, limits around hiring and firing, etc., and in some countries, union representation in the management of companies and sectors which centrally involves indirect counteractive *national*/(state) regulatory forms. In contrast Braverman's (1974) position denies the regulatory potential of state intervention. More broadly, I also argue that the Fordist model of development indirectly regulated the capitalist form of the labour process via trans-national regulatory effects of the Fordist model of development that reduced the extent of competition.

Problematically, the global variety of labour processes is also largely invisibilised in Braverman's analysis which implies a universality under capitalism (Smith, 2015). That is, Braverman's (1974) analysis seems to imply the dominance of 'the capitalist labour process' understood as homogenous. This ignores the diversity of labour processes within and between nation states, sectors and communities. Acknowledging the impact of the

regulatory architecture on labour processes does not have to break down in the face of the “welter of exceptions and variations” (Thompson, 2013) that inevitably arise from the complex terrain of the world. The adoption of the national template of the model of development does interact with the uneven development of nation states, which of course entails variations and exceptions without implying there is no causative regulatory architecture to contend with.

However, in this era, the cultural, geographical and historical divergence in labour processes has been increasingly minimised due to the prevailing indirect proactive regulation of the regulatory nexus of the NMD in agriculture which implies a situation more akin to Braverman’s (1974) homogenous capitalist labour process. That is, the global competition that is generated through the widespread adoption of the neoliberal national regulatory template drives convergence of labour processes at the base of regimes of accumulation towards their most competitive form. In this way, there is convergence towards the more competitive neoliberal forms of production. That is, to compete against the dominant neoliberal global food regime of accumulation facilitated by the indirect proactive national-transnational regulatory nexus of the NMD in agriculture, labour processes must adopt the neoliberal form of conventional industrialised agricultural production.

The labour process literature emerging since Braverman (1974), and largely associated with the International Labour Process Conference (ILPC), continues to focus on the labour process under capitalism without seeing distinct eras across this long history. Thompson (2010) himself notes this, suggesting that “the central focus of LPT [labour process theory] is on the nature and transformation of labour power under capitalism” (p. 10). An inherited narrow focus on the labour process in a homogenous capitalist epoch invisibilises how the organisation of the labour process differs in eras within this epoch. Nevertheless, within labour process literature there is space to consider the organisation of the labour process beyond the juggernaut of capital. Thus, I insert a revised regulation theory into labour process theory (which I argue is the key for understanding both the labour process under the prevailing NMD in agriculture, but also crucially the conceptualisation of labour processes beyond the power of capital in an alternative model of development).

The narrow focus on the labour process under capitalism and inherent implication of capital power has been critiqued by those who point out that there are many different forms of control of the labour process (Edwards, 1979; Friedman, 1977; Thompson, 1983; Storey, 1985; Knights & Willmott, 1990). Braverman is argued to have neglected to appreciate “the coexistence of differing dimensions, mechanisms and levels of control that mediate particular capital-labour relations” (Knights & Willmott, 1990, p. 13). Such critique goes some way towards acknowledging the space which regulation holds in terms of constraining or enabling capital’s power.

In both the Fordist and present neoliberal eras there has been an indirect regulatory force exerted on capital’s power. However, this indirect regulation is coupled with different forms of regulation in the distinct eras. Forms of proactive regulation in the prevailing era support or even intensify capitalist power, while counteractive regulation of the labour process constrains that power, even though within such constraints, the capital prerogative prevails. It is by theorising the nature of regulation deployed that one can see the nuanced realities of labour processes across capitalist eras.

In the literature that has emerged since Braverman (1974), notions of control are argued to encompass combinations of controls that coexist in multiple forms (Thompson and Harley 2007; Smith, 2015). The argument is based on the fact that labour process theory has “long recognized that there is a continuum of possible, situationally driven, and overlapping worker responses to relations of ownership and control in the workplace— from resistance to accommodation, compliance, and consent” (Thompson & Harley, 2007, p. 149-150). This argument brings in questions of class compromise and class struggle rather than a sole focus on the juggernaut of capital. Incorporating notions of worker resistance and the implicit class struggle is important because formalised indirect regulation can emerge from this base and be implemented by unions and left-leaning governments. That is, the class struggle can result in modifications of the form of the labour process or the terms of the wage-labour relations between workers and capitalists (for example, the Fordist class compromise that ensured wage levels increased with productivity during the Fordist era).

Thompson and Harley (2007) consider how managers “must interpret and enact their agency role on behalf of *capital within specific institutional, market, and workplace*

conditions” (p. 150) [Italics added]. The regulatory context shapes the context of capital’s power and thus ultimately the labour process itself, including managerial agency. The manager in the Fordist era will enact their role in different ways than the manager in the neoliberal era. While both hypothetical managers act on behalf of the capitalist, the power of capital to enact their will is either constrained or enabled through the form of indirect regulation which in turn affects the manager. Regulation at various levels employed by different actors for different agendas must be considered part of the political context of work. Thus, although considering the context of work beyond the point of production Thompson and Harley (2007) need to go further to account for the active intent of governments and transnational bodies and their deployment of various forms of regulation, which indirectly activates or counteracts the power of capital over the organisation of the labour process.

Smith (2016) points out that “Thompson emphasised... the importance of political economy as a wider conditioner to labour process practice” (p. 216). He encourages us to seek patterns of connection and disconnection between the ‘different spheres’ of “political economy, firm governance, employment relations and the labour process” (Smith, 2016, p. 216). Nevertheless, his ‘big-picture heuristic’ (Thompson, 2013) fails to adequately incorporate the state. Thompson (2013) himself identifies the issue, suggesting that “this kind of contingent, multi-level analysis seeking to re-connect spheres and literatures... only indirectly deal with the state” (p. 475). Strinati (1990) goes further, directly speaking to a relationship between the state and the labour process. Strinati (1990) focusses on how actions and policies of the British state pertaining to industrial relations and trade-union reform demonstrates the relationship between the state and the labour process. Yet, this relationship needs to be concretely specified. That is, the state plays a central role as implementor of the national regulatory template (that includes indirect regulation of the labour process), integral to the national-transnational regulatory nexus of a model of development.

Smith (2015) does unpack the impact of the state on the labour process. He contributed the system, society, and dominance (SSD) framework which “emphasizes the importance of national institutional boundaries and rules, but additionally the centrality of systemic and

dominant models - that create common and best practices, such as human resource management (HRM), lean production, total quality management that are imposed across societies" (Smith, 2015, p. 229). Here Smith is clearly bringing in broader regulatory themes. Consideration of 'national institutional boundaries and rules' accounts for regulatory forms. Extending on this we can consider how existing 'national boundaries and rules' and 'models' could be turned into considerations of alternatives. Here I also want to insert a transnational element to Smith's (2015) conception of *national* institutional boundaries and rules. That is, *transnational* institutional boundaries and rules exist in a dialectic with the national. The importance of national boundaries and rules is one half of an important regulatory dialectic that indirectly frames the organisation of the labour process, whether through enabling or constraining capital's power.

That the prevailing model of development regulates the labour process provides an explanation for what can otherwise remain perfunctorily descriptive. For example, in discussing the growth of non-standard work, Edgell (2006) argues that

the globalization of competition... constrained companies to introduce just-in-time labour to complement just-in-time production. The consequent managerial concern for increased numerical flexibility and lower costs of production has resulted in both the tendency for standard work to become less standard and for the three measurable types of non-standard work... self-employment, homeworking and temporary work – to expand, albeit unevenly (p. 149).

Edgell (2006) rightly points to the globalisation of competition as a driving factor in transformations of the organisation of the labour process. However, and crucially, it must be understood that hyper competition is a direct result of the neoliberal model of development. The transformations of the labour process are largely only indirectly regulated by the regulatory framework of the prevailing model of development. Nevertheless, the fundamental explanatory foundation for global competition, which has transformed work in the ways that Edgell (2006) mentions, is the regulatory effect of the prevailing model of development.

To present a further example, Thompson (2013) identifies “how mechanisms of financialization shape work and workplace outcomes” (p. 482). Bringing regulation to the fore provides an explanation for that increasing financialisation (see Table 1). That is, Thompson (2013) is recognising indirect regulatory effects without giving theorisation to the causative mechanism (namely, the model of development). A model of development which indirectly and proactively regulates labour processes creates a regulatory context in which flexibilisation becomes increasingly imperative to maintain productivity; and as capital has extended power to organise labour processes via indirect, proactive regulatory forms, the maintenance of productivity and in turn surplus value is prioritised.

These same considerations of the relationship between the labour process and regulation apply within sectors. Le Heron (2003) identifies “the reworking of biosecurity regulations, regulation to meet environmental risks, the commissioning of a Royal Commission to investigate genetic modification, New Zealand contributions to the emerging WTO framework and Kyoto Protocol and so on” (p. 112) as examples of “rationalities, discourses, practices and institutions that are appearing on the neoliberal agri-food landscape” (Le Heron, 2003, p. 112). I argue that these are examples of indirect regulation that frame capital’s organisation of the labour process in various ways. Nevertheless, these indirect regulatory forms do not ultimately challenge capital’s power to organise the labour process in agriculture.

Conclusion

Marx (1976/1990) provides a thorough analysis of the labour process. Starting with the abstract Marx (1976/1990) enables a clear working definition of the labour process itself, defining the essential nature of the labour process across all epochs. Marx (1976/1990) also provides us with an analysis of the form of the labour process specific to the capitalist epoch. However, because the entirety of *Capital* is dedicated to exposing the economic base of capitalism, that is, the objective logics and relations of capitalism removed from any political or ideological interference, Marx’s (1976/1990) presentation of the labour process under capitalism does not consider how this is overdetermined by the political and ideological superstructure. In contrast, I consider how particular regulatory forms define specific capitalist eras and overdetermine the capitalist mode of production. In this way,

indirect forms of regulation frame capital's capacity to organise the labour process either through proactively enabling it or counteractively constraining it. Distinct regulatory architectures delineate specific capitalist eras e.g., the previous Fordist and present neoliberal eras.

I draw on work emerging from The French Regulation School which provides a mid-range perspective and the foundations from which to begin to explore the link between regulation and the labour process. However, unpacking this work continues to expose insufficiencies that detract from the capacity to investigate the regulatory effect on the labour process. Nevertheless, drawing largely on Lipietz's (1997) work, I present my theorisation of indirect and direct regulation, making that link clear and in doing so demonstrating how the labour process is transformed by the prevailing model of development.

Throughout wider literature, following on from Marx (1976/1990) and Braverman (1974), others present an analysis largely focussed on the labour process under capitalism which fails to see the progressive reform of capitalism via regulation and the mid-range capitalist eras defined by this. Presenting some of the literature in labour process theory and beyond I insert my revised regulation theory to demonstrate the impact of indirect regulation on the form of the labour process.

The central focus of this chapter has been to define the concepts indirect and direct regulation and to consider how direct counteractive regulation of the labour process may be mobilised through a labour process model as part of the national template of an alternative model of development. The direct regulation of labour processes at the base of regimes of accumulation is imperative for facilitating the viability of alternative local food regimes of accumulation. In the prevailing era alternative local food regimes of accumulation are subordinated to the neoliberal global food regime of accumulation which is facilitated by the neoliberal regulatory nexus. Thus, the work here begins a project to define an alternative model of development, i.e., an alternative national-transnational regulatory nexus that facilitates alternative local accumulation regimes. This would involve the direct regulation of the labour process via a labour process model that enables place-based flexibility whilst ensuring environmental and social prerogatives.

Chapter Four

Traditional and neo-peasantry in the contemporary era

Introduction

My empirical work investigates alternative local food regimes of accumulation that could form part of a solution to the growing climate crisis. The local food regimes of accumulation I explore are existing alternatives to the dominant neoliberal global food regime of accumulation. These local food regimes of accumulation are under threat by both regime and regulatory aspects of the NMD in agriculture. Nevertheless, as alternatives I argue that such accumulation regimes could be enabled to flourish given a direct, counteractive national-transnational regulatory architecture defining a new era (as explored in the previous chapter). Here I want to investigate the actors involved in these alternative local food regimes of accumulation.

Emerging from my work in both Italy and New Zealand is evidence of an apparent thriving of new small-scale peasantry (neo-peasantry). Given that orthodox understandings have “overwhelmingly regarded the peasantry as an historical anachronism, or as a receding baseline of development” (McMichael, 2008, p. 205) it is apparent that the ongoing story of the peasantry requires revisiting; particularly when the peasantry is still responsible for producing over half of the world’s food (ETC group, 2017; McKeon, 2015; McMichael, 2016). 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” (pg. 242). McMichael (2016) also points out how significant small-scale farmers are, suggesting that they make up the “vast majority of the world's farmers... [and are] responsible for the well-being of over two billion persons” (pg. 658).

I draw on two case studies, one from field work in 2016 in Italy, and the other from more recent investigations in 2019 in New Zealand. In Italy 2016 I met with Angelo of Il Papavero. Angelo’s farm is located in peri-urban Rome. In New Zealand in 2019 I met with Jim, a small-scale, self-proclaimed peasant producer located in Kakanui in the South Island of New Zealand. There are similarities between Angelo and Jim’s way of life that demonstrate a shared response to the dominance of the neoliberal global food regime of accumulation and

more broadly the NMD in agriculture. I present these ways of life to explore the complex terrain across the globe that presents both a persistence of the peasantry of old and the emergence of a neo-peasantry in the context of capitalism's uneven development in the neoliberal era.

The emergence of a neo-peasantry develops the tale of the peasantry into a tale of two peasantries. The traditional peasantry has persisted outside enclaves of industrialisation through the long *durée* of capitalist history, while the emergence of a neo-peasantry signifies a return to the land in response to the dominance of the neoliberal global food regime of accumulation. Marx (1976/1990) explored how processes of primitive accumulation, that began long ago, drove the logic of 'enclosure' and industrialisation of agriculture in England, which decimated the peasantry and led to the industrial proletariat. Although processes of primitive accumulation continue in the contemporary era and repeat Marx's (1976/1990) story today, the neo-peasantry are disconnected from this history. They represent a conscious and deliberate assertion of small holding, small-scale agriculture in opposition to the neoliberal form of conventional agriculture, namely, the neoliberal global food regime of accumulation. The tale of the neo-peasantry is about an intentional return to the land rather than a persistence on the land as is the case for traditional peasantry.

Marx's (1976/1990) narrative also spoke to the imperialism of processes of primitive accumulation, e.g., the British Empire's external exploitation of the land and labour of colonial settlements. These places became 'enclaves' of industrialisation that included large scale plantation agriculture employing agricultural labourers. However, small-scale, small-holding peasantry carried on outside of this process. That was until the neoliberal model of development suddenly and forcibly brings this traditional peasantry outside the process into it, not through imperialism but through global competition under the NMD in agriculture. This global competition unites the tale of two peasantries as both traditional and neo-peasantry involved in local accumulation regimes face the threat of the neoliberal global accumulation regime and facilitating regulatory architecture defining the NMD in agriculture.

Thus, I explore contemporary processes of primitive accumulation through the lens of uneven development. However, I argue that what is driving the processes of primitive

accumulation and uneven development in the contemporary era is the NMD in agriculture. The thesis explored here is that though there are continuities with the past, something qualitatively different is happening in this era of neoliberal led global capitalism. The NMD in agriculture is based in the embedded dominance of the globalised capitalist mode of production. Although uneven, capitalist industrialisation of agriculture has gone planetary under the neoliberal model of development. This uneven industrialisation continues to impact the old peasantry in ways characteristic of the long history of capitalism that centrally involves the dispossession of peasants from the land. However, in the advanced capitalist countries, the impact of the planetary embedding of the capitalist mode of production under the neoliberal model of development gives rise, in uneven and complex ways, to a neo-peasantry – understood as a new category of small-scale producers.

On traditional peasantry

One half of the tale of two peasantries is a familiar tale about the persistence of traditional peasantry. Traditional peasantry have long experienced the compounding threats of dispossession and the industrialisation of agriculture through the processes of primitive accumulation. Marx (1976/1990) defines primitive accumulation as the pre-history of capital. It “precedes capitalist accumulation; an accumulation which is not the result of the capitalist mode of production but its point of departure” (p. 873), or “its historical genesis” (Marx, 1976/1990, p. 927). The primitive accumulation of capital, or the amassing of capital and labour-power in the hands of capitalists, is a necessary condition from which capitalist production, in turn the production of surplus-value, and finally the accumulation of capital arises. That is, primitive accumulation is the amassing of capital sufficient for investment in large scale industrial capitalist production. The amassing of capital and labour-power requires first and foremost a separation of the worker from the “conditions for the realization of their labour” (Marx, 1976/1990, p. 874). That is, primitive accumulation involves “the historical process of divorcing the producer from the means of production” (Marx, 1976/1990, p. 875).

In order to separate the worker from the ownership of the conditions of their own labour, the immediate producers are “robbed of all their own means of production, and all the guarantees of existence afforded by the old feudal arrangements. And this history, the history of their expropriation, is written in the annals of mankind in letters of blood and fire”

(Marx, 1976/1990, p. 875). That is, wage-labourers are created both through freeing slaves and serfs from the feudal relations of production and expropriating traditional self-employed peasant proprietors from the land. Marx (1976/1990) argues that if money “comes into the world with a congenital blood-stain on one cheek, capital comes dripping from head to toe, from every pore, with blood and dirt” (p. 926). En masse, “men (sic) are suddenly and forcibly torn from their means of subsistence, and hurled onto the labour-markets as free, unprotected and rightless proletarians” (Marx, 1976/1990, p. 876). The expropriation of the peasantry from the land was favoured by the bourgeois capitalists, who meant to use the land to extend “the area of large-scale agricultural production and increase...the supply of free and rightless proletarians driven from their land” (Marx, 1976/1990, p. 885). Thus, self-supporting peasant producers experience the threat of both dispossession and of large-scale industrialised production on that newly available land which threatens the viability of small-scale production.

In sum

the transformation, therefore, of the dwarf-like property of the many into the giant property of the few, and the expropriation of the great mass of the people from the soil, from the means of subsistence and from the instruments of labour, this terrible and arduously accomplished expropriation of the mass of the people forms the pre-history of capital. It comprises a whole series of forcible methods... The expropriation of the direct producers was accomplished by means of the most merciless barbarism (Marx, 1976/1990, p. 928).

Through the colonisation process, or the march of empires, and the entailed enslavement and conquest which returned wealth to the colonising country (which was there turned into capital), “great fortunes sprang up like mushrooms in a day; primitive accumulation proceeded without the advance of even a shilling” (Marx, 1976/1990, p. 916). Primitive accumulation as the point of departure is then not just to be understood as the process of proletarianisation that begins with the dispossession of the peasantry but also as the imperial process of conquest, looting and slavery. In this aspect, primitive accumulation is really focusing on the various methods by which capitalists accumulated wealth that then

enabled investment in large scale means of industrial production in both manufacturing and agriculture.

Marx (1976/1990) suggests that most of the population during the end of the fourteenth century and fifteenth century were free peasant proprietors. However, he proposed that this number of peasantry would be drastically reduced through the processes of primitive accumulation that involved the expropriation of the peasantry from their lands and the threat of newly amassed wealth being invested in industrialised agriculture. Despite this history, in the contemporary era the peasantry produces over half of the world's food (ETC group, 2017). As stated by the ETC group (2017) "Peasants are the main or sole food providers to more than 70% of the world's people, and peasants produce this food with less (often much less) than 25% of the resources – including land, water, fossil fuels – used to get all of the world's food to the table" (p. 6). This reality challenges many western modernist narratives that have relegated the peasantry to a pre-capitalist feature (McMichael, 2008).

Many scholars critically build on Marx's (1976/1990) original formulation of primitive accumulation and observe processes of primitive accumulation in the contemporary era. These contemporary processes of primitive accumulation continue to affect traditional peasantry in similar ways to those experienced across the long history of the capitalist epoch. Some (e.g., Coulthard, 2014) argue that Marx's (1976/1990) original formulation of primitive accumulation requires transformation because it rigidly ties these processes to a temporal pre-history to capitalism and therefore does not permit of observations of contemporary processes of primitive accumulation. On the other hand, Roberts (2017) argues that in "Returning 'primitive accumulation' to the context of its origination" (p. 3) we are able to invoke contemporary application without the need for transformation. Despite varying degrees of revision or critical departure amongst scholars it is clear that processes of primitive accumulation are ongoing in the contemporary era and continue to affect traditional peasantry. However, the tale of the traditional peasantry which began in the feudal epoch, continued through the advent of capitalism, and remains relevant in the contemporary era of capitalism has a different history from the contemporary emergence of a neo-peasantry.

Case studies on a neo-peasantry

Traditional peasantry in emerging capitalist nation states and neo-peasantry in advanced capitalist nation states are united in the contemporary era by the threat of the NMD in agriculture, and yet have a disunited history. I here want to outline two case studies demonstrating examples of the emergence of a neo-peasantry. These neo-peasantry participate in alternative local food regimes of accumulation that are subordinated to the dominant neoliberal global food regime of accumulation which is facilitated by the national-transnational regulatory nexus of the NMD in agriculture.

Italy - Il Papavero

Il Papavero is a small organic family farm owned and run by Angelo and his wife Fiorella in peri-urban Rome, Italy. Angelo runs his farm based on principles of biodiversity, localism, environmental preservation and custodianship of the land. Cherishing his direct relationships with those who purchase and consume his food Angelo defines his production practice as part of a local economy and frames this as his greatest success (A. Savioli, translated by M. Fonte, personal communication, April, 2016).

Angelo's practice emerges as a direct response to the NMD in agriculture, indicative of a neo-peasantry. In a direct challenge to the neoliberal global food regime of accumulation Angelo prioritises local production for local consumption, i.e., rooting food in territory. He critiques the burden of what I would call the indirect regulatory forms of the NMD in agriculture that disproportionately affects small-scale producers. Namely, Angelo speaks to the strict requirements pertaining to cleaning facilities and the types of boxes that can be used which make production more difficult for small-scale producers (A. Savioli, translated by M. Fonte, personal communication, April, 2016). It is these sorts of considerations which present an opportunity for the sort of collaborative interaction necessary to produce direct regulation (explored in the previous chapter). It creates a space within which neo-peasantry and local and national representatives could produce a direct regulatory framework for agricultural labour processes that is conducive to the flourishing of local viability. Angelo pointedly demonstrates that local viability is hindered by what I call the NMD in agriculture. For example, Angelo identifies that his methods of production exclude him from selling his fruit in the conventional market, either to the supermarket, or the wider European Union market (A. Savioli, translated by M. Fonte, personal communication, April, 2016). Here

Angelo speaks to a marginalisation and exclusion of alternatives to the neoliberal form of conventional agriculture which prevent his participation in what I define as the neoliberal global food regime of accumulation. It is only because of the creation of a local economy created in collaboration with GAS (Gruppi di Acquisto Solidale (Solidarity Purchasing Groups or GAS) - “groups of households that cooperate in purchasing food and other goods directly from producers” (Fonte, 2013, pg. 230)) that Angelo’s alternative production is viable.

Angelo grows a variety of fruit, but the main production is strawberries and peaches. Growing sporadically around his land are other fruit varieties and wild herbs, not for marketable consumption necessarily but to form part of an ecosystem and extension of biodiversity. With the exception of the strawberry field the grass was kept quite long around the farm to encourage insects; a decision based on the ideology that everything in nature has a role and needs to be looked after (A. Savioli, translated by M. Fonte, personal communication, April, 2016). The produce is sold to over forty GAS. Based on the assumption that each GAS is made up of approximately twenty families, Angelo provides for more than 800 families (A. Savioli, translated by M. Fonte, personal communication, April, 2016).

Through the development of a secure local food regime of accumulation Angelo now describes himself as “a real farmer, full farmer, because... he doesn’t have to be preoccupied by the market anymore” (A. Savioli, translated by M. Fonte, personal communication, April, 2016). This gives him the space and energy to focus on growing produce, being a custodian of the land and frees him from the ‘whip of competition’ that dominates in the NMD in agriculture.

Angelo actively positions his way of life in opposition to those involved in ‘the market’ or what I would call the neoliberal global food regime of accumulation. He is convinced that the neoliberal form of conventional agriculture does not work for anybody and will eventually collapse under the weight of its negative consequences (A. Savioli, translated by M. Fonte, personal communication, April, 2016). Thus, he was determined to do something new and different. He wanted to create a viable project that factored in environmental viability. He hopes that change will come as the realities of the solidarity economy he is a part of diffuse (A. Savioli, translated by M. Fonte, personal communication, April, 2016).

New Zealand - Jim's peasant model of agriculture

Jim's self-proclaimed peasant model of agriculture is an organic micro-horticultural unit based on regenerative agriculture in Kakanui, in the South Island of New Zealand. Jim has a one-and-a-half-acre plot of land which had originally been farmed intensively using chemicals. Jim's mission has been to restore the soil based on the premise of 'growing the soil to grow our food' (Jim, personal communication, February, 2019). A science of organic farming underpins his work as he aims to produce a model that can be transported anywhere in the world. As Jim (personal communication, February, 2019) suggests "The idea is to be able to work with hand tools; no machines and no electricity...Because if I go from here to Myanmar or wherever, it doesn't matter, it will be in a situation like this. The peasant farmers are living like that". Jim hopes that his development of a successful peasant model of agriculture can be replicated anywhere in the world. Transferring this knowledge has been a key part of his work. Similarly, to Angelo who offers educational visits to his farm, Jim's work flows into educational avenues. His research work has been available to a Professor at the University of Otago in New Zealand. Jim also provides various programmes through which he passes on his practices and knowledge.

Selling his produce to local restaurateurs in Oamaru, Dunedin and Queenstown, Jim grows largely tomatoes and potatoes, amongst an array of other assorted fruit and vegetables. Jim knows all of his customers personally. Restaurateurs from Government house and other reputable chefs from around New Zealand all come to his gate.

Similar to Angelo's practice, Jim's oasis gives life to entire ecosystems, each minute aspect of which is cherished for the value it holds in producing organic, local, seasonal produce to feed the people. Just as Angelo leaves the (beneficial) weeds as part of the ecosystem, so too does Jim. The weeds not only cover the beds from the hot sun, but become green compost and are turned straight back in. In agriculture, Jim suggests that "everything has a place" (personal communication, February, 2019).

Jim actively resists what I call the NMD in agriculture. He positions his practices and ideologies in stark contrast to those invested in the conventional market, who he suggests practice "death agriculture" (personal communication, February, 2019). His goal is to

recover “the planet yard by yard” (personal communication, February, 2019) and produce a model that works within environmental limits and will be practicable all around the world. There are similarities abound between Jim in Kakanui, New Zealand, and Angelo in the outskirts of Rome, Italy. The most profound similarity I found is how their ways of life, practices and ideologies can be positioned as actively opposed to the NMD in agriculture. Their way of life embodies a conscious rejection of the NMD in agriculture (though not using that terminology) and pushes towards a new world. However, this rejection is predominantly driven by an ideological conversion rather than by the necessities of responding to the regulatory architecture of the NMD in agriculture in order to maintain viability. Nevertheless, Angelo does suggest that without the local economy generated through solidarity with his consumers his practices would not be viable given the environment (A. Savioli, translated by M. Fonte, personal communication, April, 2016). Angelo’s depiction of ‘the environment’ speaks indirectly to what I have defined as the NMD in agriculture. Thus, resistance to the NMD in agriculture can come in the form of ideological challenges and/or necessity due to the lack of space for neo-peasantry in the neoliberal global food regime of accumulation facilitated by the indirect, proactive regulatory mechanisms of the NMD in agriculture.

Discussion of the neo-peasantry

Much can be learnt from both Angelo based in Italy and Jim based in New Zealand in terms of their production practices, their ideologies and their passion to be the change they want to see in the world. Both Angelo and Jim own their farms which are premised on regenerative agriculture exulting biodiversity and a custodial relationship to the land. However, what was apparent is that Angelo and Jim represent a neo-peasantry; a contemporary way of life that sees the peasant mode of production rehabilitated in new ways in direct response to and challenge of what I call the NMD in agriculture.

In a traditional Marxist definition of peasantry, Angelo and Jim, who own the means of production, must be considered self-employed peasant proprietors, those who “cultivated their own fields with their own hands, and enjoyed a modest competence” (Marx, 1976/1990, p. 877). Marx’s (1976/1990) traditional peasantry included slaves, serfs, and self-employed peasant proprietors. The latter existed outside of the enclaves of industrialisation that occurred through a process of historical uneven development centrally

predicated on imperialism. The neo-peasantry participating in alternative local food regimes of accumulation that I met with most closely resemble these self-employed peasant proprietors of old in terms of both scale and social relations of production; however, they should not be interpreted as such. The neo-peasantry should be disassociated from Marx's (1976/1990) historical narrative, distinctly emerging in the neoliberal era in direct response to the NMD in agriculture. Although the threat of the NMD in agriculture unites the two peasantries, the histories of traditional and neo-peasantry should be seen as distinct.

Neo-peasantry have returned to the land seeking a new way of life that challenges and/or affords a way of life outside the dominant neoliberal global food regime of accumulation facilitated by the neoliberal national-transnational regulatory nexus which together define the NMD in agriculture. Nevertheless, traditional peasantry whose history can be traced right through the long capitalist epoch also challenge the prevailing NMD in agriculture. Thus, I argue, the peasantry exists and resists in both traditional and new forms such as small-scale producers like Angelo and Jim, who are producing food both for partial subsistence purposes and for a livelihood. This two-pronged existence of the peasantry has been noted, though not distinguished, by other scholars. For example, Federici (2012) and Carlsson and Manning (2010) speak to efforts to *preserve established* commons and *create new* commons. Attention is also drawn to how traditional peasantry in Africa claim plots of land in towns (Federici, 2012), and emerging forms of small-scale producers do the same in America (Carlsson & Manning, 2010).

Beyond Marx's (1976/1990) traditional understanding of the peasantry, a more contemporary version of the definition of the peasantry is:

any person who engages or who seeks to engage, alone, or in association with others or as a community, in small-scale agricultural production for subsistence and/or for the market, and who relies significantly, though not necessarily exclusively, on family or household labour and other non-monetized ways of organizing labour, and who has a special dependency on and attachment to the land (UN Declaration, 2018).

Considering both Marx's (1976/1990) classical definition and this modern definition provided by the United Nations (2018) it becomes clear that it is appropriate to identify the local producers I interviewed both in New Zealand and in Italy as a contemporary form of

peasantry. Nevertheless, the histories of the traditional peasantry should be seen as distinct from the contemporary emergence of a neo-peasantry whose return to the land is not the same as the continual persistence on the land.

Uneven development and the NMD in agriculture

The two-pronged existence of the peasantry presents a complex picture. There is both a continuous existence through the long *durée* of capitalism in the form of traditional peasantry and a qualitative break with the past given in the emergence of a neo-peasantry. Traditional peasantry have not simply been expropriated from the land and have persisted on it despite ongoing processes of primitive accumulation. On the other hand, the neo-peasantry have deliberately returned to the land in innovative ways in response to the NMD in agriculture; though this response may be more or less conscious. In this thesis I centre a revised regulationist perspective, presenting a mid-range analysis that discerns heterogeneous periods in capitalist history based on different regulatory mechanisms defined by a model of development. It is the prevailing regulatory architecture of the NMD in agriculture that defines processes of ongoing primitive accumulation in this era.

That primitive accumulation continues in the contemporary neoliberal era demonstrates capitalism as a process of uneven development. That is, a process that describes “how different stages of development as well as different tempos of development in a given society interact with one another and thereby result in different forms or types of development” (Pröbsting, 2016, p. 381-382). This should not imply that the ongoing existence of traditional peasantry is representative of a pre-industrialised time which is just ‘yet to be developed’. Rather, that due to the uneven development of capitalism there are a host of diverse lived experiences of a peasant way of life, both in traditional and contemporary forms, across emerging and advanced capitalist countries. This two-pronged existence of the peasantry, both old and new, draws attention to the uneven development of nation states and the continued displacement of peasantry as the neoliberal form of conventional industrialised agriculture becomes embedded on a planetary scale. Due to capitalism’s uneven development in the NMD in agriculture the traditional peasantry persists alongside an emergence of a neo-peasantry. In this current era defined by the

neoliberal model of development, more nation states and in turn more peasant ways of life, both traditional and new, are exposed to the logics of global capitalism.

The forces of global capitalism are repeating Marx's (1976/1990) story of primitive accumulation including the dispossession of the traditional peasantry all around the world and the amassing of wealth for the investment in global capitalist industrialised agriculture. Many places that were once sheltered have been exposed to the logic of capitalism due to the prevailing neoliberal model of development. Even in the previous Fordist model of development the way of life of traditional peasantry remained largely protected by the counteractive regulatory forms deployed in the Fordist regulatory architecture which harnessed the power of capital to the nation state. In contrast, in the prevailing neoliberal era, this way of life has suddenly become exposed to the power of a globally mobile transnational agribusiness. Everywhere non-capitalist social relations of production are turning into capitalist relations, and through the neoliberal model of development, this is almost universal. This exposure has been uneven, hence the distinction between neo-peasantry in the advanced capitalist countries and traditional peasantry in the emerging capitalist countries. Nevertheless, exposure has been uneven in the past. As such, the now universal exposure of the countryside to the logic of the neoliberal model of development and the NMD in agriculture is imposed on a pre-existing world of unevenly developed capitalist agriculture.

While Marx's (1976/1990) story of primitive accumulation repeats as emerging capitalist countries are exposed to the logic of global capitalism in the neoliberal era, it fails to explain the emergence of the neo-peasantry, namely, small-scale local producers who intentionally position their way of life in response to the NMD in agriculture. That is, Marx's (1976/1990) story does not account for the mobilisation of regulatory forms that change the nature of uneven development and the practices of people within nation states. In the NMD in agriculture, globally mobile capital freed from the 'tyranny of state' through the deployment of indirect, proactive regulatory forms generates hyper competition between various food regimes of accumulation operating at different levels. The neoliberal global food regime of accumulation proves to be globally competitive and is facilitated by the neoliberal national-transnational regulatory architecture which renders small-scale peasant modes of

agriculture increasingly unviable. Thus, there is a never-seen-before threat on the peasantry of old and on the neo-peasantry who attempt to, ideologically or out of necessity, respond to the NMD in agriculture by seeking alternatives. The emergence of a neo-peasantry displays a marked break in the long *durée* of capitalist history, i.e., a discontinuity with the past.

Further demarcating this particular neoliberal era is that processes of primitive accumulation are driven by abstract regulation as opposed to imperialist nation states in previous eras. Amin (1976) presents an argument of uneven development which helpfully identifies uneven exchange processes throughout world capitalism. However, beyond this it is necessary to note the contemporary disjuncture that has shifted the globe beyond an empire-based understanding of the uneven development of core and peripheral nation states towards a logic of abstract regulation. Centrally, the NMD in agriculture drives processes of primitive accumulation in the neoliberal era but develops specific contemporary methods relevant to the regulatory period. Furthermore, the processes of primitive accumulation are deeply exacerbated in the neoliberal era as the NMD in agriculture extends the dominance of the capitalist mode of production planetary.

As Federici (2012) suggests “the neoliberal attempt to subordinate every form of life and knowledge to the logic of the market has heightened our awareness of the danger of living in a world in which we no longer have access to seas, trees, animals, and our fellow beings except through the cash-nexus” (p. 139). In other words, the consciously designed and intentionally implemented national-transnational regulatory nexus of the neoliberal model of development has expanded the capitalist mode of production and way of life to all corners of the globe thus implying the increased threat to and subordination of other ways of life and forms of non-capitalist agricultural production. This points to the discontinuity with the past arising from the impact of the globally prevailing mid-range neoliberal regulatory project.

Amin (1976) points out that

While accumulation of money-capital occurred in all the trading societies of the East, of Antiquity, and of the feudal world, it never led to the development of capitalist

relations, because a supply of free and available labor power was lacking...But these two conditions must *both* be present, and it is the absence of this conjunction that forbids us to speak of “capitalism in the Ancient World,” or “capitalism in the Oriental Empires (p. 31).

It is the lack of distinction between money and capital that has enabled historians to ‘discover capitalism everywhere’ (Amin, 1976). However, in the present, neoliberal led global capitalism has indeed led to the two conditions deemed necessary to discover capitalism everywhere being prevalent across every nation state, though to greater or lesser extents. In the contemporary we can locate capitalism in the far reaches of all nation states due to the widespread adoption of the neoliberal national regulatory template.

The prevailing NMD in agriculture exacerbates the power of global capital. The national template of the neoliberal model of development is very much a one size fits all, but it is stamped on countries at very different stages of industrialisation of agriculture. It means that the global standards of capitalist productivity discipline all producers, but with a brutal effect on those producers that are not globally competitive. Thus, the nature of contemporary uneven development in which both traditional and neo-peasantry exist and yet both face a never-seen-before threat from global capital, should be seen as a direct result of the opening up of all nation states to the logic of global capital. What emerges from this exposure is the imperative of competition generated through the national-transnational regulatory nexus of the prevailing neoliberal model of development.

McMichael (2013) considers the nucleus of what I call the NMD in agriculture to be the displacement of food producers who are “unable to compete with subsidized or monopolized market power” (p. 41). McMichael (2013) aptly speaks to the never-seen-before threat facing both traditional and neo-peasantry, namely, hyper global competition. Global competition remains the core effect of the NMD in agriculture. Although McMichael (2013) defines the common link between distinct eras of capitalist accumulation as “food’s contribution to capital accumulation via state system structuring” (p. 41), what needs to be recognised is that the dominant regime of accumulation is now transnational and is proactively and indirectly regulated at both national and transnational levels. State restructuring in the NMD in agriculture is about more than differential access to food

resources between different nation states, it is about how this differential access is now universally exposed to the logic of global capital. Uneven development is driven by the prevailing neoliberal model of development which implies the global community has become directly exposed to global competition.

As McMichael (2013) suggests

What is distinctive about the corporate food regime is that it was the first time farmers universally were confronted with a world market price, so while there is certainly carryover [from previous regimes] in northern farm politics, the projection of such politics *globally* in a price-assault on smallholder cultures was hardly a carryover. Rather it was a distinctively new chapter in “agriculture’s incorporation,” whereby the WTO has complied with corporate interests in constructing an artificial (subsidized) world price as the centerpiece of a cheap food regime deployed against smallholders everywhere.” (p. 46)

WTO compliance with corporate interests is demonstrative of proactive regulation (regulation which facilitates greater capital power) at the transnational level that in turn constrains the limits and possibilities of national development. This proactive regulatory context of the NMD in agriculture creates the world price assault on traditional and neo-peasantry whose production practices and way of life are rendered unviable in the face of global competition forcing them to participate in marginalised alternative local food regimes of accumulation.

What is distinctive about the present neoliberal era is that the circulation of food on a global scale moving amongst unevenly developing nation states is due to the widespread adoption of the neoliberal national regulatory template. This has generated a punishing competition imperative which marks the changing power configurations in the neoliberal era. This moves beyond McMichael’s (2013) position which suggests that “How agriculture has been organized, and food has circulated, has depended on changing power configurations as states have conquered frontiers, managed territories and adopted shared institutional relationships” (p. 41). Changing power configurations in the NMD in agriculture is not premised on empire logic, or the hegemony of any one particular nation state, but rather

the competitiveness of nation states (and moving above and between them, corporate agribusiness) in a global market economy.

As McMichael (2013) acknowledges, though not going far enough, “This suggests a corporate hegemony insofar as neoliberal doctrine, in elevating “markets” over “states,” transforms the latter into explicit servants of the former” (p. 45). That is nation states, premised on an empire logic or nation state hegemony are no longer the pinnacle of power, or are at least experiencing declining power, in the present era defined by the NMD in agriculture. Rather, the abstract regulation of the national-transnational regulatory nexus of the NMD in agriculture governs changing power relations and largely constrains national development to the priorities of the global market that is safe for capital. For example, the rate of capital export in an integrated global market can be seen in Figure 1 below.

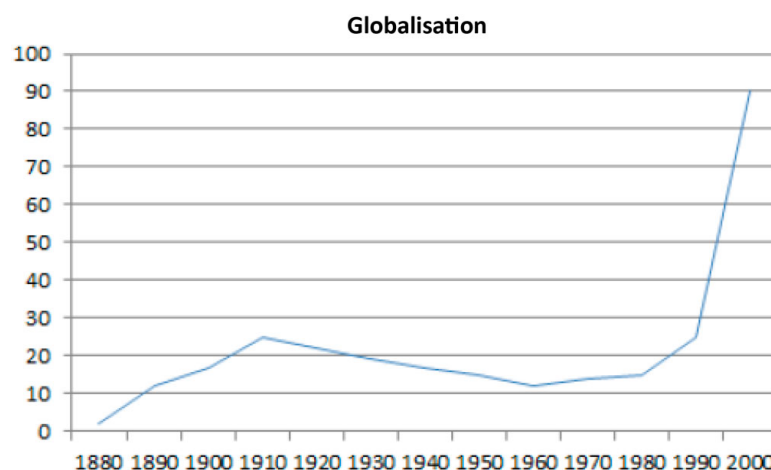


Figure 4 Rate of capital export in an integrated global market (Pröbsting, 2016, p. 395)

This rate of export must be directly linked to the adoption of neoliberal proactive regulation in nation states since the 1980s which has facilitated both greater movement and power of capital and in turn limited national development.

The indirect, proactive regulation of the NMD in agriculture exacerbates the dispossession of small producers around the world in both advanced and emerging capitalist countries. Speaking of the corporate food regime, or what I call the NMD in agriculture, McMichael (2013) suggests it

carries legacies of the previous food regimes, nevertheless expressing a new moment in the political history of capital, which can be conceptualized as the

neoliberal “globalization project” (McMichael, 1996). This project essentially reversed the order of the previous “development project” whereby states managed markets. States now serve markets (p. 47).

It is the regulatory architecture of the NMD in agriculture that has enabled internationally mobile capital global power that results in elevated global competition in turn rendering states servile to markets and global capital. This argument pertaining to abstract regulation moves beyond McMichael’s (2013) position, which at its core holds to a world systems theory, and similarly to Amin (1976) does not conceive of the severance of capital from territories of nation states to assume global power. That is, global capitalism is still seen as a fracturing of the global North and global South, or the core and periphery. Although McMichael (2013) accurately distinguishes that there is a present food regime and that there is ‘a new moment in the political history of capital’, my revised regulationist supplementation unpacks both the causative regulatory forms of this as well as the move beyond the pre-neoliberal empire view of global capitalism.

Despite the servitude of nation states to the project of neoliberal-led global capitalism these nation states are not all equal. The project of creating a global market civilisation safe for capital and precarious for all else occurs on a terrain of unevenly developing nation states. It is upon this global terrain of uneven development that the NMD in agriculture is imposed; in its own right driving processes of uneven development, now driven not by a distinction between core and peripheral nation states, but competitive and uncompetitive nation states. Within these nation states the ongoing dispossession of the peasantry and the consequential proletarianisation occurs unevenly because the methods of primitive accumulation and the consequential rate of industrialisation (directly linked with the dispossession of the peasantry) are uneven themselves. However, in this era both the dissolution of the traditional peasantry and the unviability of neo-peasantry are linked by the common threat that is neoliberal led global capitalism.

Nevertheless, the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (2019) report states that they are “Alarmed by the increasing number of peasants and other people working in rural areas forcibly evicted or displaced every year” (p. 2). The United Nations (2019) have recognised the rights of the peasantry

and have increasingly recognised the role they play in supplying the world with food. Given the urgency surrounding climate change, perhaps traditional and neo-peasantry will prove to be an enduring feature regardless of the depth of penetration of the capitalist mode of production driven by the prevailing neoliberal model of development. Given such contemporary developments, it seems more likely that the role and importance of the traditional and neo-peasantry will grow. Particularly as climate issues necessitate a move away from neoliberal forms of conventional agriculture emerging as a global food regime of accumulation predicated on fossil fuel usage and large resource use. Furthermore, in light of the present global pandemic of COVID-19, the necessity for alternative local food regimes of accumulation that are premised on local self-sufficiency is highlighted.

Contemporary forms of primitive accumulation

The methods of primitive accumulation, which Marx (1976/1990) identified as “The spoliation of the Church’s property, the fraudulent alienation of the state domains, the theft of the common lands, the usurpation of feudal and clan property and its transformation into modern private property under circumstances of ruthless terrorism” (p. 895) have taken on contemporary forms. New methods of primitive accumulation that dispossess traditional peasantry, threaten neo-peasantry and accumulate wealth to be invested in the neoliberal form of conventional agriculture have emerged distinct to the present era.

These contemporary neoliberal methods of primitive accumulation can be seen in “state-orchestrated enclosures following neoliberalism’s ascent to hegemony” (Coulthard, 2004, p. 9), World Bank legislation, United Nations regulation, trade agreements such as NAFTA, land grabbing and structural adjustment loans. Structural adjustment loans transform “states by liberalizing economic policy and redistributing power within states from program-oriented ministries (social services, agriculture, education, etc) to central banks and to trade and finance ministries, compromising national sovereignty” (McMichael, 2013, p. 48). That is, structural adjustment loans entail the adoption of the neoliberal national regulatory template.

The uptake of the neoliberal national regulatory blueprint is encouraged, and in some cases coerced, by global institutions like the IMF and World Bank who permit loans on the basis of structural adjustment programs. For example,

Over 70 southern nations undertook structural adjustment in the 1980s, entering the 1990s with 61 percent more debt than they held in 1982 (Bello et al 1994), allowing broad reductions in wages and public services. Stability in this sense is a relative term, where “market stabilization” has depended on three decades of rolling austerity (and financial) crises across the global South and into the global North in the 2000s (McMichael, 2013, p. 45).

Under the prevailing neoliberal model of development new enclosures are pursued, land grabbing occurs, and structural adjustment loans are used as a guise by transnational institutions to coerce more nation states to adopt the national template of the neoliberal model of development. Beyond this, simultaneously, nation states are wrenched open to the forces of global capital. This pushes all food production towards the neoliberal form of conventional agriculture and reinforces the dominance of the neoliberal global food regime of accumulation.

In the process of imperialist colonisation nation states were the driving force of processes of primitive accumulation. Coulthard (2014) argues that state violence is no longer the driving force behind processes of primitive accumulation and dispossession in the contemporary. For example, Coulthard (2014) puts forward the “ostensibly tolerant, multinational, liberal settler polities such as Canada” (p. 15). However, I argue that while the processes of primitive accumulation in the contemporary may not *appear* as bloody or brutish, the essence is the same. The neoliberal indirect, proactive regulatory template that is adopted at the national level achieves the same violence in covert forms.

Harvey (2004) does recognise the role of the state in processes of contemporary primitive accumulation suggesting that “[t]he state, with its monopoly of violence and definitions of legality, plays a crucial role in both backing and promoting these processes” (p. 74).

However, what both Coulthard (2014) and Harvey (2004) miss is that the national regulatory forms dialectically engage with transnational regulation that generates a global civilisation safe for capital and bloody for all others. Transnational regulation, which is engendered through the widespread adoption of the national template, in turn constrains national development in particular ways. As such, primitive accumulation is implemented by the state in this era but via an adoption of abstract regulation at the national level which is in

turn constrained by transnational regulation that limits nation states' agency. Furthermore, in the neoliberal era nation states in more or less competitive positions must pander to the interests of transnational global capital. Thus, the state, while centrally involved in contemporary primitive accumulation through the adoption of the national template of the neoliberal model of development leading to exposure to global capital, is increasingly at the whims of global capital.

In this era, covert state violence renders the same outcomes as overt imperialist state violence; the same enclosures, the same dispossessions, the same desperation of increasing numbers of people forced to become precarious wage labourers and the same plight of the growing relative surplus population (Neilson & Stubbs, 2011). However, in this neoliberal era, states become agents of capital due to the capacity for capital mobility generated through the adoption of neoliberal regulatory forms. Thus, processes of primitive accumulation are not driven by a logic of imperialist colonisation defined by a hegemonic national empire, but rather the adoption of abstract regulation. This moves beyond an empire understanding of the world towards one in which it is the adoption of abstract regulation that drives contemporary processes of primitive accumulation. This is more than a transformed version of Marx's (1976/1990) theory of primitive accumulation (Federici, 2012; Harvey, 2004; Coulthard, 2014), nor solely a story of uneven development (Amin, 1976; Pröbsting, 2016). The development of abstract regulation is moving the world beyond the empire logic that has usefully defined and explained pre-Fordist capitalism.

Contemporary peasant dispossession, the amassing of capital, and the forced industrialisation of agriculture is to be positioned as the result of the NMD in agriculture. The prevailing NMD in agriculture fundamentally shapes this era of capitalism and in this way change the features that Marx (1976/1990) identifies in his formulation of primitive accumulation. In the contemporary neoliberal era the capitalist mode of production is being embedded in every nation state. The continued existence of the traditional peasantry does demonstrate some continuity across the long capitalist history. However, the logic driving the processes of primitive accumulation that threaten traditional peasantry in this era are distinctly related to the prevailing regulatory architecture. Furthermore, in the present era a qualitative shift can be observed in innovative forms of alternative local food regimes of

accumulation that are emerging in response to the NMD in agriculture that defines this era. McMichael (2013) suggests “Whereas the original agrarian question concerned the rate of disappearance of the traditional peasant, the current agrarian question concerns the reappearance of a “new peasantry” with the potential to farm sustainably” (p. 81). Thus, there is a need to move beyond an argument that holds fast to a homogenous, continuous capitalist history.

There are plenty of arguments pertaining to the continued existence of traditional peasantry and contemporary primitive accumulation which threatens that existence. However, in contrast to my mid-range argument which defines distinct eras across the long capitalist history these arguments hold fast to the claim that there is a homogenous and continuous capitalist history. The common thread that emerges from these arguments on contemporary primitive accumulation is a general emphasis on *continuity with the past* while being blind to what is different about successive mid-range eras of capitalism especially since Bretton Woods (1970s). That is, processes of primitive accumulation are identified right through from the ‘prehistory’ of capitalism to the contemporary era, emphasising continuity.

For example, Federici (2012) examines the expropriation of existing and emerging ‘commons’ and contemporary attempts to revalorise these. She provides the example of the legislative proposal to dissolve ejidal lands in Mexico. The ejidal lands are communal lands used for agriculture, the dissolution of which inevitably separates the peasants from the conditions of their labour, i.e., the first stage of proletarianisation and a contemporary example of primitive accumulation. Federici also (2012) points out that

since at least the early 1990s, the language of the commons has been appropriated by the World Bank and the United Nations, and put at the service of privatization. Under the guise of protecting biodiversity and conserving “global commons,” the Bank has turned rain forests into ecological reserves, has expelled the populations that for centuries had drawn their sustenance from them, while making them available to people who do not need them but can pay for them (p. 139-140).

While Marx (1976/1990) identifies theft of the common lands as a method of primitive accumulation in centuries past, Federici (2012) is identifying this method in the contemporary. Following Linegaugh's idea that the "commons have been the thread that has connected the history of the class struggle into our time" (Federici, 2012, p. 141), Federici recentres continuity with the past. She demonstrates the ongoing existence of traditional peasantry that have suffered from processes of primitive accumulation and the threat of dispossession since the advent of capitalism.

Similarly, Coulthard (2014), in his argument pertaining to contemporary processes of primitive accumulation, points out that

the escalating onslaught of violent, state-orchestrated enclosures following neoliberalism's ascent to hegemony has unmistakably demonstrated the persistent role that unconcealed, violent dispossession continues to play in the reproduction of colonial and capitalist social relations in both the domestic and global contexts (p. 9).

Whilst acknowledging neoliberalism as a distinguishing factor in considerations of contemporary primitive accumulation, Coulthard (2014) fails to see how this drives the processes of primitive accumulation differently.

Harvey (2004) presents an argument pertaining to the ongoing existence of processes of primitive accumulation (or what he calls accumulation by dispossession) in the contemporary era. He challenges assumptions that

relegate accumulation based upon predation, fraud, and violence to an 'original stage' that is considered no longer relevant or, as with Luxemburg, as being somehow 'outside of' the capitalist system. A general re-evaluation of the continuous role and persistence of the predatory practices of 'primitive' or 'original' accumulation within the long historical geography of capital accumulation is, therefore, very much in order, as several commentators have recently observed (Harvey, 2004, p. 74).

This positioning and the suggestion that accumulation by dispossession (Harvey, 2004) is omnipresent reinforces notions of continuity and persistence. This is further demonstrated when Harvey (2004) suggests that “All the features that Marx mentions have remained powerfully present within capitalism’s historical geography” (p. 74).

Carlsson and Manning (2010) argue that “There are undeniable differences in the way the hegemonic global force of capital affects peoples, but there is also a continuity in the global experience of capital” (p. 926). These positions emphasise continuity but miss the discontinuity across the long capitalist epoch. Specifically, they do not elucidate the disjuncture with the past that points to something qualitatively different occurring in the contemporary neoliberal era. Seeing continuity across the long capitalist epoch and the continued plight of the peasantry under processes of primitive accumulation only speaks to the tale of the traditional peasantry. It fails to observe mid-range distinctions across the capitalist epoch that changes the logic of processes of primitive accumulation and causes the emergence of a neo-peasantry.

In order to understand the existence of both traditional and neo-peasantry and the contemporary processes of primitive accumulation (that plague both forms of peasantry, uniting disunited histories) we must see beyond a world capitalism defined by a long history of homogeneity and simple continuities with the past. Capitalism is marked by distinct regulatory projects that present a heterogeneous capitalist history as various indirect, (rarely) direct, counteractive and proactive regulatory forms are adopted more or less across nation states. There are elements of continuity both with the past, and in lived experiences of capital e.g., the experience of traditional peasantry does appear to repeat Marx’s (1976/1990) story throughout the long epoch of capitalism. However, it is important to observe and explain the *discontinuities* with the past. This is centrally predicated on the notion that what is driving processes of primitive accumulation (i.e., the dispossession of the peasantry and the amassing of capital to provide the foundation for industrial capitalist production) in the contemporary era is the regulatory architecture of the NMD in agriculture, defining a distinct capitalist era.

Primitive accumulation exists in the contemporary era, but it exists in qualitatively different forms than in eras past and is driven by the adoption of abstract regulation as opposed to the hegemony of a national empire. In the present neoliberal era we have moved beyond simply experiencing continuity in the form of new processes of primitive accumulation and a process of uneven development between core and peripheral nation states (Amin, 1976). Rather, as a direct result of the neoliberal model of development, the present NMD in agriculture renders capital a global force, modifying capitalism's uneven development and exposing all forms of agriculture to the logic of global capital. There is no shelter from global competition implying that all confront the dominant neoliberal global food regime of accumulation that is facilitated by the neoliberal national-transnational regulatory nexus.

In previous eras, enclaves of industrialisation occurred driven by the uneven exchange relation between core and peripheral nation states and a hegemonic national empire, outside of which peasant modes of existence could continue. In the contemporary neoliberal era, all have been drawn into and exposed to the global market generated by the widespread adoption of the neoliberal national regulatory template. This abstract regulation drives contemporary processes of primitive accumulation and uneven development. A neo-peasantry have emerged in response to the NMD in agriculture which nevertheless in turn creates a never-seen-before threat on all peasant modes of existence, both traditional and new. Throughout the core and peripheral nation states, nation states, domesticated capital, communities and people are exposed to the whip of global competition. Global competition fundamentally characterises this particular era of capitalism.

This insertion of regulation builds upon an empire view of world capitalism predicated on the unequal relationship between core and peripheral nation states. Centres and peripheries are argued to be permanent and enduring features of the capitalist world, albeit the division of labour that spans these being more malleable (Amin & Bush, 2014). The former are argued to actively shape globalisation, whilst the latter "remains passive, and is continuously adjusted to the demands of the global system, that is, acceleration of growth and accumulation in the centres" (Amin & Bush, 2014, p. S109). Amin's (1976) work enables us to consider how capitalism is a process of uneven development and that world capitalism is not homogenous. However, the adoption of regulatory forms and mechanisms across

nation states and transnational regulatory bodies has shifted this logic of uneven development in the present era beyond the power of nation states. No longer is uneven development so centrally predicated on the core/periphery division and the power of the core nation states in shaping globalisation. Rather, abstract regulation has become the shaping mechanism of the era. In this space whilst some nation states remain more powerful, this is inherently due to their competitiveness in a regulatory context defined by the power of transnational global capital. This power of global capital is enabled through the proactive indirect forms of the regulatory architecture of the neoliberal model of development, defining a qualitatively different era.

Thus, what can be seen simply as *new* methods of primitive accumulation serving old purposes of dispossession and amassing of capital can be framed differently so as to see how the underlying logic of the situation has actually been changed by the adoption of abstract regulation. That is, a revised regulation theory enables one to see how the NMD in agriculture actually drives processes of primitive accumulation and uneven development through global competition. The opening up of nation states to attract transnationally mobile capital exposes all forms of agriculture and ways of life to the global forces of capital. In the emerging capitalist nation states traditional peasantry are expropriated from the land and wealth newly amassed by the capitalist becomes invested in neoliberal forms of conventional agriculture which in turn drives ongoing proletarianisation. In the advanced capitalist nation states, neo-peasantry (the likes of Angelo and Jim) seek participation in alternative food regimes of accumulation in an attempt to resist, either ideologically, or out of necessity, the neoliberal global food regime of accumulation, and more broadly, the NMD in agriculture. Neo-peasantry face the same threat of expropriation and unviability as traditional peasantry because the prevailing neoliberal regulatory architecture denies shelter from global capital. This drives a near universal impetus towards neoliberal forms of conventional agriculture in order to remain competitive, further threatening the two peasantries united in their plight under the NMD in agriculture.

Both traditional and neo-peasantry in the neoliberal era confront the never-seen-before threat occurring within global circuits of production. The traditional peasantry Marx (1976/1990) wrote about continues to exist, face threats, resist and build an alternative

(e.g., the food sovereignty movement of La Via Campesina (Clark, 2016; MacRae, 2016)). The peasant movement is said to be the largest social movement in our contemporary times (Akram-Lodhi & Kay, 2009). McMichael (2013) argues that

rather than consign agrarian relations to a narrative of industrial subordination and elimination, or marginalization, of peasant-farmers, the food sovereignty movement constructs an alternative narrative working within the context, but against the dictates, of corporate globalization. In particular, the food sovereignty movement at large (represented by the International Planning Committee for Food Sovereignty) seeks to reverse and denaturalize dispossession and thereby limit peasant subjection to capital — materially and discursively (p. 79).

Contemporary peasant dispossession speaks largely to the traditional peasantry who Marx (1976/1990) spoke of, and whose livelihoods continue to be threatened today. However, as McMichael (2013) suggests, this dispossession is challenged through the food sovereignty movement which represents part of the peasant response to the NMD in agriculture in the global South. Similarly, neo-peasantry directly challenge the NMD in agriculture and build alternatives, and yet also face similar threats. For example, Carlsson and Manning's (2010) so called 'Nowtopian' practices, referring to the establishment of new commons, are a counter-movement to the dominance of the NMD in agriculture which seeks to commodify almost everything. 'Nowtopian' practices present as an alternative and yet simultaneously are threatened by globally mobile transnational agribusiness participating in the neoliberal global food regime of accumulation, and the wider regulatory architecture of the NMD in agriculture.

Conclusion

In New Zealand, Italy, and around the world the peasantry continues to exist. However, this existence is not homogenous. In the advanced capitalist nations, such as New Zealand and Italy a new group of small-scale producers – a neo-peasantry – have emerged that have a different history to that of the traditional peasantry that Marx (1976/1990) writes about. This runs counter to the neoliberal project for a global market civilisation in which non-capitalist social relations turn into capitalist relations everywhere. The rise of this neo-

peasantry, like Angelo and Jim, can be explained by understanding that the long capitalist history can be delineated into specific mid-range eras defined by different regulatory projects and accumulation regimes. The neo-peasantry emerges against the prevailing NMD in agriculture (defined by the neoliberal global food regime of accumulation and facilitating neoliberal national-transnational regulatory nexus).

Angelo and Jim present alternatives to the neoliberal form of conventional agricultural production and participate in local food regimes of accumulation, alternative to the dominant neoliberal global food regime of accumulation. This is a different sort of resistance from that of traditional peasantry, like those fighting for the ejidal lands in Mexico (Federici, 2012); though nevertheless various forms of peasant resistance can be linked in opposition to the NMD in agriculture. It is this opposition which unites the disunited histories of the two peasantries. This argument pulls on a mid-range revised regulation theory to give context for the existence of traditional and neo-peasantry who are united under the threat of the NMD in agriculture which drives processes of primitive accumulation in the contemporary era.

What is abundantly clear is that processes of primitive accumulation occur in the contemporary era. Many scholars have argued that primitive accumulation is ongoing (see for example Federici, 2012; Carlsson & Manning; Harvey, 2004; Coulthard, 2014), despite offering diverse critical perspectives on contemporary instances. Marx's (1976/1990) formulation on primitive accumulation, being in essence the separation of the peasantry from the conditions of their labour and the accumulation of capital from which investment in large scale industrial capitalist production can occur, provides part of the recurring story of the dispossession of peasantry today. The non-idyllic methods of primitive accumulation that are identified by Marx (1976/1990) can be seen in new contemporary forms. However, these contemporary processes of primitive accumulation should be separated from the narrative Marx (1976/1990) tells, and from arguments that posit a homogeneous, continuous capitalist history.

The existence of both traditional peasantry and neo-peasantry is not about continuity with the past, but rather acknowledging that capitalism is a process of uneven development. This speaks to the uneven industrialisation that occurs as the uneven development of capitalism

goes planetary under the prevailing model of development. The prevailing neoliberal model of development deepens this process of uneven development as the neoliberal project of a global market civilisation is realised and most nation states, and communities within them, are exposed to the imperative of global competition. It is not enough to note that primitive accumulation remains ongoing, an argument which maintains a continuity with the past through the long *durée* of capitalism. We also need to acknowledge the unevenness of these contemporary instances of primitive accumulation and speak to the decidedly new demarcation of this neoliberal era.

The forces of global capitalism repeat Marx's (1976/1990) story of dispossession and proletarianisation in the emerging capitalist countries. But the livelihoods of small-scale producers in advanced capitalist countries, albeit also under the threat of the neoliberal model of development, tell a different story from the peasantry of old. Novel forms of social relations of production alongside non-industrialised methods of food production (such as those embodied in Angelo and Jim's practice) are formed in the context of the NMD in agriculture. That is, in revisiting primitive accumulation in the context of global neoliberal capitalism we can see the dissolution of traditional peasantry, who nevertheless continue to fight back, but also the threat that neo-peasantry face in the advanced capitalist countries as they attempt to step outside the neoliberal global food regime of accumulation and do something different.

The NMD in agriculture demarcates a particular era across the long run of capitalist history and the industrialisation of food. The global imperative of competition generated by the widespread adoption of the neoliberal national regulatory template causes production practices to converge towards the neoliberal form of conventional agriculture which remains most competitive. Alternatives are under threat from global competition in a way never seen before. This threat occurs within global circuits of production that flourish because many places that were sheltered from global market logic in previous eras are exposed to the logic of capitalism's uneven development. This exposure occurs through the widespread adoption of the national template of the neoliberal model of development and the corresponding transnational terrain generated that in turn constrains the limits and possibilities for national development. In the next chapter I present some case studies of alternative local food regimes of accumulation in both Italy and New Zealand. I consider

their resistance to the neoliberal global food regime of accumulation – that together with the neoliberal national-transnational regulatory nexus defines the NMD in agriculture.

Chapter Five

The organic movement towards a counter-hegemonic alternative model of development in agriculture: Practices of resistance in the global North

Introduction

Given the crises of the neoliberal form of conventional agriculture centrally defined by a global food regime of accumulation my empirical work centred on investigating alternatives to this which emerge in the prevailing era as local food regimes of accumulation. Drawing on work completed in Italy in 2016 and in New Zealand in 2018 and 2019, I make the argument that these alternative local food regimes of accumulation resist the neoliberal global food regime of accumulation and also provide the foundations of a post-neoliberal world. This world can be intentionally created by deliberately constructing an alternative model of development to frame the next era of capitalism. Given the crisis of the prevailing NMD in agriculture, and the larger climate crisis, seeking practical solutions is the only way forward.

The following case studies are examples of alternative agricultural practices that both resist the current neoliberal form of conventional agriculture and which could centre a progressive counter-hegemonic post-neoliberal model of development in agriculture. I draw on the tables presented by Beus and Dunlap (1990) and Maye and Kirwan (2010) (Table 2 and Table 3 in chapter two) to identify trans-era elements that define the practices I looked at as alternative agriculture. However, beyond this, I locate the emergence of these specific examples of alternative agriculture within this era. Namely, I position my case studies as specifically alternative to the neoliberal global food regime of accumulation.

These case studies should be understood as organically developing alternative practices that emerge from the ground up. They represent the informal elements of a local alternative food regime of accumulation. Associated with these alternative local regimes of accumulation are informal elements of local regulation. Central to my proposition of the need to conceptualise and implement an alternative model of development is the need for local food regimes of accumulation that can be harmonised with local regulation within a national regulatory template as part of the national-transnational regulatory dialectic of an

alternative model of development. These case studies demonstrate practices which can serve that purpose.

My Italian case study is largely organised around the consumption element of an alternative local food regime of accumulation – The Gruppi di Acquisto Solidale (Solidarity Purchasing Groups or GAS) which are “groups of households that cooperate in purchasing food and other goods directly from producers” (Fonte, 2013, pg. 230). 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. I also interviewed three of the producers who supply to the GAS. These three alternative production initiatives were La Nuova Arca, Barikamà and Il Papavero.

In New Zealand I looked at the Tauranga Farmers’ Market. Here I carried out participant observations once a month for nine months, interviewing consumers at the market during that time. Separately, I also interviewed four local producers/distributors who sell their produce at the Tauranga Farmers’ Market, two vegetable sellers, an egg distributor and one cheese maker. I also interviewed the chairperson of the market who is themselves a stallholder and sells vegetables. I also investigated a self-proclaimed peasant model of agriculture in the South Island of New Zealand which was a micro-production based on regenerative agriculture.

Investigating these examples of currently alternative, local food regimes of accumulation point to how such practices encompass the seeds of a post-neoliberal path. As McMichael (2013) suggests “given the growing crisis of industrial agriculture in a climate-challenged world with widespread malnourishment... the current agrarian question concerns the reappearance of a “new peasantry” with the potential to farm sustainably” (p. 81). As explored in chapter three, the following case studies are evidence of the appearance of a neo-peasantry, pointing not only to the uneven development of capitalism under the neoliberal model of development (see chapter four), but also to potential solutions to the crisis of the neoliberal form of conventional agriculture.

Italy

GAS Testaccio Meticcio

The Gruppi di Acquisto Solidale (GAS) or Solidarity Purchasing Groups are aptly named. GAS can be defined 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” (Fonte, 2013, p. 230). The value laden practice of GAS and the producers who supply them is steeped in ideas of localism, solidarity, sustainability and social justice. GAS articulate their objective as “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, pg. 233). This is evidence of resistance to the neoliberal form of conventional agriculture. That is, this is a decidedly post-neoliberal vision, heralding the next era of capitalism in which the global imperative of competition does not whip people into isolated and divided actors rendered competitive or uncompetitive on the neoliberal-led global market.

While the neoliberal global food regime of accumulation centrally involves the purchasing of food at a store or supermarket, GAS facilitate a more personal, albeit complex, system for purchasing food in this alternative local regime of accumulation. Fonte (2013) points out that “the first important difference is that the act of purchase is not individual but collective, implying planning and coordination” (pg. 237). As an alternative site of distribution, consumption and exchange, GAS prioritise the livelihoods of small-scale producers, environmental limits, alongside quality produce. The coordination implied is also testament to Beus and Dunlap’s (1990) identification of alternative agricultural practices marked by community – including increased cooperation.

Fonte (2013) provides the legal recognition of GAS, suggesting that “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’” (pg. 233). However, despite the formalisation inherent in lawful recognition, a purposeful informality is adopted by GAS as “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” (Grasseni, 2014, p. 79). As noted by Maye and Kirwan (2010) short supply chains distinguish alternative agriculture from the long supply chains of conventional agriculture. These long supply chains have gone global in the neoliberal era. Thus, it is the global supply chains, part of the neoliberal global regime of accumulation, that this local food regime of accumulation provides an alternative to.

The informality of GAS makes it difficult to report how many exist. At any given time some may be emerging whilst others cease. The first GAS was established in 1994, and as of 2013, 945 GAS were listed on the national GAS network (Fonte, 2013). I interviewed participants from one GAS – GAS Testaccio Meticcio. This GAS was started in 2011, by one of my participants, Alfredo. This group began slowly which came with challenges. The producers who supply GAS require a minimum order but with only a few members it was a struggle to reach that. However, after moving locations to a different area of Testaccio their visibility increased, and with it an explosion of membership. In 2016, at the time of my research, the group had approximately 40 active members which was described as being a large group (U. Sievers, personal communication, April, 2016).

At the time of my research GAS Testaccio Meticcio met weekly at 6.30pm on Thursdays for several hours in a location described as accessible and quite central (U. Sievers, personal communication, April, 2016). The purpose of this weekly meeting is twofold. The main priority (particularly for those members who are less participatory) is for the members of GAS Testaccio Meticcio to collect the food which they have ordered in either weekly, fortnightly or monthly intervals. In preparation for collection a long table was set up at the back of the room. Upon my arrival, some of the wares were already packed in brown paper bags resting in crates ready for collection, which had been delivered by the local producers themselves or brought in with the particular member charged with a certain product. Of the produce delivered by local producers during the meeting time, I noted beans, artichokes, sweet cakes and yoghurt. The members themselves do not pay the producer upon delivery to this site; payment is organised via a product coordinator within the GAS. In some cases the goods are sent to GAS members throughout the week, and are brought to the weekly meeting by the members rather than the producers themselves.

Secondly, this weekly gathering serves as a formal meeting time. An agenda is followed and the more active members of the GAS are able to address any issues that may have arisen. The comradery of the group was clear in as much as although there was a set agenda requiring the attention of the group, laughter and small extraneous conversations would break out. I noted that many orders are dropped off at the very beginning of the evening, which enables them to be sorted out somewhat [before the more formal meeting begins]. Nevertheless, a few farmers continued to bring in orders through the course of the evening, while the discussion is being held. After finishing the agenda, the officiality of the week is concluded. However, people continue to socialise after the conclusion of the meeting.

As alluded to above, not all members participate in the formal proceedings, but arrive simply to collect their goods and depart after a brief interlude with those members holding the more formal discussion. To ensure the functioning of this regime of accumulation activity occurs throughout the week. GAS are participatory, “everyone works together to get stuff done” (U. Sievers, personal communication, April, 2016). Uta (personal communication, April, 2016) went on to suggest that “people are generally encouraged [to take on a role] and eventually everyone does something and you can see that this only works if everyone contributes”. Members are allocated certain roles including the allocation of ordering specific foods. The member charged with such a role uses a software system to collate the order, download it with all the names and respective amounts for each person and then ensure that it respects the minimum order that the farmer will accept. Then the member sends the order to the farmer. Depending on the product, orders are sent out weekly, fortnightly or monthly. This speaks to the ‘independence’ of this local food regime of accumulation that Beus and Dunlap (1990) mark as an indicator of alternative agriculture, involving community self-sufficiency. However, more specifically this is alternative to the neoliberal form of conventional agriculture in which coordinating power is removed from communities and given to global agribusiness and supermarkets to coordinate distribution and consumption.

Not only is GAS Testaccio Meticcio participatory in terms of the roles needed to ensure the functioning of this alternative local food regime of accumulation, but also in terms of building relationships amongst each other. Compared to the dominant site of food

distribution and exchange in the neoliberal era, namely, the supermarket, GAS Testaccio Meticcio provides a social element. That is, “the group makes efforts to know one another, and also to do social events together (A. Gagliardi, personal communication, April, 2016). Uta mentioned events such as picnic trips on the weekend out to the countryside (U. Sievers, personal communication, April, 2016)”. Uta also suggested that this social element can be the key attraction for people, saying, “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” (U. Sievers, personal communication, April, 2016). This demonstrates the creation and embedding of new social relations which resists the commodification of every aspect of social life in the neoliberal global food regime of accumulation.

The main order for this GAS is vegetables, which are organic and are ordered weekly. Fonte (2013) articulates that “buying certified organic food has become one of the routine methods for facilitating the process of selecting producers” (pg. 236). As noted by Maye and Kirwan (2010), organic farming is one of the key distinctions of alternative agriculture. In the neoliberal global food regime of accumulation the need to remain competitive drives producers away from organics in order to lower costs. Other goods are ordered on top of the vegetable order in fortnightly and monthly intervals. For example, eggs or yoghurt are ordered fortnightly. The final meeting each month is when the largest order comes in catering for the monthly orders which include Fairtrade coffee and chocolate.

GAS select which products they will purchase based on *production practices* which are considered more important than *product characteristics* in the pursuit of “enhancing environmental sustainability and principles of solidarity” (Fonte, 2013, pg. 235). In the neoliberal form of conventional agriculture supermarkets are the key site of distribution and exchange. Within supermarkets the customer is not afforded the same ability to make choices concerning production practices. Production methods and the social relations of production alike are invisibilised within the neoliberal global food regime of accumulation. There is no room for negotiation on production practices once the product reaches the shelf of the supermarket.

The production practices that are sought by GAS align with what Beus and Dunlap (1990) and Maye and Kirwan (2010) define as alternative. Namely, involving (in the words of Beus and Dunlap (1990)) *decentralisation, independence, community, harmony with nature, diversity and restraint* (see Table 2). Maye and Kirwan (2010) would define the production practices sought by GAS as alternative because of the following key priorities: *naturalness/freshness, biodiversity, small-scale production involving short food supply chains, local markets, sustainable farming, slow food and quality produce* (see Table 3). In the specific neoliberal era, the key is that GAS are seeking alternatives to the neoliberal form of conventional agriculture in which long food supply chains have gone global and are premised on cheap and accessible food in a competitive market.

The producers are vetted by each GAS. Field visits occur to ensure that the production practices align with the values of GAS. The producer is thus selected “in accordance with ethical and solidarity principles, the most important of which are respect for the environment and for people” (Fonte, 2013, pg. 232). To elaborate, Fonte (2013) suggests that when visiting the local producers on their farms GAS engage in dialogue pertaining to “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” (pg. 237). GAS members can form relationships with producers on these farm visits, but also during the weekly meetings if the producers come to deliver their goods. Accessing “good food at a good price that was still fair for the producer was a key factor for many people (A. Gagliardi, personal communication, April, 2016). In the neoliberal form of conventional agriculture working conditions and environmental concerns are deprioritised in the pursuit of competitiveness. On the other hand, this alternative local food regime of accumulation is able to recentre social and environmental concerns that resist the regime and regulation impetus of the prevailing NMD in agriculture.

A multitude of reasons are given for motivating participation in GAS and making the choice to consume food in this way. One of these is the importance of having a relationship with those producing your food. As Grasseni (2014) found, for GAS activists “trust substitutes an oppositional setup that places consumers and producers as vocationally at odds in a free market” (pg. 88). Brunori et al. (2012) suggest that participation is based on reflexive

consumption, a desire for solidarity within the group and with producers, socialising, and the generation of synergies “that is, the use of social links to generate economies in food production and distribution” (Brunori et al., 2012, pg. 10). Fonte (2013) identified motivations including “leftist political ideologies... environmental concerns... Catholic (or other Christian) spirituality... [and] obtaining healthy food or making the food system more sustainable” (p. 238). To these findings, based on my own research with GAS Testaccio Meticcio, I would add that health concerns contribute to participation as well. The generation of synergies between producers and consumers involves the active construction of social relations which resist the neoliberal impetus towards the planetary embedding and dominance of the capitalist mode of production in this era.

For the security of local, small-scale producers GAS have proven to be instrumental. GAS provide a guaranteed consumer base, supplying a minimum order that provides a buffer for the intense hyper competition generated in the present NMD in agriculture. GAS also helps to finance the producers meaning they are able to avoid bank loans and the subsequent interest rates incurred. As noted by Beus and Dunlap (1990) this *independence* is a distinct indicator of alternative agriculture; namely, reduced reliance on external sources of credit. This arrangement is testimony to an alternative to the neoliberal global regime of accumulation in which consumers and producers are distanced by nations and a lack of solidarity.

La Nuova Arca



Figure 5 Left garlic rows



Figure 6 Right artichoke rows

La Nuova Arca is one of the small-scale local producers who supply a range of organic fruit and vegetables to GAS. 90-95% of their produce goes to approximately thirty GAS, including Testaccio Meticcio (S. Carbone, personal communication, April, 2016). More than simply a

consumer base, the GAS are considered “companions, co-investors and co-generators, groups and individuals who share our vision and our values” (La Nuova Arca, n.d., para. 2). As much as GAS desire relationships with the producers, so too does La Nuova Arca desire a relationship with GAS. The importance of solidarity is what their food production is based on. This is described 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?” (S. Carbone, personal communication, April, 2016). This speaks to La Nuova Arca’s prioritisation of community, namely increased cooperation, which Beus and Dunlap (1990) identify as a defining aspect of alternative agriculture. In the current era, this emerges as an alternative to the neoliberal global regime of accumulation in which producers and consumers are likely to be in different countries.

La Nuova Arca, or ‘The New Ark’, began in 2010 and is a family home situated on three hectares on the outskirts of Rome. La Nuova Arca is much more than just an agricultural production unit. The priority of the initiative is to provide paid work to those in need and as such can be thought of as ‘solidarity agriculture’ (S. Carbone, personal communication, April, 2016). La Nuova Arca can be thought of as a social project first and foremost. This project encourages the reintegration of disadvantaged people into the labour market. Migrants, [refugees], 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.

In the neoliberal global food regime of accumulation the trans-era description of conventional agriculture as a practice in which labour is an input to be minimised (Beus & Dunlap, 1990) is embedded as a necessity. Labour must be minimised as producing cheap products becomes an iron law in order to remain competitive in the neoliberal global market. As an alternative to this neoliberal form of conventional agriculture, La Nuova Arca actively pursue the integration of more labour in order to reduce precarity among vulnerable groups. In this way the incorporation of labour into this alternative agricultural production practice as part of an alternative local regime of accumulation is made meaningful and recentres people in agricultural production.

La Nuova Arca places great emphasis on the freshness of their produce. The produce for afternoon deliveries is harvested the same morning. But the freshness of the produce is merely one of Salvatore's selling points. As he says "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?" (S. Carbone, personal communication, April, 2016). As Maye and Kirwan (2010) identify, short food supply chains, based on the prioritisation of biodiversity and sustainable farming, producing quality, organic, slow food marks alternative agriculture from conventional. Furthermore, as Beus and Dunlap (1990) suggest, farming as a way of life as well as a business is indicative of an alternative agricultural practice. All these aspects can be observed in La Nuova Arca's practice and principles. However, further to this, and instrumental to my argument, is that it is apparent that this practice is specifically alternative to the neoliberal form of conventional agriculture in which cheap food moves around the world in not simply long, but global, supply chains that incur everywhere. This alternative resists the neoliberal impetus to embed conventional agriculture planetary and instil global commodity chains.

The production at La Nuova Arca is variegated. Some of the organic produce planted during my visit included garlic, beans, zucchini and lettuce. Salvatore suggested 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 (S. Carbone, personal communication, April, 2016). Thus, their agricultural production is far from the monocultural, mechanised and industrialised farms characteristic of conventional agriculture (Beus & Dunlap, 1990). Specifically, their production serves as an alternative to the power of supermarkets which has been embedded in the neoliberal era. That is, this agricultural production serves as an alternative site of production and distribution which locates La Nuova Arca as an alternative to the entrenching of supermarkets that coordinate and make available global produce.

Maintaining a variety of products is made difficult due to the unpredictability of weather. Of course, this is true across all agricultural production. However, Salvatore notes that growing organically adds to the complexity. Conventional agricultural practices use fertilisers, flying in face of seasonality to ensure bigger yields for longer periods of time (S. Carbone, personal communication, April, 2016). In contrast, at La Nuova Arca the plant is not overstressed

because fertilisers etc. are not used, permitting the plant to produce seasonally and unburdened, but this does add to the precarity of production (S. Carbone, personal communication, April, 2016). Conventional agriculture can be defined in a trans-era sense by large, capital-intensive production units and technology and is maintained by agricultural chemicals (Beus & Dunlap, 1990). These aspects of conventional agricultural production emerge in a specific neoliberal form in the present era. Namely, the present neoliberal global food regime of accumulation incorporates “farmers in the “chemical treadmill”” (McMichael, 2012, p. 75). However, the production at La Nuova Arca is maintained without chemicals, and is smaller, based on low-capital production units providing a clear alternative and resistance to the neoliberal form of conventional agriculture.

In the face of the uncertainty tied up in producing a diverse, organic array of produce using small scale farming methods and ideologies Salvatore emphasises the importance of working “in net” (S. Carbone, personal communication, April, 2016). For example, if the zucchini were not ready for harvesting at the expected time, La Nuova Arca sells the zucchini of other local producers in the area instead of their own. This ensures that La Nuova Arca are always able to meet the needs of their consumers and have a ‘diverse basket of produce’ ready to deliver. In return, La Nuova Arca will provide produce to other local producers if their crop has suffered a setback, who will in turn sell on behalf of La Nuova Arca. Salvatore suggests that “This is the key to ensuring the continuity of small scale farming that provides variety and that if you try to play this game alone... you are not going to [succeed]” (S. Carbone, personal communication, April, 2016).

This is fundamental for thinking about an alternative to the neoliberal regime of accumulation which is based in large scale national specialisation within global competition and relies on importing what is not produced. This alternative practice demonstrates the organic development of a local regime of accumulation that provides a post-neoliberal alternative. Salvatore 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). This displays a key element of the alternative nature of La Nuova Arca’s production, namely, resistance to the neoliberal regime and regulation impetus towards large scale global conventional production. Thus, it provides a local alternative to neoliberal globalisation.

Barikamà



Figure 7 Left Barikamà's yoghurt



Figure 8 Right Lake Martignano

Barikamà is another local producer who supplies to GAS Testaccio Meticcio. There is a significant story behind this local alternative agricultural production. As I outlined in previous work

Barikamà 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 Barikamà were among those who left the South after being involved in the riots of Rosarno. 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 (Howard, 2017, p. 101-102).

Barikamà is defined as a type B social co-operative. In Italy this standard is predicated on at least 30% of those involved in the co-operative being 'disadvantaged people'. The president of Barikamà at the time of my research – Suleman – along with five other men were given thirty euro to begin this project. From these humble beginnings, Barikamà was founded in 2011 forming 'the resistance': a resistance in the form of a small-scale local production practice that provided both a livelihood and a way forward. As Beus and Dunlap (1990) suggest, farming as a way of life as well as a business is indicative of alternative agriculture. In the neoliberal era, this emerges as a way of life specifically alternative to that which is dominant within the neoliberal global regime of accumulation in which very few large-scale, transnationally mobile agribusiness units remain competitive.

Barikamà produces organic vegetables and yoghurt. The production is based next to the idyllic Lake Martignano, on Casale di Martignano – a certified organic farm and cheese factory that offers them use of their equipment and other assistance. Here Barikamà has been producing an array of organic vegetables since 2014 including basil, cucumbers, onions, green beans, zucchini, potatoes, eggplants and tomatoes, which are tended to daily. The diversity of production based on the use of renewable resources and locally adapted production systems is, by Beus and Dunlap's (1990) definition, indicative of alternative agriculture. Maye and Kirwan (2010) would concur, as Barikamà produces natural and fresh produce in small-scale production using sustainable farming methods, as part of short food supply chains in which biodiversity, regional palates, local markets and slow, quality food is prioritised. This is a clear alternative to the mono-cultural, chemically driven global supply chains coordinated and distributed within supermarkets around the world that increasingly incur into all areas of the world through the coupling of this neoliberal global regime of accumulation with the national-transnational regulatory nexus.

GAS are the main consumer base for Barikamà. They sell their produce and yoghurt to approximately twenty GAS. The average size of GAS is twenty-five households (Carolan, 2016). Based off this average size, Barikamà supply 500 people in various GAS groups with

yoghurt and vegetables. Barikamà also supply to the wider public through other sale points like some markets and stores. Barikamà frequent various markets on a monthly basis, one of which is called 'terra TERRA', which literally translates to 'earth earth'. This market occurs every weekend in the suburbs of Rome. Using their bicycle delivery system, they also do some home deliveries of their own produce as well as some of Casale di Martignano's cheese and sausages.

Barikamà has grown significantly. Initially, they produced 15 litres of yoghurt per week. This has increased to 100 litres or more. The yoghurt, whilst not being certified organic, contains no thickeners, preservatives, sweeteners or dyes. The actual production of the yoghurt occurs either on a Tuesday and/or Wednesday, depending on the demand. Mauro notes that the yoghurt is more expensive than what you can purchase at the supermarket or through conventional distribution sites because they are unable to compete against the supermarket prices (personal communication, April, 2016). This is a recurring theme for small-producers in the neoliberal era as they confront the neoliberal form of conventional agriculture.

The yoghurt and vegetables are delivered by bicycle. Casale di Martignano bring the produce from the farm into Rome, where the deliveries are then made by bicycle from a warehouse. To help increase the efficiency of their deliveries Barikamà has bought an electric scooter which is in keeping with their values of environmental preservation. The yoghurt is also bottled in glass jars and consumers are encouraged to return these so they can be reused. Such practices demonstrate that external costs are considered; presenting as an alternative to the global dispersal of market competition under the neoliberal model of development, in which it is imperative that capital avoids being accountable for externalities in order to remain globally competitive.

Il Papavero



Figure 9 Left strawberry field



Figure 10 Right packed strawberries ready for delivery

Il Papavero is a small, organic family farm in peri-urban Rome run by Angelo Savioli and his wife Fiorella. Various fruit trees are grown on the farm including apricots and pears, however, the main focus is on the production of strawberries and peaches. Alongside the more formal production, wild herbs, fruit and vegetables also grow on the fields. Angelo also had some beehives on the property. These were set up so that children on educational trips could come and observe. All around the farm, with the exception of the strawberry field, the grass was kept long with the intent of encouraging insects because it is Angelo's view that "all of the things that are in nature have a function, so everything has to be taken care of" (A. Savioli, translated by M. Fonte, personal communication, April, 2016). This latter perspective points to Angelo valuing nature for its own sake and ensuring that the life-cycle is complete, i.e. elements of alternative agriculture (Beus & Dunlap, 1990). In the neoliberal era, these trans-era definitions emerge specifically as alternative to the neoliberal form of conventional agriculture in which nature is continually overridden in order to maintain competitiveness.

The core of Angelo's consumer base is GAS. He had been working with GAS for twelve years at the time of research in 2016. As is expected practice when working with GAS, members came to visit his farm. From here a direct relationship was established with his consumers and his production practices could be observed and verified. This demonstrates that short food supply chains predicated on cooperation are a key part of Il Papavero's practice; elements which Beus and Dunlap (1990) define as alternative agriculture. However, in the prevailing era, this emerges as a local regime of accumulation alternative to the neoliberal global regime of accumulation where producers and consumers are geographically dispersed.

Six years ago, Angelo proposed that the relationship between his farm and GAS become more formal through the notion of pre-financing. 24 out of the 40 GAS he supplies finance Angelo at the beginning of the season before expenses accrue. In return, GAS get the product at a discounted rate until the pre-finance is paid back. This ensures Angelo security and means he does not have to rely on bank loans. As Beus and Dunlap (2010) suggest independence, or not relying on external sources of credit, alongside more community self-sufficiency are indicators of alternative agriculture. In the neoliberal era, this provides a direct alternative to the spatially distanced consumers and producers in the neoliberal global regime of accumulation. In the latter, producers are unable to rely on consumers for support or security and must rely on their own competitiveness in a global market in order to succeed.

Angelo is part of a participatory local regime of accumulation centred on direct relationships between local producers and local consumers. Both the producers and the consumers participate in the same project, through tangible forms such as pre-financing and intangible forms such as shared values. This participatory system allows for much more flexibility and transparency. For example, if production costs increase Angelo can justify the necessary increase in price and then increase it. On the other hand, within the neoliberal form of conventional agriculture, competitive logic drives producers to offer the cheapest product at the cost of environmental and social externalities. Such logic does not apply in this contained alternative local regime of accumulation.

The decision to convert to an organic farm was motivated by dissatisfaction with the conventional system. In other words, Angelo was dissatisfied with the particular neoliberal form of conventional agriculture. Angelo consciously situates his practice as an alternative to conventional agriculture. For example, Angelo suggests that “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” (A. Savioli, translated by M. Fonte, personal communication, April, 2016). The nature of a small-scale farm and all that embodies is a core premise of Angelo’s work. Again, emerging as a specific alternative to the large-scale global form of neoliberal agriculture.

Angelo's dissatisfaction with the conventional system emerged largely from the financial strain experienced competing in the conventional market as well as the prevalence of the use of chemical products (A. Savioli, translated by M. Fonte, personal communication, April, 2016). Here Angelo articulates the experience of neo-peasantry, small-scale producers, confronting the neoliberal global regime of accumulation. This neoliberal form of conventional agriculture renders small-scale, ecologically driven practices unviable and uncompetitive. This lack of competitiveness squeezed Angelo out. However, Angelo was also ideologically motivated to participate in a practice alternative to the dominant neoliberal form of conventional agriculture. He is "convinced that the industrial system of agriculture didn't work, it didn't work for everybody, that the system could collapse because of the negative impact and so he decide to change to do something new, different" (A. Savioli, translated by M. Fonte, personal communication, April, 2016). Angelo identifies the negative impacts as involving both the adverse impact on the environment and the health of people.

The ideological underpinnings of Il Papavero point to the practice being formed in resistance to the NMD in agriculture. As Angelo suggests "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" (A. Savioli, translated by M. Fonte, personal communication, April, 2016). This is something he wants to change. He hopes that ideas from his practice will diffuse and result in a change to the wider agricultural sector, and beyond that the wider economy. In this way Il Papavero, as an alternative to the neoliberal global food regime of accumulation, can be seen as resisting both regime and regulation aspects of the NMD in agriculture.

The process of converting to organic offered the potential to compare the growth and output of plants that were treated with chemicals and those that were not. One interesting comparison Angelo notes is 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.

Angelo also noted that once plants could self-regulate yield, which occurred once fertiliser use stopped, the quality of the fruit improved. Although yield size varied between plants, 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. The quality of these organic peaches was recognised, with people describing how “these were the peaches that we used to eat when we were small, years ago”” (A. Savioli, translated by M. Fonte, personal communication, April, 2016). This is a direct example of the success of alternative agricultural practices.

Angelo bases his production on principles of biodiversity, a key theme indicative of alternative agriculture (Beus & Dunlap, 1990; Maye and Kirwan, 2010), and certainly alternative to the presently dominant neoliberal form of conventional agriculture. Angelo initially described 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. This development came from the realisation that monocultural production is simply unsustainable. He reflected on the production habits of his grandfather and his father who grew many things. They had “animals, they had legumes, they had cereal, grain, wheat, they had many fruit and they never lacked anything” (A. Savioli, translated by M. Fonte, 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, translated by M. Fonte, personal communication, April, 2016). The prioritisation of diversity and the production of polycultures indicate that this practice is alternative (Beus & Dunlap, 1990; Maye and Kirwan, 2010). These elements emerge in this specific alternative production practice which both resists and provides an alternative to the neoliberal regime of accumulation at the base of which are labour processes engaged in the production of monocultures to maintain competitiveness and national specialisation.

Not only are Angelo's production practices based on principles of biodiversity and environmental preservation but also custodianship. Angelo suggests that "he became conscious that he was not really the proprietor of the land, but was a custodian of the land because the land [had been] there ... millions of years... then in this period I have to be the custodian of the land... I have to leave the land in a better condition than it was before" (A. Savioli, translated by M. Fonte, personal communication, April, 2016). He hoped to leave behind a project that was both economically and environmentally viable. He prioritises environmental sustainability including the reuse and recycling of the containers his produce is delivered in. In contrast, the need to prioritise competitiveness in the neoliberal era forces capital participating in the dominant neoliberal global food regime of accumulation to deliberately discount externalities including environmental costs. The imitation of natural ecosystems emerges as a direct alternative to the neoliberal form of conventional agriculture which centrally involves overriding natural rhythms.

Passionate about localism, Angelo celebrates working directly with his consumers within a local economy as his greatest success. He advocates for food being rooted in territory to avoid the excessive consumption of energy and non-renewable resources and the inevitable deterioration of freshness (A. Savioli, translated by M. Fonte, personal communication, April, 2016); central faults of the neoliberal global food regime of accumulation. Angelo emphatically points out that "the trouble is food is moved to the people. Since the second world war we are consuming fossil resources to move food from one country to the other" (A. Savioli, translated by M. Fonte, personal communication, April, 2016).

This trans-era tendency for food to move has been deeply exacerbated in the neoliberal era. The NMD in agriculture defines both a national-transnational regulatory architecture that opens up nations coercively or through choice, and a neoliberal global food regime of accumulation. This regime of accumulation has, through these newly and long exposed nations, embedded the global movement of food premised on competitive export specialisation and the importing of all else. Alternatively, Angelo suggests that people need to develop different food habits (A. Savioli, translated by M. Fonte, personal communication, April, 2016).

However, Angelo's passion for localism and his hope that more people will become involved in what I call alternative local food regimes of accumulation is tempered by his understanding of the wider structures that hamper this. He recognises how things like free trade agreements and the threat to the welfare state through liberalisation and privatisation impede such thinking (A. Savioli, translated by M. Fonte, personal communication, April, 2016). That is, he is identifying how the regulatory architecture of the NMD in agriculture determines the possibilities of the dominant neoliberal regime of accumulation and drives an impetus towards the neoliberal form of global commodity chains.

Angelo now describes himself as "a real farmer, full farmer, because... he doesn't have to be preoccupied by the market anymore" (A. Savioli, translated by M. Fonte, personal communication, April, 2016). The alternative local food regime of accumulation he is a part of and actively reproduces gives Angelo freedom from the global market which the neoliberal global regime of accumulation dominates and which is proactively stimulated by the regulatory architecture of the NMD in agriculture.

New Zealand

Farmers' Markets

Farmers' markets exist throughout the world, in this era, forming part of a local regime of accumulation alternative to the dominant neoliberal global regime of accumulation. The market itself acts as the site of alternative distribution, as Cameron (2007) states, "Farmers' markets... provide an important alternative retailing option for growers" (p. 373). Cameron (2007, p. 368) defines an authentic farmers' market as

a recurrent market at a fixed location where farm products are sold by farmers themselves. That is, some, if not all, of the vendors must be producers who sell their own products (Brown, 2001). The term "farmer" in farmers' market is used metaphorically to encompass not only agricultural and horticultural activities but also artisan-type occupations such as bread, cheese, jam and preserve making.

Lawson, Guthrie, Cameron, and Fischer (2008) draw attention to the varied nature of practices occurring under the term 'market'. They suggest that

Since a market is an aggregation of traders no two agglomerations will ever

be exactly the same but a farmers' market can be defined as "a common facility or area where multiple farmers/growers gather on a regular recurring basis to sell a variety of fresh fruits, vegetables, and other farm products directly to customers" (Payne, 2002, p. 1). It is clear from our investigations... that one essential element is missing from this description. Farmers' markets are also clearly the domain of small businesses (Lawson, Guthrie, Cameron, and Fischer, 2008, p. 12).

Farmers' Markets then describe part of a localised regime of accumulation that is central to an alternative to the global form of accumulation under the NMD in agriculture.

Trends demonstrate an increase in farmers' markets in New Zealand, the United States, UK and Australia which provide a successful distribution platform for local small-scale producers (Cameron, 2007; Lawson et al., 2008). Brown (2001) points out that contrary to prevailing thought in and around the mid-1900s "local production and marketing of agricultural products, have grown in importance, both to urban consumers and to periurban producers" (p. 657). I argue that this is a result of the necessity of developing alternatives to the prevailing dominant neoliberal form of conventional agriculture that squeezes out traditional and neo-peasantry. Cameron (2007) points out that although farmers' markets have persisted in some places, "farmers' markets are making a reappearance in other countries where they had disappeared due to the advent of supermarkets. These are the "new generation" farmers' markets" (p. 368).

In line with the neo-peasantry that have emerged, these alternative sites of distribution and consumption demonstrate resistance to the neoliberal form of conventional agriculture which centrally involves the growing power of supermarkets to coordinate and distribute produce sourced through global commodity chains. After the dominance of the neoliberal global food regime of accumulation was asserted farmers markets disappeared, subordinated to a more convenient and cheaper supermarket revolution. However, the dominance of the neoliberal global food regime of accumulation in turn forces the organic development of bottom-up alternatives which emerge as local food regimes of accumulation.

Farmers' markets as an alternative site of distribution and exchange remove the middleman. This implies shorter food supply chains (key to defining alternative agriculture (Maye & Kirwan, 2010)) and the potential for relationships to form between the producer and consumer, which develops a sense of community and coordination, again indicative of alternative agriculture (Beus & Dunlap, 1990). Small scale production, local distribution via direct contact between the producer and consumer, and local consumption are all elements at odds with the neoliberal form of conventional agriculture dominant in the NMD in agriculture.

Farmers' markets can provide either an incubatory function to contribute to the growth of small business or a safety net function to protect small business (Cameron, 2007). These functions arise because farmers' markets provide small-scale producers access to consumers outside of the neoliberal global food regime of accumulation. On the other hand, within the neoliberal global food regime of accumulation, "Due to their size and buying power the large corporates can squeeze the profits of small producers" (Cameron, 2007, p. 370). Farmers' markets provide a setting for small-scale producers to distribute their produce to local consumers within an alternative local regime of accumulation, relieving the competitive pressure on small-scale producers. As Cameron (2007) suggests "by selling through farmers' markets [small-producers] can obtain higher margins that allow them to compete successfully" (p. 373). That is, the farmers' market forms part of an alternative local regime of accumulation that enables the viability of neo-peasantry and small-scale production.

Lawson et al (2008) draws attention to a similar point, suggesting that

Small businesses cannot generally compete head-on against big businesses... Cooperation, in the form of networks and clusters, allows small enterprises to compensate for lack of resources (Cameron and Massey, 1999). One form of cluster, the farmers' market, is increasingly seen as an alternative strategy and counter-measure to the dominant agro-food system (p. 12-13)"

In this way, farmers' markets can be seen as an alternative site of distribution and consumption, part of a local food regime of accumulation alternative to the global neoliberal regime of accumulation.

Tauranga Farmers' Market

I investigated the Tauranga Farmers' Market as one of my case studies of agricultural practices that are alternative to the dominant neoliberal form of conventional agriculture. The Tauranga Farmers' Market is registered under the national body of Farmers' Market New Zealand. Although anyone or any gathering can call themselves a farmers' market, those markets that are under the umbrella of Farmers' Market New Zealand are not considered craft markets, but rather fresh food markets. The chairperson of Tauranga Farmers' Market, Lyn, notes that "to be an authentic farmers' market you're only allowed ten percent" craft or non-food (personal communication, July, 2018). In order for individual markets to maintain authenticity Lyn notes that being a member of the Farmers' Market New Zealand body is useful as it brings a certain degree of clout (personal communication, July, 2018).

The first official Tauranga Farmers' Market was held on the 2nd of February 2003. From here a committee was formed to run the market. Two years later the market moved sites to a school in central Tauranga. The Tauranga Farmers' Market is still held here once a week, on a Saturday morning, opening at 7.45am and running until midday. The Tauranga Farmers' Market has a 200km radius catchment area, however, at the time of research, none of the producers were coming quite that far. Most of the producers came from Kati Kati (approximately 40km away) and live in the Western Bay. Some people came from as far as Hamilton (approximately 105km away) which Lyn noted is "a huge mission to get here at that hour of the morning" (personal communication, July, 2018). In 2005 an incorporated society was formed and the market became a not-for-profit incorporated society, known as an organisation. In 2007 the committee, who are all volunteers and stallholders (this is constitutional), were still running the market but had found that the job became too much as the market grew. Thus, it was decided that the committee would hire an independent contractor to run the market on Saturday. There was one market manager before the existing market manager, Trixie, who was hired in 2008.

The committee runs the organisation. This includes the governance of the market as well as managing the policies, the constitution and the finances. The committee works alongside the market manager on decisions pertaining to stallholders who come into the market. The committee for the Tauranga Farmers' Market meets monthly or more often if necessary. Lyn suggests that you end up being on the committee for years because people rarely want to join the committee (personal communication, July, 2018). The committee is made up of a minimum of five and a maximum of seven members. Lyn notes that their committee is normally made up of six members which she suggests is a good number of people to work with (personal communication, July, 2018).

The committee receives two or three new applications from potential stallholders a month. New applications are screened using a strict criterion to ensure they will fit with the market requirements. The market manager screens the applications first. If the manager considers the application acceptable they bring them forward to the committee. In turn, if the committee thinks the application is good then they do a property visit. This way the applicant knows the committee and the committee knows the applicant before they actually come to the market. The values underpinning all markets under Farmers' Market New Zealand are the same, but each market has the jurisdiction to decide which applications they accept and which they refuse.

Once accepted, new stallholders have a four-week probationary period. It is a trial for the producer to ensure they want to participate and for the committee to ensure that the producer will be a good fit for the market. Once the four-week probation period has ended, it is entirely up to the stallholder to choose to come to the market every week. However, there is an underlying expectation that if they say they are going to come fortnightly then they do so. But as Lyn says, "if they ring and say, "We're not coming this week," – I mean, as you can see, there's lot of gaps today. It's raining so they don't want to be there. You can't do much about that" (personal communication, July, 2018). Lyn points out that the committee is quite stern in their encouragement of the stallholders to be there weekly, "We sort of keep feeding to them, "Your customers come every week, they expect you to be here, and if you're not here...I mean basically we're a supermarket aren't we. You expect to go to the supermarket and get your product. So, if you're not there then you'll lose your customers" (personal communication, July, 2018). Key to my argument is that farmers'

markets are an alternative to supermarkets. The latter is a key part of the global commodity chain form of the neoliberal model of development's accumulation regime in agriculture.

Stallholders must become a member of the organisation which necessitates an annual subscription of \$35. On top of this, they make a weekly payment for their stall site. The average size for a stall site is a 3mx3m gazebo. This costs \$30 a week. This price was put up the year before my research and Lyn notes that this is cheap compared to stall pricing at other markets (personal communication, July, 2018). The stallholders own their gazebo and tables. They must provide their own equipment and are entirely responsible for setting up and taking down their site. Most stallholders have a permanently assigned site. In this way the market maintains some consistency and familiarity in structure. The market does have seasonal stallholders, so they will go wherever the market manager is able to find a spot for them when the season rolls in. The perimeter sites are the most coveted sites in the market. It enables stallholders to have their vehicle with them and eases the burden of unloading and carrying produce.

In terms of support from the wider level, such as Farmers' Market New Zealand or the local council, Lyn notes that it is not really there: "I think we do it all ourselves. The community, the customers support us. It's them that keep you coming back" (personal communication, July, 2018). Nevertheless, Lyn suggests that "The local council are very good. We don't have to work with them because we're not on council property; so there's no direct need. But, they do support us in that they recognise that we actually are a vital commodity, I suppose, in the community; that we serve a purpose" (personal communication, July, 2018). This demonstrates the informal and embryonic forms of local regulation of an alternative local regime of accumulation.

For the long-standing stall holders the sense of community is strong. Lyn notes that "I was just having a chat to one of the stallholders this morning, and we were laughing about how you have stallholders that have been here 11 years. We've got stallholders that we know and in that time we've seen their children grow up, we've seen grandchildren arrive" (personal communication, July, 2018). Friendships form among the stallholders who all grow to know each other well. Lyn says "They support each other and encourage each other" (personal communication, July, 2018).

Summer proves more frantic at the market. Lyn, as a vegetable producer herself, can have up to five queues and twenty people deep outside the stall during the summer. The strawberry and egg producers will have more than that. Nevertheless, there is a steady customer base throughout the winter as well. Lyn mentioned that they had been away from the market for six months and she said “The number of people who have come and said, “‘We missed you’. You think after six months you might have forgotten that they were even there; that’s what our expectation would have been. That was something that we thought we were going to have to start again and rebuild our custom base again” (personal communication, July, 2018), but this proved not to be the case.

Lyn notes that “Rain, hail or shine we’re here”, the market goes ahead (personal communication, July, 2018). Stallholders might set up, ensure their core customers are serviced and then at 10.30am, rather than midday, pack up and leave. But nevertheless, the market always runs. As Lyn says “If the shoppers turn up we’re here” (personal communication, July, 2018). On very blustery days the number of stallholders greatly reduces so they structure the market slightly differently and shift as many people as they can up onto the school verandas, and use cars to shelter stalls still on the bottom as much as possible.

During the week activity occurs to ensure the market runs well on Saturdays. This is primarily the job of the market manager. It is their prerogative to communicate with stallholders. The stallholders must contact the market manager to advise if they are coming in or not. The market manager then does up the site plan to ensure that everybody has a spot. Site visits by committee members also occur during the week. This is all volunteer time, although they do claim their petrol costs back.

Lyn positions the conventional food market and in particular the supermarket as the competition for the farmers’ market and small-scale producers (personal communication, July, 2018). Lyn suggests that the “the supermarkets don’t want to know about us, no, not at all. That’s what we sell to our customers as our point of difference. You’re talking to the person that grew it. They can tell you where the seeds came from, what date they were put in the ground, and all that sort of stuff if you want to know it” (personal, communication, July, 2018). This demonstrates many alternative aspects defined by Beus and Dunlap (1990),

namely, that production systems are locally adapted, there is community self-sufficiency as opposed to the dependence on the market in conventional agriculture, and a primary emphasis on local wisdom. These elements emerge in this current era as part of a local regime of accumulation that resists the NMD in agriculture and the specific neoliberal form of conventional agriculture. It demonstrates the organic bottom-up development of alternative practices. It represents informal elements of localised accumulation and regulation central to an alternative model of development in agriculture.

Consumption

Across the seventeen consumers interviewed at the Tauranga Farmers' Market there was some consistency in terms of the motivations for frequenting the market (see Table 5 below).

	Community	Producer Relationship	Quality Food (fresh)	Breakfast	Event	Seasonal food	Exercise	Local food
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

14	I		I					I
15	I	I	I			I		I
16	I	I	I					I
17	I		I			I		I
Total	16	9	16	2	5	4	3	12

Table 5 Consumer motivation for frequenting the Tauranga Farmers' Market

One of the most commonly identified reasons for frequenting the market is the sense of community that surrounds the market. This was suggested to be because of both relationships with the producers/stallholders, and other market goers. As Diana suggests “I buy from the local markets because I like what they have, but also because I like to support our local people, and we come every Saturday morning without fail” (personal communication, July, 2018). She goes on to say “Well, it is the feeling, and people; they’re your market friends...The producers as well...we’re very friendly with the macadamia people, and all of them; well, you just get to know them” (personal communication, July, 2018). Pat echoes this, “you get to know the stall holders, and even if you don’t shop from them; you give them a smile and a wave, and say hello... this is a gathering point for the community” (personal communication, September, 2018). Phil articulates that the market “sort of shows me that within a big city there are still the small communities which get together, and can bring produce, especially fresh things, within a small radius of a major city” (personal communication, December, 2018). This valuing of community was also readily apparent from my own participant observations. The development of community and cooperation represents the organic growth of elements of a local accumulation regime and mode of regulation alternative to the dominant neoliberal global regime of accumulation.

Consumers here wanted to engage in a relationship *between people*, between producer and consumer, rather than through a social relationship *of things*, namely money and commodities. Leonie feels that good relationships are made at the market, especially with producers, she notes that “where I buy all the time they know me, and that’s lovely, it’s very personal that way” (personal communication, July, 2018). Rather than participate in the consumption of a commodity where the social relations of production are obscured, these

consumers expressed a desire to know where and how their food was grown and engage in a direct relationship with those who produced it. Janice and Brian point out that they enjoy being able to ask questions of the producers and have knowledge passed on to them (personal communication, October, 2018). The capacity to clarify production practices e.g., that the eggs are truly free range by talking to the producers is identified as a great boon (personal communication, October, 2018). Sue, Robyn and Debbie identified a desire to support local producers directly and enjoy the fact that there is no middleman (personal communication, October, 2018). Furthermore, the sense of community implies that rather than a depersonalised exchange of money and commodity, the consumers here felt that they were engaging in a form of socialising and community participation when shopping at the market. These motivations directly resist the distance between producer and consumer in the global commodity chains of the accumulation regime dominant in the NMD in agriculture.

Another key motivator for the consumers I interviewed at the Tauranga Farmers' Market was the ability to purchase fresh, quality food. Sarah considers the produce to be fresher and of better quality than what she would be able to purchase at the supermarket (personal communication, February, 2019). This is a critique of the global commodity chain and an assertion that local is better. Lee too identified that he frequented the market because of the fresh food available (personal communication, September, 2018). Leonie also relishes the freshness of the produce available, and also notes that not many of the stallholders use sprays on their produce which is a priority for her (personal communication, July, 2018). Mr Marketman considers the reason that people frequent markets rather than supermarkets is because they want fresh produce (personal communication, July, 2018). Pat comes to the market because of the variety of fresh food that is on offer. Pat considers the market a one-stop-shop providing her with high quality fresh produce (personal communication, September, 2018). Phil reiterates this, suggesting that he loves "the idea of coming here because you can get fresh produce, and it's also the diversity of the produce from here, like from greens to crops, to actually all sorts of types of meats" (personal communication, December, 2018). For Phil fresh produce implies "locally grown produce, the production of which makes very little use of pesticides and fertilisers etc., and that it has been picked the day before, or the morning of the day it will be on your table" (personal communication,

December, 2018). Sue, Robyn and Debbie all acknowledged they came to the market with the initial objective of obtaining spray free or organic produce that is fresh (personal communication, October, 2018). One of them notes that “It’s become a bit of a social thing now, but it started out with; well, hopefully they’re spray free, organic - so that’s why, and fresh” (personal communication, October, 2018).

Most of the consumers, when asked if they would like to purchase more of their food locally if that was an option indicated that they would. Diana notes that she would like to purchase all of her food locally, but alas, she says, “Oh, if I could; those days have gone” (personal communication, July, 2018). Mr Marketman suggests that he and his wife still use supermarkets because not all food is available locally, Mr Marketman jokes “Nobody makes baked beans like Heinz”. However, if they could purchase more food locally, they would (personal communication, July, 2018). Phil too would prefer to purchase more local food, saying “Oh heck yeah; yes, definitely. If this was slightly expanded with a bit more variety; yeah, I think we would do most of our shopping here” (personal communication, December, 2018). These indications of a desire to purchase more local food not only indicate the alternative consumption here, (as Maye and Kirwan (2010) suggest, short food supply chains, regional palates, local markets, slow food and quality products are considered indicative of alternative agriculture), but the specific organic development of a local regime of accumulation predicated on values absent or alternative to the neoliberal global food regime of accumulation.

Janice and Brian try to source their food locally whenever they can, including side of the road set ups (personal communication, October, 2018). For Leonie, she considers her Dutch heritage influential on her food purchasing habits (personal communication, July, 2018). Namely, although she does still purchase food at the supermarket, Leonie prefers to shop daily rather than a big weekly shop (personal communication, July, 2018). This pattern aligns well with the purchase of local food that might require more sporadic and daily shopping. Leslie notes that he still shops at the supermarket because of the convenience “Basically I would buy most of it there for the simple reason I can get it every two or three days. This place is only open once a week” (personal communication, 2018). If more local food was readily available Leslie would want to purchase that; this was echoed by Sue, Robyn and Debbie as well (personal communication, October, 2018). The dominance of the neoliberal

form of conventional agriculture under the NMD in agriculture hampers the ability for consumers to more readily access local food.

Production

I interviewed four stall holders at the Tauranga Farmers' Market who all engage in production or distribution practices that could be defined as alternative to those engaged in the neoliberal global food regime of accumulation. I spoke to two vegetable producers, Sixed Toed Fox Organics and Belk Road Farm, one cheesemaker (a value-added agricultural practice) – Kath's Business, and an egg distributor, Nicki's Eggs. Not only do these agricultural practices demonstrate many of the elements of alternative agriculture laid out by both Beus and Dunlap (1990) and Maye and Kirwan (2010), but most importantly for my argument present the organic development of a specific local regime of accumulation which is alternative to the neoliberal form of conventional agriculture.

Six Toed Fox Organics

Rachel and her husband Brad's alternative agricultural practice is underpinned by a desire to create change (personal communication, January, 2019). This demonstrates a resistance embedded in their practice which I suggest emerges as an alternative to the neoliberal global food regime of accumulation and the large-scale, global agricultural production associated with it. Brad had been in horticulture his whole life. Later, he and Rachel gained experience learning about permaculture, giving them a whole different lens with which to approach their goals. Rachel articulated that this lens made her feel "quite empowered about actually being able to make a change" (personal communication, January, 2019). But really Rachel suggests that "It's hard to define a point, where we really decided we were going to do this; or where organics was really important to us, or local food was really important to us" (personal communication, January, 2019). What this identifies is that growing food is much more than a business for Rachel and husband Brad, thus, as Beus and Dunlap (2010) suggest, farming becomes a way of life as well as a business demonstrating their practice to be alternative. Ultimately, this emerges in a specific alternative form in the prevailing era and represents a ground up initiative that forms part of a local regime of accumulation in direct challenge to the neoliberal accumulation regime.

A key part of their statement of purpose is to have “a vibrant, meaningful, long-term work culture for people that are really passionate about doing stuff the way that we are; and then hope that we can keep doing that, and that will vibrate out” (Rachel, personal communication, January, 2019). This demonstrates a key element of alternative agriculture, namely that Six Toed Fox Organics aims to make farm work rewarding, where labour is made meaningful (Beus & Dunlap, 1990). Beus and Dunlap (1990) contrast this with the position adopted in conventional agriculture in which farm work is considered a drudgery and labour an input to be minimised. In the specific neoliberal form of conventional agriculture, the necessity to reduce labour input is exacerbated as global commodity chains which incur everywhere drive a punishing competition imperative, leaving no room for the viability of meaningful work. In contrast, in this alternative local, small-scale production practice meaningful work is being recentred.

Extending on this, Rachel notes that Six Toed Fox Organics have a very labour-intensive model which has been a deliberate and conscious decision (personal communication, January, 2019). They are trying, as much as possible, to reduce the use of fossil fuels in their practices (personal communication, January, 2019). As Rachel suggests “We’re really trying to go for a model that actually is sustainable, instead of just the buzz word sustainable; and go for something that is actually regenerative through our land and is giving back and building up soil, and sequestering carbon, and having a positive impact on the planet just through the way that we do things” (personal communication, January, 2019). A labour-intensive model involves replacing a lot of machinery with people. This is not only alternative to the specific neoliberal form of conventional agriculture, but entirely opposite as within the neoliberal global food regime of accumulation the impetus is towards maximum productivity implying the increasing use of technologies to replace people. That is, the labour process that Six Toed Fox Organics pursue is entirely at odds with those at the base of the neoliberal global accumulation regime.

Six Toed Fox Organics had been in production for two and a half years at the time of the interview (January, 2019), though not always by that name. They started at the Tauranga Farmers’ Market and have been selling there ever since. For the first six months of business the market provided a security blanket for them and they sold 80% of their product there. For the following year, this dropped to around 40%. Rachel identifies that the market is

generally a reliable source of income, depending on the weather. In some ways the protectionism of the committee ensures that the market does not become saturated, which Rachel appreciates (personal communication, January, 2019). However, Rachel identifies that there must be a balance between ensuring the market does not become saturated with one product, but also allowing the flexibility for producers to grow with demand and diversify or prioritise what the consumers demand as opposed to what the committee demands.

Rachel notes that the Tauranga Farmer's Market has thrived on the scarcity model (personal communication, January, 2019). This scarcity model involves the development of 'runners', or consumers who would get in line at market opening to run and make a beeline for high-demand vendors selling limited product. It was seen as a success that a lot of stall holders' produce was sold out by ten o'clock, but Rachel points out that this is frustrating for a vendor that wants to keep product there until twelve (personal communication, January, 2019).

Six Toed Fox Organics' operation is structured on a weekly basis. They have three main harvest days which are for their 'commercial' customers. They do wholesale distribution, a large amount of which goes to organic stores in Auckland, some restaurants and several organic stores in Tauranga and a supermarket in Omokoroa. The harvest days are Mondays, Wednesdays and Thursdays. They hope to get harvested produce on the road by about 1.30pm to meet their deadlines. Field work fills the rest of their afternoons. Tuesdays are a full field workday. Friday is the market preparation day. Rachel pointed out that the composition of what they take to the market is very different to that which they sell wholesale. Rachel notes that the commercial and market customers are completely different, with different viewpoints (personal communication, January, 2019).

When asked to consider the biggest difference between her commercial customers and those at the farmers' market Rachel suggested that

The wholeness of the food is really important to farmers' market customers.
Especially the ones that come every week looking for something a little bit different.

They're braver, they've got more courage and they're more willing to give different things a try. They're not necessarily hooked on organics. I talked to one of my customers who have been coming every day without fail for two years. I pulled her aside one day and said, "Why do you come to the farmers market?" She just said that nutrition and local food is really important to her; not so much what it looks like, and she knew that she would get the freshest and best product for her family there (personal communication, January, 2019).

Rachel articulates that the retail stores, e.g., Be Organics, do not want the product that looks authentic. For example, they cannot sell the carrots that still have their tops on. Essentially the product they send to the stores must look like it came from a supermarket but be certified organic. At the farmers' market the customers want the tops on the carrots – they want the product that looks authentic (personal communication, January, 2019).

Within the supermarket Rachel suggests that she does not really feel the pressure from big producers who put lesser quality products for a cheaper price alongside theirs (personal communication, January, 2019). Because at the end of the day, Rachel knows that at this point, even in the supermarkets they are probably still only catering to a very particular demographic (personal communication, January, 2019). The demographic that Six Toed Fox Organics caters to at both the market and organic retail stores, as well as inevitably in the supermarket, is the middle class (Rachel, personal communication, January, 2019). At the market, this is also typically an older clientele. Across the board their customers present as well-educated (Rachel, personal communication, January, 2019). The key age range spreads from 30-45. Although Rachel "would love to be able to drop the price and feed everybody, [she doesn't] think that's [her] role at the moment... I see it as in a way they've established the market for the product that we're trying to sell, which we're then trying to flip things over" (personal communication, January, 2019). In this way the alternative production practice that Rachel runs could perhaps be understood as an articulation with the dominant neoliberal global regime of accumulation in a way that subverts that very dominance. On the other hand, the incorporation of alternatives into the neoliberal global food regime of accumulation could also be an appropriation to mitigate the resistance and limit the full development of a viable alternative local food regime of accumulation.

The logistics of distribution to retail stores out of region has proved difficult for Sixed Toed Fox Organics, as it does for any small grower (Rachel, personal communication, January, 2019). Their wholesale distribution that goes to Auckland is approximately a three-hour drive. They do not deliver this themselves, but rather use a chilled delivery service – Weatherells. The main limitation with this is that the drop off points are restricted. Most of the delivery services will only go to distributing centres which eliminates the possibility of being able to work with any smaller customers or restaurants (Rachel, personal communication, January, 2019). This is fine for nine months of the year because they are able to send their produce on a courier to the restaurants, but for the three summer months by the time the food is transported in a courier all day it is decidedly less appealing.

At present they are using a bulk transport company that will take it to three distribution centres. They are supplying Huckleberry Distribution Centre, which goes to all the Huckleberry brand stores in Auckland, Ceres Organic Distribution Centre which act as a middle party to distribute to smaller organic stores. Finally, they have also just started supplying New World Remuera which is easy as all delivery companies go to the supermarkets. Rachel pointed out that they would love to be able to sell directly to all the organic stores, and that in turn the stores would love to be able to buy from them (personal communication, January, 2019). Rachel mentioned that the organic stores prefer to deal directly with the grower which enables them to ask “what does your broccoli look like today?” rather than have it sent on the delivery service and have to accept whatever it is on that day (personal communication, January, 2019). But logistically this relationship is not feasible (personal communication, January, 2019). This was the one thing that they did not anticipate. After investigating every single shipping company in New Zealand Rachel found that the order capacity is too small or too infrequent, or will not deliver to the stores they supply, or they do but at an extraordinary cost (personal communication, January, 2019).

When asked what small-scale production means to Rachel she pointed out that this is hard to define and seems privy to subjective interpretations (personal communication, January, 2019). She suggests that for her local food is easier to define. That is, products that are produced and consumed within the same region (personal communication, January, 2019). For their own practice, they consider the North Island of New Zealand to be local. It is their aim to only ever sell their produce within the North Island. At the moment this is contained

to three regions, the Bay of Plenty, in which their farm is located, Auckland (approx. 200km) and Waikato (approx. 100km).

Rachel said that they do really want to focus on moving towards being able to distribute everything within the local hundred-mile (160km) radius (personal communication, January, 2019). At present, having those contracts in Auckland allows them the freedom to make that move. Once the sales, staff and training are in place then attention can be diverted to selling more and more locally (personal communication, January, 2019). At this point however, Rachel points out that she doesn't "know that anybody with a viable business is selling a hundred percent directly to their customers. New Zealand is not set up to do that easily" (personal communication, January, 2019).

This demonstrates that despite presenting as an alternative, i.e., more local/regional production and processing (a definitive element of alternative agriculture for Beus and Dunlap (1990) and prioritising short food supply chains in local markets (what Maye and Kirwan (2010) point to as indicative of alternative) there are structural inhibitors in this era that prevent the flourishing of the specific form of alternative agriculture emerging as local regimes of accumulation. That is, this organically developing alternative practice which resists the NMD in agriculture and represents elements of an alternative local food regime of accumulation is suffering due to the dominance of the global regime of accumulation which is supported by the prevailing regulatory architecture of the NMD in agriculture. The regulatory impetus of this era drives the infrastructure to support the neoliberal form of conventional agriculture. Fundamentally, alternative local food regimes of accumulation are at odds with both regime and regulation aspects of the prevailing NMD in agriculture and this presents obstacles for alternatives.

Rachel identifies this issue, pointing out that New Zealand is not used to or structurally prepared for small growers (personal communication, January, 2019). Rachel says

We've really just gone full... you know how it is. Just the quality and the price of our product; all the product that New Zealand produces... We've just been trying to mass produce cheap food that's good enough. That's the mentality we've gotten, and

that's how our systems are set up, and that's how Turners & Growers gets everything around the country. And, to try and revolutionise that and get more small growers into that is going to take a really big change.

Although Rachel notes that Turners and Growers were quite receptive to distributing their product, their definition of small entailing fifty acres of tractor cultivation still massively exceeds the reality of Six Toed Fox Organics' small-scale production. For instance, Rachel points out that they do have a tractor but this is only used for setting the beds up. Even this is a practice they want to move away from. They are moving towards being no till, so that in the long term even the minimal amount of tractor use will be eliminated (personal communication, January, 2019).

Rachel suggests "we try and run it as lean as possible... We live in a cheap food world and we're not producing cheap food because we're trying to do it in a good way. All our costs are internalised" (personal communication, January, 2019). This cheap food world is a direct result of the NMD in agriculture. This era has seen the embedding of global commodity chains all around the world that drive the cost of food down. In this neoliberal form of conventional agriculture neither quality food nor the internalisation of costs can be a priority, when the goal is to be competitive on a global market. Thus, as Rachel states, their practices involve "some disruption in a system that's not very receptive to it. It wouldn't be disruption if it wasn't, but I don't even really want to be disruptive. I just want to grow good food for people to eat" (personal communication, January, 2019). Be that as it may, Rachel's practice, by virtue of providing an alternative to the dominant neoliberal global regime of accumulation, is disruptive. Nevertheless, despite being disruptive it is also successfully subordinated by the dominance of the neoliberal form of accumulation that is facilitated by the neoliberal national-transnational regulatory nexus.

Rachel notes that they would ideally like to be working collaboratively with other local producers, for example those at the market. It is an ideal they aspire towards because they want more people farming in similar ways to themselves (personal communication, January, 2019). But Rachel points out that not all local producers see that "it's the supermarkets that we're fighting and not each other" (personal communication, January, 2019). Rachel wants all small producers to realise that "having more people with more things is actually better for everybody as a whole; even if it might make a short term impact on sales. We've seen

that ourselves. We've been letting another smaller salad grower in this year that did have an impact on our sales, but eventually it leads to better sales. I support that. That's my mentality. I can't stop how [they're] taking my customers, because that's what I want to happen" (personal communication, January, 2019).

Rachel's position demonstrates the intentional organic development of an alternative local food regime of accumulation that could provide a viable alternative to the neoliberal global food regime of accumulation. The alternative that Rachel envisions is predicated on co-operation which differs markedly from the intense competition that dictates the neoliberal form of conventional agriculture that they must currently confront. That is, the neoliberal form of conventional agriculture that dominates in the contemporary era is driven by the competition generated by the widespread adoption of the national regulatory template of the neoliberal model of development. Thus, the global neoliberal regime of accumulation that dominates does not leave space for cooperation. Producers must compete or be rendered unviable. In contrast the development of cooperation in this local regime of accumulation actively resists the competition imperative in the NMD in agriculture.

Rachel positions her alternative practice in opposition to the dominance of corporate ownership and lack of accountability that emerges within conventional food production in the prevailing era (personal communication, January, 2019). In this form of conventional agriculture Rachel argues that the actual producers are masked by global agribusiness and are unable to be lobbied by people (personal communication, January, 2019). For Rachel "When you lose that ability to communicate with a person along every step of your food production process, you're losing the ability to make any real change" (personal communication, January, 2019). Rachel goes on to suggest that "If the customer is telling us something, or rejecting something then we react to that. Whereas in a global model, if the customer tells you something or reacts to something, you just find a different market. You go, "Okay, I'll sell it in Chile instead of China" (personal communication, January, 2019). That is, Rachel is pointing to the problems of the neoliberal form of conventional agriculture, namely, the neoliberal global food regime of accumulation in which both farmers and consumers are removed from the story. The widespread adoption of the national regulatory template of the neoliberal model of development exposes all to the logic of global capital.

Global commodity chains as part of the neoliberal global regime of accumulation are proactively stimulated by the regulatory architecture of the model of development resulting in the situation that Rachel outlines.

Six Toed Fox Organics is part of a network of other small-scale producers maintained through a Facebook page. Of about a thousand members Rachel notes that about 30 of them are active. The active members work together to set up projects and hold huis in the winter. At the time of research they had held two huis. The first one had nine attendees. The following year twenty people gathered. Rachel suggests that the next one “is going to be bigger again. It's all coming together collaboratively...We have to support each other... There's nobody else that's going to help” (personal communication, January, 2019). This draws attention to multiple indicators of alternative agriculture: more personal and community self-sufficiency, emphasis on personal knowledge, increased cooperation and small rural communities proving essential to agriculture (Beus & Dunlap, 1990). These trans-era aspects of alternative agriculture are emerging in this era as a local food regime of accumulation that resists and challenges the dominant neoliberal food regime of accumulation.

Rachel emphasises the importance of collaboration because “when we scale up these organic operations, they just become industrial organic, and then no better for the soil, and then no better for the environment” (personal communication, January, 2019). Thus, Rachel suggests that scaling out, rather than up, and working in cooperatives is the key to maintaining the beneficial elements of alternative agriculture. Rachel says “You don't have to change everything, but I don't understand people that don't want to” (personal communication, January, 2019). This speaks to and demonstrates the intent behind this organically developing local regime of accumulation alternative to the dominant neoliberal accumulation form.

Kath's Business

Kath's business is one of only three raw milk cheese makers in New Zealand and have been in production for the last ten years. The venture began after living in England for a fifteen-year period and being privy to all of the “really good cheese there” (Kath, personal communication, October, 2018). This was coupled with a desire for a change of direction.

Kath and her partner wanted to return to New Zealand to live and start their own business. Whilst still in England they visited a small cheese maker in Wales. It was here that they thought that making cheese was something they could do too. This necessitated some retraining along with market research into what the prospect of setting up a cheesemaking business in New Zealand would involve.

The Tauranga Farmers' Market was the first point of contact with consumers for Kath, although it is not the only farmers' market where they now sell their cheese. Kath has frequented the Tauranga Farmers' Market for ten years since their venture began. They were approached by the Tauranga Farmers' Market and have been a staple there ever since. Another farmers' market also approached them, so Kath sells their cheese there on Friday nights, and at the Tauranga Farmers' Market on Saturday mornings.

Their consumer base developed slowly spreading via word of mouth from the farmers' markets. Through these avenues, chefs began to taste and use Kath's cheese. Kath has also marketed through major cheesemongers and retail delis that are able to handle whole cheese wheels and do a cut and wrap service. They sell their product via avenues that provide a personal interface with the consumer and the capacity to engage them in discussion about the cheese. In this way they engage with the consumer face to face and prioritise what Kath calls "active sales, rather than passive" (personal communication, October, 2018).

Through delis and cheesemongers their cheese is sold throughout New Zealand, from Auckland in the North Island, to Christchurch in the South. Some of the bigger cheesemongers distribute to the hospitality trade, so their cheese reaches restaurants through that avenue and Kath supplies a small amount directly to restaurants. These avenues of supply are viable for small-scale producers, rather than for example, supplying to supermarket chains as part of the neoliberal global regime of accumulation. Kath mentioned that supermarkets request many little pieces of cheese wrapped in single portion plastic wrap with the caveat that any they do not sell will be returned to the producer (personal communication, October, 2018). Kath mentions stories about how hard it is for small-scale production to cater to the supermarket requirements (personal communication, October,

2018). When the scale of production is increased the capacity to manage such requirements is enhanced, but this is harder to achieve for small-scale producers (personal communication, October, 2018). This demonstrates that alternatives must be sought because small-scale producers cannot compete or maintain a viable operation in the dominant neoliberal global regime of accumulation and associated supermarket powerhouses.

When asked if making cheese was an easy task, Kath laughs, “The short answer, no...there have been lots of obstacles and lots of hoops that we’ve had to jump through... and lots of learning. Blood, sweat and tears... Lots of passion and joy with it as well, but... it’s a hard craft” (personal communication, October, 2018). It took about five years to gain permission from MPI to begin making cheese with raw milk. This was mainly held up by the lengthy process of getting their Food Safety Plan approved by MPI. This took thirteen revisions involving a validation protocol premised on extensive batch testing which entailed a research process to prove that their cheese was safe. Every single batch was tested for numerous parameters; the microbiology of the cheese as well as the compositional characteristics of the cheese, the curd and the milk from the farm. Over twenty tests had to be carried out on every single batch and all of those tests had to be done by an independent laboratory. Kath would send all the samples out after every batch and wait for the results. The approval was given on the basis that the results provided from every batch were absolutely perfect. For Kath “it was very very hard, it was a very tense time” (personal communication, October, 2018). Over fifty batches of cheese were tested so the research process took an extensive amount of time. This was then followed by a second research project, which, although it was simpler, took a further year to complete.

Kath prioritises local food production in her practice. For Kath, this means that food is

grown or produced locally using locally sourced ingredients and local people, the people who live, work and play in the same region as the people who are buying the food as well. So locally produced, locally marketed as well and...Locally consumed. So still all about that, more of a closed loop system as well; less waste, less food miles if you like or... where most of the energy involved in producing that food, is going in to

making that food rather than shipping it, and marketing it and so on (personal communication, October, 2018).

This very much presents as an alternative to the dominant neoliberal global food regime of accumulation in which global commodity chains and geographically distanced supermarkets are embedded. For Kath local food production is right there in the face of the community so it necessitates transparency (personal communication, October, 2018). In this way “a lot of it is about the people. It relates right back down to the people of the land. The people who are living and working here. And if it’s not going to be good for those people then your business is not going to work” (personal communication, October, 2018). It is upon this ethos that Kath and her partner base their cheese-making practice and this ethos of centring community is decidedly alternative. That is, their practice demonstrates the organic development of an initiative that is part of an informal local regime of accumulation that resists the neoliberal global regime of accumulation.

To distinguish between local food production and global food production Kath distinguishes the term commodity from craft (personal communication, October, 2018). Kath considers a commodity to be mass produced for global export. In this instance, Kath argues that in order for production to be economical, quality must be sacrificed for quantity (personal communication, October, 2018). Here Kath is articulating the competition imperative that drives the neoliberal global regime of accumulation and necessitates that cheap products are produced consistently.

Kath points to New Zealand’s agriculture as an example of this (personal communication, October, 2018). She observes that

we’ve reached maximum capacity and so instead of looking at adding more quality, what’s New Zealand done but try to add more and more volume to production and put more and more cows on the land if you like, more and more animals, more stock; at the sacrifice of our water, you know we’re finding that our resources which we thought were limitless are not in fact. A lot of farmers that I talk to would actually like to carry less stock, but to make a living they have to produce high volumes of

milk. A lot of them are doing really amazing stuff to try and protect the environment by building and planting waterways and so on and they have to do that. But really we, as a nation, need to be looking at our resource use and adding quality rather than quantity to agriculture (personal communication, October, 2018).

This points to the failings of the dominant neoliberal global regime of accumulation that pressures producers into decisions based on viability in a global market. In contrast, the alternative local regime of accumulation that Kath is a part of permits her the capacity to factor in externalities and cooperative considerations.

Kath suggests that as a nation we need to reprioritise; pointing out that

the priority is not feeding the whole world, but rather the immediate needs of our communities and our neighbours. And maybe you know domestic, regional, we're looking at small community, regional and out to more domestic, you know we can do that in New Zealand, we're an island nation. I'd like to think that we can share our resources with the rest of the island" (personal communication, October, 2018).

This represents the intentional desire to create a viable alternative local regime of accumulation that challenges the neoliberal global regime of accumulation and its associated crises. It would encourage more farmers dispersed control of land, resources and capital; smaller, low-capital production units; more personal and community self-sufficiency and increased cooperation. These are key elements of alternative agriculture (Beus & Dunlap, 1990) and central to my argument, key elements of a specific concrete alternative to the neoliberal global regime of accumulation.

Characteristic of the neoliberal global food regime of accumulation is competitive specialisation. Centrally, nations export products in global supply chains that prove most competitive and then import anything else. Kath speaks to this, suggesting

it seems kind of mad that we should be importing things that we can grow here. Even if it's more expensive to buy them here, the cost of dealing with the waste and the cost of producing the packaging and refrigeration and everything else to get those things here is actually unseen, it's a hidden cost, and we actually don't know

what those costs are. If consumers and people who are buying food continue just to be based on price alone then it's the global economy that will win" (personal communication, October, 2018).

Here Kath is critiquing the lack of cost internalisation and the prioritisation of competitive specialisation in the neoliberal global regime of accumulation. It is against this, that the alternative local food regime of accumulation that Kath participates in can be positioned.

Kath identifies active resistance against what I call the neoliberal global regime of accumulation. This resistance comes from, not simply the existence and success of alternative local regimes of accumulation, but also a food movement in New Zealand called NZEats (personal communication, October, 2018). This movement is largely supported by the hospitality trade and particular chefs who buy and champion local food. They support small-scale production, like Kath's Business, choosing to buy local and seasonal. Chefs will elect to pair local and seasonal foods together "They won't be bringing in out of season pears from America or cherries or grapes grown in California or something. They'll be looking at what have we got around and see that it's persimmon time or the walnuts are good from Malborough at the moment and they're really searching and looking and doing all that sort of stuff" (personal communication, October, 2018). The small-scale producers benefit from the collaboration with the hospitality industry, and in this way they can service a movement that supports the same ethos as their own.

The local regime of accumulation that Kath is a part of proves to be collaborative rather than competitive as in the neoliberal regime of accumulation. She points out that

you're starting to see... cheesemakers actually collaborating and having someone else's product on their market stall as a guest cheese. New Zealand cheese month has just happened and Cartwheel Creamery, was selling our cheese down in Fielding. I've had theirs here for a while, which helped fill a gap... So rather than us think 'we should make what they make and see if we can steal some of their market', we're not trying to take people's market shares, we're trying to actually help them increase their market share by getting word out and pairing and collaborating putting their stuff with ours. It's not just about collaboration with other cheesemakers either, it's

about collaborating with local brewers, local growers (personal communication, October, 2018).

The competition imperative that emerges in the neoliberal global regime of accumulation mitigates any capacity to engage in the kind of cooperative behaviour that emerges in this alternative.

The goal that Kath and her partner had was “to make the best cheese in New Zealand... and... to make a living for our family”. When I asked Kath if they had achieved this, she responded “We have done it! And want to carry on doing it. I think our goal would be to make sure that this can carry on and keep going” (personal communication, October, 2018). Their small facilities based on their home property from which they run an artisanal craft cheese production that prioritises local distribution and emphasises community self-sufficiency, increased cooperation, internalisation of costs, regional palates and quality food demonstrates that this production is an alternative to the prevailing dominance of neoliberal forms of conventional agriculture. Their practice thus represents part of the organic development of a local alternative regime of accumulation.

Belk Road Farm

Joe began his small-scale horticultural production practice because he had always been passionate about growing. A Permaculture Design Certificate inspired him to pursue his passion more actively. Permaculture, as Joe put it, is “basically sustainable long term life practices; people care, earth care, fair share is the motto. It's all about buying local, keeping it local, practices that sustain the environment rather than killing the environment; in all aspects of life, not just growing – but growing is a big part of it” (personal communication, December, 2018). Joe was working for a local café who grew some of their own produce, which provided good experience. Joe continued to work at this café when he made the leap to begin Belk Road Farm. Belk Road Farm is based on approximately 800 square metres on a leased property that is owned by friends of friends.

Joe's production changes depending on what sells and what grows well. Generally, Joe grows salad greens – salad mix, baby spinach, baby kale, snow peas and broccolini. In the twelve months following our interview Joe wanted to focus solely on growing salad mix,

broccolini and snow peas. At the time of research Belk Road Farm was still in its infancy so Joe rotated crops, becoming familiar with what sells well and what is profitable for him to sell. Joe is “on a very limited land base, only 44 beds, so every single bed has to bring in the highest return possible. This is even more important in the winter months when growth slows down and days to maturity increases” (personal communication, December, 2018). Joe notes that he does not actually spend that much time on the farm doing physical farm tasks (person communication, December, 2018). Depending on what crops Joe has producing in any given week, and how much of that is available that week, he might spend six hours doing bed prep plantings, and then four to six hours a week harvesting. The rest of his time is spent doing activities like seeding trays, prepping bed fabrics, and then washing, packing and delivering the produce.

Joe notes that there is still learning to be done and improvements to be made, however, the way he has laid out his farm minimises the amount of work it necessitates. Joe hand-pulls any big weeds and when he preps the beds he puts black plastic tarp over it for three weeks, so anything that comes up dies. Sometimes Joe will put a layer of compost on top that he won't turn in which gives the seedlings that are seeded in a good few months head start before the weeds come through that. Another method that Joe is trying is planting in permeable fabrics which negates the need to weed. In the walkways between beds Joe uses a hoe once a week to get the weeds while they are still small. Around the perimeter he has a metre-high shade-cloth and then all the way around the perimeter Joe has a metre-wide piece of fabric that stops any weeds and grass encroaching into the beds. Nothing grows up the shade cloth, this means that no weed-whacking or mowing is needed. His beds start directly at the edge of the cloth. This design was intentionally implemented from the beginning to minimise work and weed issues.

Joe is not certified organic, however, he does not use any chemicals in his production. Occasionally Joe might use a drench or a spray of certified organic seaweed, or worm juice, which he buys or makes himself from a worm farm. When Joe looked into becoming certified organic he decided there was too much paperwork, money and hassle involved (personal communication, December, 2018). He also found that his customers did not seem to mind that he was not certified. Joe notes that “If I’m selling to ten different supermarkets then the grower never sees my face or knows my story, then maybe. But, anybody that goes

into the organic stores I supply and haven't met me, they still might have heard about Belk Road Farm, or see the Instagram, or a friend has told them about it, or they'll ask the girls at the counter and she'll say, "Yeah, that's Joe, he grows up here." Everybody at the farmers' market knows me and my story. Everybody that I said to, "I'm looking into the organic certification," they just said, "oh no I don't really care about that"" (personal communication, December, 2018). So he found it an unnecessary expense when supplying his food locally and directly to consumers. Such production decisions are only permitted because of the alternative local food regime of accumulation that Joe is a part of.

At the time of the initial interview Joe sold at the Tauranga Farmers' Market, but also in some stores – Wild Earth, Be Organics and Te Puna Deli. For Joe, pursuing local food production emerges as an effect of curating the lifestyle that he wants. A Hamilton market (one-and-a-half-hour drive) is the furthest Joe would consider going to sell his product (personal communication, December, 2018). At the time of the interview Joe only supplied to stores within a twenty-minute drive of his farm with no desire to expand. Joe says, "I want to keep it small because if it's providing me with an income, what more do I need?" (personal communication, December, 2018).

Joe notes that his customers are quite loyal and very consistent (personal communication, December, 2018). He has a relationship with customers that he sees on a weekly basis. Joe considers farmers' markets to be good for small producers because you are able to sell your product for the full retail price which you do not receive selling through stores (personal communication, December, 2018). Joe points out that they are really lucky with the quality of the Tauranga Farmers' Market; even though he is still very small and building his customer base, on a good day Joe is able to make between \$1200 and \$1400 (personal communication, December, 2018).

Nevertheless, relying on the farmers' market alone can be problematic. For example, Joe said that a couple of weeks before the interview one Saturday (market day), there was torrential rain and he only made \$400 (personal communication, December, 2018). Thus, Joe articulates that although the farmers' market does provide security in that there is a good outlet to sell the product at full price, if you are relying on that alone for your income and suddenly have an awful week it can be fairly precarious (personal communication,

December, 2018). This is why it was always Joe's plan to sell a few things in grocery stores. However, Joe made a conscious decision not to sell to any big grocery stores because that entails dropping the price even further (personal communication, December, 2018). Even at the smaller, boutique organic stores Joe sells to he notes that he has to sell his broccolini at nearly half the price (personal communication, December, 2018). While at the market Joe gets \$6 for his broccolini, he must sell it to the stores at \$3.50. This takes time and value away from Joe (personal communication, December, 2018). However, if he is able to sell a box a week to the stores he can make an additional \$400 a week on top of his farmers' market income. This is especially important on the weeks that it rains on a market day, or he is sick and unable to make it to the market – he jokes, “I don't get sick pay” – then he knows the stores provide security (personal communication, December, 2018). However, Joe later informed me that he had to forego the protection of supplying to small grocery stores and rely solely on his farmers' market income. The reasons for this will be explored in the next chapter.

When I asked about competition, originally Joe suggested that “there is a lot of competition from big businesses because obviously the big supermarkets are where everyone goes to do their big weekly shop. They don't want to have to go here for their carrots, here for their salad, here for this, here for their flour; which is understandable” (personal communication, December, 2018). Here Joe was articulating the dominance of the neoliberal global regime of accumulation and the embedding of supermarkets which have a growing power to coordinate distribution and consumption. However, on reflection, Joe considers his practice involving small-scale local production and distribution at local small stores or markets as an entirely distinct practice which mitigates that competition. That is, Joe is identifying that the local food regime of accumulation he participates in is an alternative to the neoliberal global regime of accumulation and in this way provides an alternative for small-scale producers within the neoliberal era.

Joe notes that the consumers who participate in what I call the alternative local regime of accumulation are different from those who participate in the neoliberal global regime of accumulation purchasing food at a supermarket. He suggests that “A lot of the people that come to the farmers' market don't go to the supermarket; they just go to organic grocery stores. Whereas a lot of the people that would go to the supermarket because they want

the cheap product wouldn't come to the farmers' market" (personal communication, December, 2018). Joe mentions that it is more expensive to buy local, organic and naturally grown food (personal communication, December, 2018). However, he thinks that there are enough people in the city that even if Belk Road Farm is not catering to ninety percent of the food shoppers, the ten percent of them who have got more time and income to shop at smaller stores or markets will be sufficient (personal communication, December, 2018).

Joe points out that whereas once the farmers' market would have been the place to source very cheap produce direct from the farmer, it is now where you go to get a premium organic product at a premium price, and "the people that go there kind of know that" (personal communication, December, 2018). Through appealing to a different demographic of food consumers in an alternative local regime of accumulation Joe also finds that competition is mitigated. However, this does demonstrate the subordination and marginalisation of alternative local regimes of accumulation in the prevailing NMD in agriculture. That is, Joe is identifying that he is part of a niche local regime of accumulation which remains subordinated to the dominant neoliberal global regime of accumulation, within which the vast majority of food consumers participate.

Joe's practice is not founded on a revolutionary desire to change the world. As he puts it,

It's not an airy-fairy kind of hippy save the planet thing. Certain things are just kind of the way of the world at the moment, and yes, they are needed...In this day and age, the supermarkets are kind of a part of that (personal communication, December, 2018).

Nevertheless, whether Joe intends it to be the case or not, his practice emerges as part of an alternative, and in this way resistance, to the neoliberal global regime of accumulation. His practice represents the organic development of an alternative practice that represents informal elements of a local alternative regime of accumulation. This is central to providing an alternative to the prevailing global commodity chains and global accumulation regime dominant within and proactively stimulated by the regulatory architecture of the NMD in agriculture.

Nicki's Eggs

'Nicki's Eggs' provides the packaging and distribution of free-range eggs as opposed to the production itself. Nicki originally worked with Otaika, a long-time established free-range egg business. Nicki began roadside selling but quickly realised that approaching and distributing to local cafes was a good option. After Otaika Nicki came upon an "amazing little farm" (Nicki, personal communication, October, 2018) run by a 78-year-old man. She preferred this setup because "it was so alternative, and that was more along my line" (Nicki, personal communication, October, 2018). However, the setup of the farm failed to meet hygiene requirements because the hens nested and excreted where they lay their eggs. These concerns encouraged Nicki to go out and seek a new farm whose eggs she would pack and market as 'Nicki's Eggs' (Nicki, personal communication, October, 2018). In this process she found Otto's farm, located in the lower Kaimai ranges in the North Island of New Zealand surrounded by native bush. This was in 2016 and continues to be the farm she sources from.

Nicki credits Otto with an astounding knowledge of chickens, which is vital to the success of both of their enterprises. Nicki says that "Otto will pick up a bird and know; he'll just feel it and know that it's either eaten that day, or it needs to eat, or there's something wrong with it" (Nicki, personal communication, October, 2018). While Nicki notes that a lot of the larger egg companies will pile antibiotics into the chicken feed, even when they are not needed, just to cover their bases in case anything comes up, Otto does not do that (Nicki, personal communication, October, 2018). Otto's chickens get the grain they need, and if they are sick are then treated independently.

Local cafes, organic and gluten free shops now stock or use 'Nicki's eggs'. She mentions that it evolves as more people became aware of them (Nicki, personal communication, October, 2018). Nicki also sells the eggs at the Tauranga Farmers' Market alongside Otto. Nicki identifies that she has a connection with her customers at the Tauranga Farmers' Market that come to her stall on a weekly basis. She has been selling her eggs at the market for a year and half at the time of research and feels secure in the customer base she has established there (Nicki, personal communication, October, 2018). Over Christmas Nicki notes that things become chaotically busy at the market, but that nevertheless, all year round she maintains a consistent customer base. This is also true of her relationships with local cafes and restaurants. Nicki notes "I really like the people thing; because going around

the cafes you get to know all the guys, all the chefs and stuff” (Nicki, personal communication, October, 2018). It is the chefs in particular that Nicki has established relationships with and if they move establishments then Nicki moves with them to distribute the eggs to the new establishment (Nicki, personal communication, October, 2018). Similarly to Kath, Nicki notes that chefs are supportive of the idea of local production, and her locally distributed eggs. This demonstrates the increased cooperation found in alternative agriculture that resists the NMD in agriculture. Here the organic development of a cooperative local regime of accumulation challenges the competitive global regime of accumulation that dominates in the prevailing NMD in agriculture.

Nicki travels out to Otto’s farm to pick up the eggs. Nicki’s week is generally fairly hectic. She attempts to have quieter Wednesdays and Saturday afternoons after the market, as well as Sunday mornings, but this is not necessarily always achievable because she has set up her business to be on call. Nicki tries to pre-empt what everyone in the cafes, restaurants and stores will use and ensure they have that, but if they call saying “Nicki, we’ve run out of eggs”, she has to provide (personal communication, October, 2018). This was a conscious business decision thinking that her service would be a step above what everybody else would offer (Nicki, personal communication, October, 2018). Nevertheless, servicing approximately twenty establishments keeps Nicki busy. Thus, Nicki’s business model is built on practices of localism and freshness. Nicki’s big selling point is that the eggs come straight from the farm, and she means it. When establishments require eggs Nicki is literally bringing them straight from Otto’s farm. This freshness increases the quality of the eggs for the customers. This is indicative of the alternative short food supply chains and local markets that Nicki is a part of, defining an alternative to the neoliberal global regime of accumulation.

Nicki’s practice is a cottage industry, which Nicki defines as a “small local industry” (Nicki, personal communication, October, 2018). The labelling on the egg cartons is simple black and white stickers. This has been an intentional move to visibly remain a cottage industry (Nicki, personal communication, October, 2018). Nicki’s eggs are in one supermarket, a Fresh Choice in Omokoroa – this is a small supermarket that is very community orientated which locals cherish as “their supermarket” (Nicki, personal communication, October, 2018). The eggs are also stocked in delis in Te Puna and other places that Nicki considers “sort of

alternative” (Nicki, personal communication, October, 2018). Nicki does not want to go into big supermarkets. She does not consider it aligned with her values to stock in the likes of Count Down and New World, she considers it “really bad taste. Like, going in the supermarket just the other day and the broccoli is there for \$1.00. So that poor farmer, it is him that has to supply them at 50cents a head because they demand it, and it's so wrong. That just irritates me” (Nicki, personal communication, October, 2018). Staying local and alternative is a goal for Nicki (personal communication, October, 2018). Thus, Nicki’s mission can be interpreted as remaining an alternative agricultural practice that resists the NMD in agriculture. That is, the prioritisation of local markets, slow food and short food supply chains are key elements of alternative agriculture (Maye & Kirwan, 2010) and an alternative to the global commodity chains of the neoliberal global regime of accumulation that has been enabled by the widespread adoption of the neoliberal national regulatory template.

Nicki considers her values largely absent in what I call the neoliberal form of conventional agriculture that dominates in the prevailing NMD in agriculture. She remarks that “I think supermarkets have trained us all. Slowly people are becoming untrained and reaching out for something different like the farmers’ market or the organic shops” (Nicki, personal communication, October, 2018). Here is an expression of a local small-scale distributor expressing the power of the supermarket in the prevailing neoliberal era. It is the neoliberal global regime of accumulation and centrally the power of supermarkets to coordinate distribution and consumption which all forms of agriculture, participatory or alternative, must confront and manage. However, in spite of this dominance Nicki is identifying the organic development of alternatives. The local food regime of accumulation that Nicki is part of is an example of a concrete form of alternative in this era.

Nicki is cautious and intentional about maintaining her values throughout her practice. For example, in order to remain truly local Nicki suggests that she must maintain a size that is big enough to be sustainable, but not too big that she has to hire someone else (Nicki, personal communication, October, 2018). If she hires a second person Nicki worries that the business “loses it flavour, because it's not just me; which I think it's really important if it is ‘Nicki’s eggs’ distributed by Nicki. Then it makes a big point” (Nicki, personal communication, October, 2018).

Being, 'just Nicki', does also come with a degree of precariousness. I enquired whether there are any support systems in place or people Nicki could turn to if issues arose with her local business, but she noted that "There's really no-one. Otto would have my back, because it's his eggs being distributed, so he would try and help me out in any way he could. But, really, it just comes back to me" (Nicki, personal communication, October, 2018). This points to the marginalisation of alternatives in the NMD in agriculture that really is dominated by the global neoliberal regime of accumulation which is proactively stimulated by a regulatory architecture that supports and intensifies these neoliberal forms of conventional agriculture.

Self-proclaimed peasant model of agriculture

Jim's self-proclaimed peasant model of agriculture can be considered a micro-horticultural unit. A self-proclaimed peasant model of agriculture explicitly demonstrates the emergence of a neo-peasantry. While all my case studies implicitly demonstrate this, Jim's proud declaration makes this explicit. This is a model that demonstrates the organic development of an alternative to the neoliberal global regime of accumulation and the neoliberal regulatory architecture. Jim's practices are based on one and a half acres in Kakanui, near Oamaru in the South Island of New Zealand.

A science of organic farming underpins his work as he aims to produce a model that can be transported anywhere in the world. As Jim suggests "The idea is to be able to work with hand tools; no machines and no electricity. I do get a computer and get it charged up once a week, and that's what I allow myself. Because if I go from here to Myanmar or wherever, it doesn't matter, it will be in a situation like this. The peasant farmers are living like that" (personal communication, February, 2019). To this day Jim still has no machinery and mentions that there have been no machines on his land for twenty-five years (personal communication, February, 2019). Small-scale, low-capital production units and technology is an indicator of alternative agriculture (Beus & Dunlap, 1990) and demonstrative of an alternative to the global industrialised capitalist forms of agriculture proactively stimulated by the regulatory architecture of the NMD in agriculture.

Jim's produce is sold locally through Oamaru, Dunedin and Queenstown and distributed by courier. However, all of Jim's customers have come to his gate, including chefs from

Government House, local restaurants and restaurants in neighbouring cities, wanting to purchase produce directly from the grower. Jim's customer base of prominent restaurateurs emerged largely from word of mouth (personal communication, February, 2019). One restaurateur purchased some of his potatoes from a stall and asked him to grow more, and it blossomed from there. It was Jim's potatoes that were requested by the head chef of Government House to feed the royal family on their visit in 2018. This demonstrates that quality, slow food produced using practices of organic/sustainable farming that define this particular alternative production practice prove to be valued above that available in the neoliberal forms of conventional agriculture.

A recurring theme noted by Kath, Nicki and Jim is that the chefs in hospitality support small local producers. Jim suggests that the chefs get just as furious about obstacles to accessing local produce as the producers do about obstacles to producing it (personal communication, February, 2019). Jim notes that their local mayor once said "Look, we don't see what the fuss is. There's good food in the supermarkets." A restaurateur said, "Excuse me, there is no good food in the supermarkets. We can't get good food in the supermarkets. And please don't force us to depend on bloody supermarkets for our food because it's horrible" (personal communication, February, 2019). However, in contrast to Kath who identified a network of collaboration between the hospitality industry and small-scale producers, Jim does not feel that this support extends as far as collaboration. Jim said in this sense, there is "None whatsoever. That's the trouble. Little guys are out on a limb completely on their own. You are an island unto yourself" (personal communication, February, 2019).

The self-proclaimed peasant positions his plot of land as an oasis (personal communication, February, 2019). Jim's oasis gives life to entire ecosystems, each minute aspect of which is cherished for the value it holds in producing organic, local and seasonal produce. This is underpinned by Jim's concern that "We are not planet focused. The one thing in our faces right now is environmental security; in everyone's face and not one of us wakes up in the morning and says, "What do I have to do today to be planet positive?" (personal communication, February, 2019). It certainly seems that Jim is asking, and furthermore, actively practicing solutions in his work and life to be planet positive. For Jim "it's all about the comma, where do you put the comma? Take the sentence: I'm a human being on a

planet. You put a comma after the word 'being' – I'm a human being, on a planet. What if you put the comma after the word human? I'm a human, being on a planet. It's all about where you put the comma. Most of us are human beings, on a planet, and as a result we're parasites. We're consumerist parasites. We do nothing" (personal communication, February, 2019).

Jim's land was not always a fertile oasis. For decades it had been farmed intensively by a Dutch family. In the end they walked off the land because the chemicals they were using could not fix the land. At the end they were raising bulbs on the land, but they all either died in the ground or in the shops. This was the quality of land that Jim started with (personal communication, February, 2019). For Jim the decision to purchase the plot of land and begin to embody the 'Dirt Doctor' life just seemed like the right time and place to begin. His process began as one of trial and error starting from nothing, with nothing. Jim decided this was the right place to come to because a lot could be proven by starting with the worst plot of land (personal communication, February, 2019). Jim also wanted to ensure his practices were transferable anywhere, thus he thought, "Start from nothing with nothing; absolutely no money... Which is exactly where most of the third world farmers are going to start from when they get out to wherever they are" (personal communication, February, 2019). In line with this thinking Jim maintains a minimal water allowance for his crops and personal use, which Jim jokes is what most people would use in one shower. This adheres to an attempt to create a practice that could be transposed into settings that have reduced access to water. For Jim it is about developing practices and knowledge that can be applied to any soil in the world and begin to recover it (personal communication, February, 2019). This can clearly be seen as not only the organic development of elements of an alternative local regime of accumulation that resists the NMD in agriculture, but also the beginnings of a flexible labour process model that could form part of the regulatory template of an alternative model of development.

Jim has ventured all around New Zealand trialling his practices and has had people take his programme overseas with great success (personal communication, February, 2019). Jim's practices are simply based on developing healthy soil, noting that the most important thing he grows is the soil (personal communication, February, 2019). He calls himself the Dirt Doctor and prioritises growing the soil to grow food. One of the experiments Jim has been

undertaking, which is worth noting because it is argued to be unachievable, is to grow tomatoes and potatoes consecutively for 18 years in a row. Potatoes and tomatoes are related so they extract the same nutrients from the soil, thus the soil should be dead. But Jim's soil is flourishing (personal communication, February, 2019). This method of agricultural production is directly alternative to the methods pursued in neoliberal forms of conventional agriculture.

Jim speaks to these methods, suggesting that the main issue with conventional agriculture is that they have been following the wrong science (personal communication, February, 2019). Jim notes that "The downside is that not one scientist is interested in what I'm doing. Not one scientist" (personal communication, February, 2019). Jim has compiled decades of research that demonstrate the effect that chemical imbalances have on the soil. In order to make the soil work for you, Jim articulates that "you've got to understand the balance of your soil... You see what I'm doing there, is bringing those things...that are out of kilter and bringing them back" (personal communication, February, 2019). Biological inoculums and compost teas are a big part of Jim's practice. Jim tests his soils once a year, amassing the results into data that he compiles over the years to prove that his practice is successful and achievable on a continuing basis.

Through this he has demonstrated that the core problem with conventional agriculture, and in particular neoliberal forms of conventional agriculture which mobilise heavy use of chemical fertilisers to maintain high yields and a competitive edge, is that they are chemistry-based practices. Such an approach involves attempting to manage the biology of the soil and the structure of the soil by using chemistry alone. This has "damaged the biology of our soil so often for so long that we've killed it. We've now got this inert thing we call soil or dirt, that we apply chemicals to in order to grow stuff. It's completely the wrong way of looking at it. But, we'll find out in the end" (personal communication, February, 2019). Jim argues that "what you're finding is that your chemistry will never balance the soil because you're using high salt index fertilisers which kill the very organisms that you're trying to breed" (personal communication, February, 2019). Jim has found that microorganisms are essential to the success of growing quality produce. That is, Jim demonstrates an alternative to the chemical treadmill (McMichael, 2016) that defines the

production within the neoliberal global food regime of accumulation. This is a successful alternative, as Jim says, “You would have to be an idiot to starve here; there’s that much food coming out of the ground” (personal communication, February, 2019).

Jim categorises his practice as regenerative farming. For Jim this involves taking “a whole new look at the game and asking what does the planet offer to give us a chance to help restore things. My job is not to overwhelm and to take charge of the whole deal; it’s to understand what the planet is trying to do and enhance it” (personal communication, February, 2019). This perspective is an alternative to both Fordist and neoliberal forms of conventional agriculture which follow a practice of pumping the land full of chemicals, “pump it, pump it, pump it, and you’ll destroy everything that’s under it. That’s exactly what’s happened right now. The farmers are practicing death agriculture I’m afraid” (personal communication, February, 2019).

The reliance on chemicals in production has been exacerbated in the prevailing neoliberal era as all become exposed to the logic of global capital, driving a greater impetus towards participation in the neoliberal global regime of accumulation which necessitates greater chemical use to maintain competitiveness. Until legislation changes, or everything collapses, Jim does not hold much hope for widespread change (personal communication, February, 2019). He suggests that the mentality is “I’ll get away with as much as I can for as long as I can... you’re not off-side until the referee blows his whistle. We’re taught that. In our whole culture, you’re not off-side until the referee blows his whistle. Until you’re caught...Keep going” (personal communication, February, 2019). This perspective is echoed in Beus and Dunlap’s (1990) indicators of conventional agriculture, suggesting that conventional agriculture emphasises speed, quantity and profit, resulting in production that is maintained by agricultural chemicals and long-term consequences are ignored for short-term benefits. On the other hand, Jim’s alternative, specifically to neoliberal forms of conventional agriculture, internalises all costs, conserves non-renewable resources and considers long-term outcomes as integrally important to the success of his practice.

Jim transfers his knowledge by offering internships. He also creates and runs small courses called ‘Dirt Doctor’ programmes. Jim took these courses all around the country. Participants

would take away a bowl of the compost tea that they had learned about, along with an understanding of how the biology works in the soil. People would take the knowledge and work their own patch and found that it worked for them in the same way it works for Jim. One of the programmes Jim is hoping to start is 'Recovering the planet yard by yard'; based on the principle that people could move towards growing their soil and growing food in their yards rather than growing lawns. Such programmes demonstrate how Jim's alternative agricultural practice can spread beyond his oasis in Kakanui and encourage the seeds of a post-neoliberal world to spread.

Jim suggests that he cannot compete against the export-orientated production of global commodity chains within what I call the neoliberal global regime of accumulation. However, he points out that he does not even grow what they grow. According to Jim there is room for small-scale producers to produce specialised boutique products that serve as an addition to the mainstay products that are grown in large-scale production practices and sold for a price that small-scale producers cannot compete against (personal communication, February, 2019). Because neoliberal forms of conventional agriculture are focused on the highest rate of return they cannot supply produce that requires more time to produce. This does offer small-scale producers a particular niche market in which they are able to produce more labour and time intensive specialised products (personal communication, February, 2019). This does demonstrate the separation between the neoliberal global regime of accumulation and alternative local regimes of accumulation. At the same time, it expresses the dominance and competitive edge that those participating in the neoliberal global regime of accumulation have in the prevailing era, rendering small-scale producers marginalised to niche areas.

For Jim, local food production means "Harmony. No other way of describing it... if the people in your village are sharing what they do on a regular basis then everybody eats well" (personal communication, February, 2019). Against harmonious local food production Jim contrasts global food production or what I would call the neoliberal global regime of accumulation which produces and is reproduced by "this expectation that we can eat anything we like any day of the year...We couldn't be more wrong if we tried. That's why we're so backward in the whole world" (personal communication, February, 2019). It is in

contrast to this expectation that Jim's practice stands. As part of an organically developing local regime of accumulation Jim resists the NMD in agriculture and within this the dominating neoliberal global regime of accumulation.

Conclusion

Presenting my case studies as forms of alternative local food regimes of accumulation I am offering on the ground initiatives that speak to the localisation of accumulation in opposition to the neoliberal global food regime of accumulation. GAS Testaccio Meticcio, La Nuova Arca, Barikamà and Il Papavero work together in a consumer-producer inception of a local food regime of accumulation in Italy. The Tauranga Farmers' Market as a site of distribution and consumption brings together consumers, local producers and distributors, including Six Toed Fox Organics, Kath's Business, Belk Road Farm and Nicki's Eggs to form a local regime of accumulation in Tauranga, New Zealand. Finally, Jim centres restaurateurs as consumers in a local food regime of accumulation in Kakanui, New Zealand. These offer practical realities which demonstrate an alternative to the currently dominant neoliberal global food regime of accumulation. Though drawing on Beus and Dunlap's (1990) and Maye and Kirwan's (2010) (Table 2 and Table 3) trans-era descriptors of agricultural practice as 'alternative' and 'conventional', I locate these in the specific mid-range era as emerging in local food regimes of accumulation alternative to the neoliberal global food regime of accumulation.

These case studies demonstrate the organic development of bottom-up initiatives that resist the regime and regulatory impetus of the NMD in agriculture. Despite the dominance of the more competitive neoliberal global food regime of accumulation, these alternative local food regimes of accumulation have found a subordinated position of viability that presents alternatives and a post-neoliberal vision. The people involved in these alternative local food regimes of accumulation, to greater or lesser extents, consciously and/or deliberately resist the NMD in agriculture. Nevertheless, whether the intent is conscious and deliberate or not, participating in the inception and reproduction of an alternative local food regime of accumulation in turn resists the NMD in agriculture and paves the way for a post-neoliberal era. However, the transformative potential of alternative local food regimes of accumulation must be problematised while subordinated to the neoliberal global food

regime of accumulation and national-transnational regulatory framework in the prevailing era. The next chapter explores this problematisation, whilst nonetheless holding on to an 'optimism of the will' predicated on the latent transformative potential in alternative local food regimes of accumulation such as those explored here.

Chapter Six

The practical local seeds of a progressive post neoliberal model of development in agriculture?

Introduction

The local food regimes of accumulation explored in the previous chapter present alternatives to the specific neoliberal form of conventional agriculture centrally defined by a global food regime of accumulation. Within these alternative local food regimes of accumulation there are evident solutions to the many environmental and social crises of the neoliberal global regime of accumulation and facilitative neoliberal national-transnational regulatory architecture. That is, I am arguing that the lived realities of alternative local regimes of accumulation that exist in the neoliberal era challenge the NMD in agriculture. Through this challenge we are able to identify the type of labour processes in agriculture and more broadly the type of local regimes of accumulation that could flourish with a facilitative alternative national-transnational regulatory architecture within an alternative model of development defining the next post-neoliberal era of capitalism.

However, in this chapter I expand on how these alternative local food regimes of accumulation are subordinated by neoliberal forms of regime and regulation in the prevailing era which hampers their emancipatory potential. The Food and Agriculture Organisation of the United Nations (2019) point out that

To feed the world and do it sustainably, an urgent and radical shift in our food systems is necessary. To be effective, transformative actions must address a complex set of interconnected objectives encompassing economic, social and environmental dimensions. Family farmers—including pastoralists, fishers, foresters, indigenous people and other groups of food producers—are at the heart of this issue. They provide the majority of the world's food, are the major investors in agriculture and the backbone of the rural economic structure... They don't just produce food. They simultaneously fulfil environmental, social and cultural functions, and are custodians of biodiversity, preserving landscape and maintaining community and cultural heritage. Further, they have the knowledge to produce nutritious and culturally appropriate food as part of local traditions. In fact, nothing comes closer to the

paradigm of sustainable food production than family farming. Family farmers, when supported with affirmative policies and programmes, have a unique capacity to redress the failure of a world food system that, while producing enough food for all, still wastes one third of the food produced, fails to reduce hunger and the different forms of malnutrition, and even generates social inequalities (p. 7)

As The Food and Agriculture Organisation of the United Nations (2019) suggests, I want to emphasise that the support of regulation, including ‘affirmative policies and programmes’, is essential to enable the transformative potential of traditional and neo-peasantry and family farmers. I argue that the policy that is necessary to achieve such a vision should be understood much more broadly as the need to conceptualise and implement a progressive counter-hegemonic post-neoliberal model of development in agriculture. This necessitates the intentional design of an alternative national-transnational regulatory nexus to facilitate an alternative regime of accumulation.

As it stands, both regime and regulation aspects of the prevailing neoliberal model of development are not conducive to the success of alternative local regimes of accumulation. As such, alternatives remain subordinated to the dominant neoliberal global regime of accumulation and neoliberal national-transnational regulatory nexus. In a Gramscian ‘pessimism of the intellect but optimism of the will’ approach (Gramsci, 1977), I put forward some cautions about the post-neoliberal potential of alternatives whilst constrained in the contemporary era by the prevailing NMD in agriculture.

Firstly, I explore how small-scale neo-peasantry rely on consumers for the viability of alternative local regimes of accumulation in the prevailing era. This is not to suggest that the consumer should not play a role in the success of alternatives, but rather that in the prevailing era, there is no national or transnational regulatory support for local regimes of accumulation. This absence of regulatory support thus reduces alternatives to rely solely on the consumer for viability. On the other hand, the neoliberal global regime of accumulation is supported by a dominant neoliberal national-transnational regulatory nexus that facilitates its success.

Secondly, I present the lived experiences within the alternative local regimes of accumulation of my case studies in relation to the dominance of the NMD in agriculture. Here my participants express some of their challenges and frustrations which I contextualise as the result of the dominance of the neoliberal global food regime of accumulation and the associated support of a national-transnational regulatory architecture. This highlights that alternative local food regimes of accumulation are subordinated in the prevailing era and the absence of any favourable national-transnational regulatory support.

In the last section of this chapter I bring back the 'optimism of the will' (Gramsci, 1977) and suggest that though I have problematised the transformative potential demonstrated in alternative local food regimes of accumulation, this should not cause us to dismiss that potential. Rather, I argue that these alternative local regimes of accumulation should be coupled with an alternative regulatory architecture that is operationalised at local, national and transnational levels and is conducive to the success of local regimes of accumulation. That is, I argue that alternative regime and regulation aspects should cohere in an alternative model of development in agriculture.

The active consumer in alternative local food regimes of accumulation

My research in both Italy and New Zealand demonstrates that consumers are the key to success for alternative local food regimes of accumulation *in this era*. That is, the success of alternatives in the present era is wedded to consumers. In the potential next era of capitalism defined by an alternative model of development in agriculture, consumer support would not be the sole determiner of viability for local food regimes of accumulation. An alternative model of development in agriculture would be defined by local food regimes of accumulation coupled with a national-transnational regulatory architecture that was conducive to their success.

Curtis (2004) suggests that

Salvation [of family farming]... can come only from an alliance with consumers. Thus, in discussing AAFNS, Goodman (2004, p. 13) asserts: "Politically, to imagine radical change in food production, systems of provision, and the spatial scaling of everyday foodways without the agency of consumers is simply quixotic, given the formidable

economic and spatial power concentrated in the hands of leading food manufacturers and retailers... It is argued (in Goodman's terms, imagined) that farmers (i.e., in alliance with consumers) can, by growing organic food, reverse the narrowing realm of family farming (p. 183-185).

My own research reiterated that the salvation of family farmers, in this case the neo-peasantry I have identified, has come at the hands of consumers. In the case of La Nuova Arca, Barikamà, and Il Papavero, it is the solidarity experienced with GAS – The Solidarity Purchasing Groups, made up of households who form the primary foundation of their consumers – that enables the success of these small-scale neo-peasantry fighting for a better world through the production of better food. In the case of Six Toed Fox Organics, Kath's Business, Belk Road Farm and Nicki's Eggs the Tauranga Farmers Market as a site of distribution and consumption provided a foundation for the success of these small-scale producers. It is only Jim's self-proclaimed peasant model of agriculture that appears less reliant on a specific alliance with a particular group of consumers. Although, in saying that, it is through word of mouth amongst restaurateurs that his produce is so coveted.

Brunori, Rossi and Guidi (2011) consider themselves "among those who believe that 'the political possibilities of consumption (are) less than the revolutionary overthrow of capitalism but more than merely a niche marketing opportunity'" (p. 2). They emphasise "the capacity of consumers to co-produce – together with other actors – new material and immaterial frames of daily life" (Brunori, et al., 2011, p. 2). They suggest that "Provided that they are informed as to where the product comes from or how it is produced, consumers can exert their choice as a political act. Food consumption, therefore, is one of the examples of the opening of new political spaces" (p. 3).

Based on my research Brunori et al's (2011) position appears to be accurate in the sense that the possibilities of consumption do co-produce new frames of life and are "active components of new systems of provisions" (p. 4). However, I do argue that consumption does present as a niche marketing opportunity. Nevertheless, these two realities need not be mutually exclusive. That is, in the present NMD in agriculture the dominance of the neoliberal global food regime of accumulation and neoliberal national-transnational regulatory dialectic is not conducive to the success of alternatives. As such, alternative

small-scale local producers rely on consumers and intentionally appeal to a niche demographic of consumers. This is a strategy of survival. Neo-peasantry are unable to compete within the neoliberal global food regime of accumulation that is proactively stimulated and facilitated by the neoliberal regulatory nexus in the prevailing NMD in agriculture. Thus, they must rely on the niche opportunities that present themselves to pursue their alternatives. However, in doing this these alternative practices do open up new political spaces and organically develop local food regimes of accumulation and informal elements of local regulation which could form a central part of an alternative model of development that defines the next post-neoliberal era.

The members of GAS Testaccio Meticcio that I spoke to suggested that only well-educated professionals with a reasonable income could afford to be involved in GAS. The demographic of GAS Testaccio Meticcio appeared typical and representative of most GAS (Fonte, 2013). Generally dominated by middle aged professionals engaged in comfortable employment with a middle to high income, the members were described as being educated, enabling them to think critically and consequently make informed choices about where their food comes from (U. Sievers, personal communication, April, 2016). This GAS is based in a suburb 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” (U. Sievers, personal communication, April, 2016). This implies issues of accessibility. That is, this alternative local food regime of accumulation only seems to be accessible to those with a higher income. This is reinforced by one of the participants who suggested that “in general the GAS... 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). This is echoed by Fonte (2013) who after investigating the GAS in Rome 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” (p. 233). This reiterates that this local regime of accumulation exists as a marginalised niche alternative in the present era. It is because such alternative local regimes of accumulation are subordinated in the prevailing era that access to and in turn, the transformative potential of, this alternative is restricted.

My participant observations at the Tauranga Farmers' Market in New Zealand, along with consumer and producer corroboration, showed that the demographic of consumers frequenting the market could also be similarly described as middle class, well educated professionals. Tanya and David point out that the demographic of the market is "very white... I'm going to say you've got doctors, lawyers, surgeons, business owners. We've been business owners for many years here, and this is your upper class. It really, really is... It is very white middle class" (personal communication, August, 2018). This is a particular demographic of consumers who can afford the time and money to make such food choices and thus become co-producers of a particular alternative local food regime of accumulation that resists the NMD in agriculture. Rachel, from Six Toed Fox Organics, expressed a frustration that they repeatedly found that all of the education and access to organics and permaculture was going to one particular demographic – a wealthy demographic marked by ethnicity and class identities, namely, white, middle class consumers.

Cameron (2007) suggests that "One of the driving forces in the regeneration of farmers' markets is the increasing demand for higher quality food by more discriminating consumers" (p. 368). Let us be clear that 'more discriminating consumers' is a term that has certain class implications. Only consumers with certain resources are able to afford the luxury of discrimination. As Brunori et al (2011) suggest, "consumers with no family constraints, according to their available budget, can adjust their own purchasing and consumption routines" (p. 8-9). However, not all consumers have this flexibility. In fact, as both Rachel of Six Toed Fox Organics and Joe of Belk Road Farm noted, the demographic they cater to is a very small proportion of food consumers.

Whilst I agree wholeheartedly with Brunori et al. (2011) that "alternative networks of yesterdays may be dominant networks of tomorrow" (p. 5), our positions on how to reach that goal differ markedly. The alternative local food regimes of accumulation that I observed certainly involved "Re-embedding production and consumption into new social relations and dis-embedding them from dependence on big players in the agri-food system" (Brunori et al., 2011, p. 4). However, this has not, in the prevailing NMD in agriculture, lived up to the full emancipatory potential such re-embedding and dis-embedding permits.

Turning to the political power of consumption is important, and certainly has played a central role in the existence and success of the alternative local food regimes of accumulation explored in this thesis. However, consumers cannot unleash the post-neoliberal potential of alternatives whilst the prevailing neoliberal model of development remains. It is because of this that these alternative innovations are tolerated; albeit subordinated, marginalised and constantly under the threat of the competitiveness of the neoliberal global food regime of accumulation and its proactively stimulated incursion worldwide. That is, as long as the neoliberal model of development prevails the organic development of alternative regimes of accumulation will be marginalised and subordinated.

We need a new regulatory template for the nation state to be established and widely adopted in order to generate a new transnational terrain conducive to the success of alternative food regimes of accumulation. In this way, Brunori et al's (2011) position that "alternative networks of yesterdays may be dominant networks of tomorrow" (p. 5) can be possible. Against the confines of regime and regulation aspects of the NMD in agriculture consumers cannot hope to achieve a revolution within local regimes of accumulation without corresponding regulatory change. Without regulatory change politicised consumption remains tolerated in a subordinated and marginalised alternative. In this way, the post-neoliberal potential of alternative local food regimes of accumulation remains quashed.

In agreement with Brunori et al. (2011) it appears that consumers really do, deliberately or not, reshape "the worlds of consumption, production and distribution according to principles that are alternative to the dominant ones" (p. 8). The success of the organic development of the local food regimes of accumulation outlined in this thesis that challenge the neoliberal global food regime of accumulation is testimony to this. Brunori et al (2011) and I certainly share the view that "niches can provide the organising principles for a new regime or may be incorporated and subsumed into the old one" (p. 5). However, I argue that they have not considered the possibility of intentionally and deliberately reflecting on how alternative local food regimes of accumulation coupled with an alternative local, national, transnational regulatory nexus could define the next post-neoliberal era of capitalism. We can see practical demonstrations of alternative local food regimes of

accumulation. However, I argue that reaching the next post-neoliberal era requires more than the political consumer exercising their agency.

Understanding local regimes of accumulation in the context of the prevailing neoliberal model of development

In the present NMD in agriculture the prevailing neoliberal global food regime of accumulation is proactively stimulated by the neoliberal national-transnational regulatory nexus. Alternative local food regimes of accumulation are subordinated to, but nonetheless co-exist with and resist, the dominant neoliberal global food regime of accumulation. The dominance of the neoliberal global food regime of accumulation is due to the deployment of indirect, proactive regulatory forms. That is, labour processes in agriculture are not directly regulated, but instead are largely indirectly regulated, preserving the prerogative of capital. The proactive regulation of the neoliberal model of development that is both pro-capital and pro-market (Neilson & Stubbs, 2016) gives power to globally mobile capital and exposes all nation states and within them all labour processes in agriculture to the logic of global capital. This drives a global competition imperative that results in the dominance of the neoliberal global food regime of accumulation which is more competitive given the regulatory architecture of the NMD in agriculture. This position is supported by Duram and Chitiyo (2017) who suggest that “According to participants, alternative agriculture is that form of agriculture that is marginalized not only by the government but by international development organizations such as Food and Agriculture Organization (FAO) and United States Agency for International Development (USAID)” (p. 43). Thus, in this era the neoliberal global food regime of accumulation increasingly threatens alternative local food regimes of accumulation.

Cameron (2007) suggests that “In many developed countries rural small businesses have been adversely affected by changing global food production, distribution and retailing patterns, and New Zealand is no exception. In the 1980s and 1990s New Zealand underwent radical economic reforms, including the elimination of all agricultural subsidies, which often resulted in rural hardship” (p. 368). The changing production, distribution and retailing patterns that Cameron (2007) speaks to is indicative of the emergence of the neoliberal global food regime of accumulation as part of the NMD in agriculture that defines the present era from the 1980s to the present.

The elimination of subsidies that Cameron (2007) points out should be understood as part of the regulatory architecture of the NMD in agriculture. That is, part of the external component of the national neoliberal regulatory template encourages a rollback of state support, including subsidies. Le Heron and Roche (1999) point out that, “no other country in the world has reduced its subsidies for agricultural production to the same extent...from 34 percent of gross agricultural revenue in 1984 to almost zero in 1995” (p. 204). Of the OECD nations, New Zealand is ranked the lowest in terms of the subsidies provided for producers (Le Heron & Roche, 1999).

To reiterate, this lack of subsidies is not an absence of regulation but a clear dominance of proactive regulation (Neilson & Stubbs, 2016) in the present era. This has impacted small producers around the world as they struggle to remain competitive in the face of global capital, in the case of agriculture, global agribusiness. Small scale producers struggle to be competitive, for example in terms of colour, size and uniformity of produce (Cameron, 2007). The widespread adoption of the national regulatory template of the neoliberal model of development has engendered the dominance of the neoliberal global food regime of accumulation that is not favourable to local regimes of accumulation nor traditional and neo-peasantry.

To consider how the regulatory architecture of the NMD in agriculture unfolds in New Zealand consider the language of the Ministry of Foreign Affairs and Trade (New Zealand Foreign Affairs and Trade, n.d., para. 13). New Zealand is called an agricultural exporting country “pushing for ambitious agricultural trade reform”. The first paragraph pertaining to agricultural trade negotiations, reads as follows

Many countries retain a range of barriers to agricultural imports, such as high tariffs and tariff quotas, so there are still significant distortions to trade in this sector. New Zealand's agricultural exports frequently come up against these barriers and also have to compete against products that enjoy subsidies. This can put New Zealand farmers at a significant disadvantage. We're not alone in calling for ambitious and urgent reform of agricultural trade (New Zealand Foreign Affairs and Trade, n.d., para. 1).

In essence, New Zealand government's position is to adopt an even more heavily proactive approach – regulation which invigorates the core logic and relations of capitalism (Neilson & Stubbs, 2016) to push for a more deeply embedded neoliberal global regime of accumulation. The external component of the national template of the neoliberal model of development encourages reductions in government support e.g., tariffs. Thus, the position outlined above promotes a heavier neoliberal hand. Make no mistake, this is not an absence of regulation, but rather a presence of proactive regulation that results in the dominance of a global regime of accumulation and subordinated local regimes of accumulation.

Furthermore, MFAT (New Zealand Foreign Affairs and Trade, n.d., para. 3) go on to suggest that

The WTO Agreement on Agriculture (AoA) was a good first step in liberalising agricultural trade...but through the Doha Round we are working to achieve further improvements to the rules...The negotiations are divided into 'three pillars': Market access – substantial improvements by reducing barriers to trade and improving rules; Export competition – including reducing and eventually phasing out subsidies paid to exporters; [and] Domestic support – reducing the trade-distorting subsidies that are paid to farmers and limiting government price guarantees.

The proactive regulation of the NMD in agriculture that stimulates the core logics and relations of capitalism is rather explicitly stated here. The dominance of global commodity chains as part of the neoliberal global food regime of accumulation is a direct result of the widespread adoption of the neoliberal national regulatory template. Le Heron and Roche (1999) suggest that we should view agriculture "as a series of distinct commodity chains stretching from the land to the table, with many links, and most output in New Zealand's case, going to offshore destinations" (p. 205). However, this is reaching crisis point, as suggested by the OECD (2017); "New Zealand's growth model, largely based on exporting primary products, has started to show its environmental limits, with increased greenhouse gas (GHG) emissions, diffuse freshwater pollution and threats to biodiversity (p. 15).

Blandford (2015) problematically argues that the WTO disciplines whilst not perfect, are on track in terms of ensuring food security. Given that world hunger is on the rise, affecting eleven percent of the global population – a staggering figure of 815 million people in 2016

(FAO, IFAD, UNICEF, WFP, & WHO, 2017) – I argue that this is simply not the case. As McMichael (2013) suggests “Food provisioning via the global market managed by tncs [transnational corporations] has proven not only inadequate, but also a device by which small producers have been undermined... That is, the market is not about feeding the world, rather it is about consolidating the power of agribusiness to install “agriculture without farmers” (p. 81). The food provisioning in a global market described here should be understood as the neoliberal global food regime of accumulation that coupled with neoliberal forms of indirect, proactive regulation at the national and transnational level generate a hostile environment for alternative local regimes of accumulation.

People and business can either follow the neoliberal impetus and participate in the game of global competition through engagement with the neoliberal global food regime of accumulation in which few will be successful; or opt for an alternative that though subordinated in the prevailing era can organically develop and resist this impetus. In the case of the latter option, this generally entails more obstacles, and compromise in order to exist in an era defined by a model of development that is not conducive to the success of non-neoliberal alternatives. That is, the trade laws governed by the World Trade Organisation (WTO) and implemented at the national level indirectly regulate agricultural labour processes. The prerogative for organising the actual process of agricultural work remains in the hands of capital and through the mobilisation of proactive regulation this prerogative is extended and enabled. However, it is globally mobile capitalists who benefit from this power and from the indirect, proactive regulation that prevails and not the traditional and neo-peasantry who, even in the case of those who own their own land, are constantly faced with the threat of competition from those who participate in the global regime of accumulation.

This argument holds true around the world, as capitalism unfolds unevenly everywhere due to the prevailing neoliberal model of development. As Chitiyo and Duram (2017) find, in

Zimbabwe agriculture, when it comes to policy it just recognizes conventional farming.’ International organizations such as FAO and USAID promote conventional agriculture... So a lot of funding that is available from donor institutions especially

the USAID is really about commercialization of agriculture in Zimbabwe, a very strong focus on promoting multinational industries in terms of their provision of chemical fertilizers, hybrid seeds (Participant 2, 2013) (p. 43-44).

This reflects the neoliberal led impetus towards the neoliberal global food regime of accumulation. Furthermore, it is indicative of the consequential marginalisation of alternative local regimes of accumulation across the world under the NMD in agriculture. To demonstrate the confines of the NMD in agriculture I now explore some of the frustrations and obstacles experienced by my participants as they navigate an alternative local food regime of accumulation in an era not conducive to their success.

Bottom-up experiences of top-down regulation

Throughout my research it was clear that neo-peasantry are experiencing lived realities shaped by the prevailing NMD in agriculture. Thus, despite the emancipatory potential in the alternative local regimes of accumulation investigated in this thesis, whilst the NMD in agriculture prevails it is clear that organically developing local food regimes of accumulation will continue to struggle. That is, neither the dominant neoliberal global food regime of accumulation nor the neoliberal regulatory architecture is conducive to the success of alternative local food regimes of accumulation.

For example, when speaking to Angelo of Il Papavero, he suggested that though biodiversity persists in Italy within what I call national and local regimes of accumulation, there is an ongoing fight against homogenisation (A. Savioli, translated by M. Fonte, personal communication, April, 2016). Angelo points out that the regulation of the EU is a threat to biodiversity due to permitting practices that homogenise wine and cheese making (A. Savioli, translated by M. Fonte, personal communication, April, 2016). For example, in Italy a particular use of sugar in winemaking is forbidden, as is using milk powder to make cheese (A. Savioli, translated by M. Fonte, personal communication, April, 2016). However, EU regulation is now permitting these practices in Europe which not only homogenises production (losing essential diverse aspects that are linked to the quality of Italian products) but also undermines traditional local production practices in Italy that adhere to these authenticities (A. Savioli, translated by M. Fonte, personal communication, April, 2016). The latter are undermined because they cannot compete against the homogenised and cheaper

products permitted in the neoliberal global food regime of accumulation that is supported through the deployment of proactive regulatory forms by the transnational EU body. Angelo identifies that challenging this and wider regulation “is the fight” (A. Savioli, translated by M. Fonte, personal communication, April, 2016). This demonstrates both Angelo’s intentional resistance to the NMD in agriculture but also the marginalised position of alternative local regimes of accumulation in the prevailing era.

Rachel from Six Toed Fox Organics points out that regulation hinders their small-scale production. She suggests that the Food Act in New Zealand has been constructed for

large production farms that are really export focused. I think it's only 60 percent of the horticultural produce that we grow here is actually consumed here. They’re just really geared up for these big farms that have these big packing and processing facilities and big budgets; or they have the land mass, which is where all your value is now to be able to go to the bank and go, “Well the Food Act is here, and now I’ve got to get five hundred grand worth of equipment to be able to meet it, so I can borrow that against my land please?” For small producers and getting land access is just so, so difficult... we’ve got no government support in any way (Rachel, personal communication, January, 2019).

For example, Horticulture New Zealand requires levies to be paid however, they do not offer any benefit, support, or lobbying for businesses like Six Toed Fox Organics (Rachel, personal communication, January, 2019) that are not participating in the neoliberal global regime of accumulation. Rachel points out that Horticulture New Zealand are just focused on exports (personal communication, January, 2019). This is an example of the indirect regulation of the prevailing NMD in agriculture that does not directly regulate the labour process in agriculture, but certainly frames the choices and opportunities available. The regulatory architecture of the NMD in agriculture creates a sector in which the likes of Rachel finds herself without regulatory support and confronted by the neoliberal global regime of accumulation.

From her perspective Rachel does not consider the lack of regulatory or state support for small scale production to be a conscious decision (personal communication, January, 2019).

She considers the influence of large producers' lobbying on the outcome of the Food Act to have unintentionally left small producers with "nobody in the game; basically nobody going, "Well, actually this is going to have these kind of flow-on effects" (Rachel, personal communication, January, 2019). Pointing to the MPI calculator of 'Where do I fit' Rachel notes that according to that calculator, Six Toed Fox Organics does not fit anywhere (personal communication, January, 2019). New Zealand is set up so that businesses fit into one area or another, e.g., you are either a food producer, a food processor or a food distributor (Rachel, personal communication, January, 2019). But in the case of Six Toed Fox Organics, they are all three. New Zealand has divided up the food supply chain to the extent that the regulation on vertically integrated practices like Six Toed Fox Organics is left between categories with no clear directions (Rachel, personal communication, January, 2019). This lack of representation and direction for alternative agricultural practices is a direct result of the prevailing regime and regulation aspects of the NMD in agriculture.

Rachel recognises the impact of the impediments of neoliberalism. She says "God, it's just enough to make you want to cry some days. But, then I go, I'm doing my bit for what we can in the structure that we have" (Rachel, personal communication, January, 2019). At the end of the day Rachel notes that she is operating and living within the neoliberal framework "and that's where we get stuck a lot" (personal communication, January, 2019). She points out that "Neoliberalism is so comfortable for such a majority of people, or majority of voters" (Rachel, personal communication, January, 2019). Rachel notes, that the neoliberal viewpoint constantly rests on the line of the balanced economy, however she accurately points out "There's no... balance if we can't breathe the air anymore" (personal communication, January, 2019). Here Rachel is recognising that the forms of agriculture that are proactively stimulated and that emerge as dominant under the NMD in agriculture must be resisted.

Nicki of Nicki's Eggs also provides an example of the effect of national regulation on aspects of what I call local food regimes of accumulation. Nicki mentions that as an egg producer Otto is part of the New Zealand Egg Producers Board (personal communication, October, 2018). The Board designates particular areas where specific egg producers are permitted to distribute their eggs. Otto's farm is the smallest of the farms managed by the Board (Nicki,

personal communication, October, 2018). With a flock of 5000, compared to the egg farms with 50,000 to hundreds of thousands of birds, Otto's egg production is only tiny (Nicki, personal communication, October, 2018). Be that as it may, Nicki says that he has to be under the jurisdiction of the board so that he can distribute his eggs (personal communication, October, 2018). Although Nicki suggests being part of the New Zealand Egg Producers Board is supposed to be supportive, the implicit politics affects this (personal communication, October, 2018). That is, Nicki identifies that large-scale egg producers have much more clout and the Board have to please the bigger farms with less regard for smaller producers (personal communication, October, 2018). This is indicative of the dominance of the neoliberal global regime of accumulation which features large-scale global production and the consequential subordination of alternatives who experience less regulatory support and less influence as a result of that subordination in the present era.

Nicki expresses feeling the pressure of the competition imperative which is a key feature of the prevailing NMD in agriculture. Nicki points out that what I identify as neoliberal forms of conventional agriculture are able to purchase a large mass of eggs and then sell them for less than what they purchased them for – making their money elsewhere (personal communication, October, 2018). In this way they completely undercut small producers and small distributors who are part of local regimes of accumulation and cannot afford to lower their price. Nicki notes she has no margin to play with like that, and even though her eggs are fresher and higher quality, she can sometimes struggle to tell a customer that they have to pay more (personal communication, October, 2018). She points out that "It's a super competitive market to a point where I can't compete; I literally can't compete. Even the egg farmer cannot compete" (Nicki, personal communication, October, 2018). The difficulties and lack of competitiveness that Nicki identifies is a direct result of the prevailing NMD in agriculture, both regime and regulation aspects of which threaten the success of non-neoliberal alternatives.

The experience that Kath articulates speaks to similar issues. Kath felt that they faced a mixture of support and antagonism from industry and state-imposed regulation (personal communication, October, 2018). Initially they felt that they were stonewalled, that the industry really did not want raw milk cheese (personal communication, October, 2018). They found that one of the reasons it took thirteen revisions to get approval for their Food

Safety Plan was that their correspondence was not being addressed for months at a time. This Kath sympathetically suggests was “probably a combination of the regulators being quite stretched and thin on the ground themselves and under resourced but also a reluctance to want to move towards raw milk cheese being allowed in this country and there were a lot of people who opposed it within the industry, within the regulatory authority I should say, and also I suspect the wider industry” (personal communication, October, 2018). While Kath does sympathise with the regulators knowing that the environment within New Zealand at the time was very risk averse she also points out that this risk averse environment is largely based on the premise of preserving the export market (personal communication, October, 2018), i.e. a central feature of the neoliberal global regime of accumulation that is proactively stimulated by the neoliberal regulatory architecture.

That is, Kath points out that the advice on which the regulators were acting had been

received from big commodity industry and the systems and structures that they needed to have in place to make sure that they protect their export market. There are huge systems that small producers just don’t have. So, there was a disparity between what the regulatory approach wanted and what is actually sensible and doable for a small producer (personal communication, October, 2018).

Upon entering the value-added agricultural practice of cheese-making Kath and her partner were met by an industry within a sector that was structured to serve the interests of the neoliberal global food regime of accumulation. By extension, alternative agricultural practices are not serviced in this sector and furthermore face obstacles that those neoliberal forms of agricultural production participating in the neoliberal global food regime of accumulation with subsequent regulatory clout do not have to endure.

Jim, reporting on his self-proclaimed peasant model of agriculture, articulates a similar experience. He notes a distinct lack of support from any level of council or government, which is intensified by the deliberate opposition Jim feels from local council and the MPI (personal communication, February, 2019). One of the obstacles he was facing at the time of research was meeting the Food Security Act. If he fails to register he will be sued (personal communication, February, 2019). However, he is trying to work with them to find

a different approach because he is a pensioner and simply to apply will cost Jim 5% of his disposable income (personal communication, February, 2019). Eventually the total cost would set Jim back \$1000. What really irks Jim is that under the Food Security Act he is unable to sell his food to a good business, e.g., a restaurant or store, without being registered. However, he can sell his food at his gate or at a farmers' market to the very same people (personal communication, February, 2019). That is, a restaurateur can come up to Jim at his gate or a farmers' market and purchase his food without Jim being registered, however if he supplies it to the restaurant himself he must register his business and pay the fees. Jim considers this "another little tax for the little person... Cutting out the little guy who's providing the really high quality little things that make up a really top grade restaurant. They've just killed it right off" (personal communication, February, 2019). He notes that of course, MPI just want to be sure of the food that is being produced, but their methods are inconsistent and disproportionately affect the small-producer (Jim, personal communication, February, 2019).

Jim provides the example of a friend close by who has eight apple trees and sells 10kg of them a year to a chef from Queenstown. Jim questions why his friend should spend \$1000 to sell 10kg of apples (personal communication, February, 2019). Jim suggests it only serves to disarm small-scale ventures. This demonstrates the lack of regulatory support, and in fact regulatory obstacles, for alternatives that engage in local regimes of accumulation in an era which is defined by a national-transnational regulatory framework that supports the neoliberal global food regime of accumulation.

Joe from Belk Road Farm also highlighted a similar experience. At the initial interview in December 2018 Joe was starting the process for applying for his 'national programme 1' (NP1) food safety/control certificate. Concurrently he was selling not only at the Tauranga Farmers' Market but also in some small local organic stores. His sales at these stores though being of reduced value provided a great safety net ensuring a weekly income against the precarious income from the farmers' market which could be drastically affected by the weather (Joe, personal communication, December, 2018). However, since this time Joe experienced a massive obstacle for small producers engaged in what I would call alternatives to the neoliberal form of conventional agriculture.

Since the initial interview Joe has stopped supplying to any grocery stores and now only sells direct to the end user at the farmers' market. This change was the result of finding out the cost associated with applying for his NP1 which would permit him to supply to stores and cafes. From memory Joe suggested that "the initial certification and checks would cost me \$400 in fees to apply to MPI, around \$650 to pay the fees for the private inspection company to come to verify my washing/packing premises (which is a one off inspection, unless I moved premises), and then \$350 each year to renew the licence (even though there are no forms or inspections required)" (personal communication, June, 2019). For Joe

These costs seemed ludicrous for a business of my scale, and therefore I could not justify going through this process. Technically, this would be required for all producers that don't sell directly to the end user that package/ process/ wash products, including bagging apples, washing carrots, cutting a cabbage in half to sell as halves etc...This seems to be a grey area even among councils, but to me simply wasn't worth it when I feel I can make a living from the farmers' market alone. I felt on principle very frustrated at the idea of paying an annual fee simply to have the right to sell a raw, organically grown vegetable that I have grown (personal communication, June, 2019).

Joe's experience again serves to demonstrate the regulatory obstacles that are faced by alternatives to the neoliberal form of conventional agriculture. The regulatory architecture of the prevailing NMD in agriculture drives a convergence towards neoliberal forms of production and participation in the neoliberal global food regime of accumulation more broadly. Alternatives to the neoliberal form of conventional agriculture that do not engage in the neoliberal global food regime of accumulation are constrained by a regulatory architecture that is not conducive to their success.

The indirect, proactive regulation defining the regulatory architecture of the NMD in agriculture implies that a) capitalists retain the prerogative of control and organisation of labour processes; b) less competitive alternative producers are marginalised and c) the neoliberal global food regime of accumulation is dominant and subordinates alternatives. Alternative local regimes of accumulation confront the neoliberal blockade of a global regime of accumulation, exposure to the logic of global capital, a global competition

imperative and national and transnational regulatory forms completely uncondusive to their success. This results in Jim's experience as he notes that when he began his regenerative agricultural practice there were fifteen small producers and six organic growers locally (personal communication, February, 2019). At the time of research this had decreased to three conventional growers and Jim. In sum, the proactive, indirect regulation of the NMD in agriculture is not conducive to the flourishing of alternative place-based small-scale alternative food regimes of accumulation.

As Jim suggests, "The juggernaut of the chemical industry is just so overwhelmingly large; it's so hugely supported by government and can't be broken because we are so dependent on it in our overseas trade, that we daren't break it; as a nation we daren't break it" (personal communication, February, 2019). Nevertheless, Jim does not shy away from this challenge, he says that "the best way to start this change is right next to where they're doing everything else. So, I've jumped right into the middle of the Philistines" (personal communication, February, 2019).

Jim is identifying that as an alternative agricultural practice his practices, knowledge and way of life is subordinated by the neoliberal global regime of accumulation which prioritises and reproduces global trade and the global exchange of food produced competitively. The dominance of the neoliberal global food regime of accumulation and neoliberal form of transnational regulation puts pressure on the government to maintain national regulation harmonious with this; as a result, as Jim puts it, "we daren't break it" (personal communication, February, 2019). This clearly demonstrates the effect of the regulatory architecture of the NMD in agriculture. The regulation deployed stimulates the prevailing dominance of the neoliberal global regime of accumulation and the consequential pressures and obstacles faced by alternative local regimes of accumulation. To move beyond the NMD in agriculture and consider how these local food regimes of accumulation and informal elements of local regulation could be truly elevated beyond such a position, I now want to synthesise my exploration of organically developing bottom-up alternative initiatives with the top-down conceptual framework of mid-range regulation.

Glocalised regime and regulation cohering in an alternative model of development

The case studies outlined in this thesis demonstrate resistance to the NMD in agriculture and showcase the organic development of alternative practices that represent informal elements of a local alternative regime of accumulation (and informal elements of local regulation). Such developments are central to a specific national template alternative to the currently prevailing NMD in agriculture. That is, these case studies demonstrate the organic bottom-up growth of the informal elements of localised accumulation and regulation central to an alternative model of development in agriculture. They present an alternative to the prevailing global commodity chains of the neoliberal model of development's regime of accumulation in agriculture that have been enabled by the widespread adoption of the neoliberal national regulatory template. We need to conceptualise and implement an alternative model of development that harmonises these neo-peasantry practices with local regulation and situates this within an alternative national regulatory template that mobilises direct and counteractive regulatory forms conducive to environmental and social goals and the flourishing of these alternative practices. As it stands the prevailing NMD in agriculture defines an era that is not conducive to this but rather renders alternative potentially post-neoliberal practices subordinated and constantly under threat by the more competitive neoliberal accumulation regime.

The project to conceptualise an alternative model of development rests on a mid-range position. To reiterate this, capitalism as a mode of production is based on particular social relations of production which define and organise a particular way of life. However, the capitalist mode of production is overdetermined by mid-range regulatory projects. The two mid-range regulatory projects that we have seen thus far have either constrained or stimulated the relations and logic of the capitalist mode of production. That is, the capitalist mode of production and its central social relation of production, the wage labour relation, has defined and organised numerous ways of life in an expanding way since the 16th century. Two distinct periods can be defined by a model of development that overdetermines the capitalist mode of production. The first, the Fordist model of development spanned from the 1940s to the 1970s, this constrained the core logics and relations of capitalism and thus humanised it for several decades. However, since the fall of

the Fordist model of development, the prevailing model of development has been the neoliberal model of development. The neoliberal model of development has stimulated the core logics and relations of capitalism and effectively ensured the absolute dominance of the capitalist mode of production on a worldwide basis, providing a world safe for capital, and precarious for all else. The model of development impacts different sectors in separate yet converging ways. In the agriculture sector, as outlined in previous chapters, building on McMichael (2005; 2009a; 2009b; 2012; 2013), I argue that what he calls the corporate food regime should be understood as the NMD in agriculture, or the unfolding of the neoliberal model of development in the agricultural sector.

The conceptualisation of an alternative model of development implies the intentional and conscious design of the next post-neoliberal era of capitalism. Using the extension developed by Neilson and Stubbs (2016; see also Neilson, 2012; 2020) I have defined the regulatory forms deployed in the neoliberal era as proactive – both pro-capital and pro-market. The implementation of an alternative model of development in contrast must be defined by counteractive regulatory forms. However, in order to encourage food regimes of accumulation in directions which are harmonious with environmental and social limits, this counteractive regulation should be coupled with direct regulation. That is, direct regulation that subordinates capital's prerogative to a collaborative process between regulators (both elected and unelected in national and transnational regulatory bodies), workers and their representatives, community representatives and capital.

Together this collaboration creates a labour process model that is flexible and able to be adopted in place-based ways conducive to the organic development of local culturally appropriate food regimes of accumulation. This labour process model then forms part of the alternative national regulatory framework that is adopted by nation states across the globe. Thus, we directly regulate local food regimes of accumulation with labour processes at their base in order to subordinate the power of capital to a human prerogative. In turn we create an environment conducive to the flourishing of alternative local food regimes of accumulation, the likes of those presented in this thesis. In this way, various ways of life, including traditional and neo-peasantry, that coalesce around small scale, local food regimes

of accumulation, can flourish and become dominant in a regime and regulatory context that is conducive to their success.

The sort of multi-actor collaboration that is needed to create a labour process model emerged in my research. In response to the trials that Kath and her partner experienced as they began their venture, they participated in lobbying the central government of New Zealand. In 2016 Kath and her partner went to parliament. They wrote a submission to parliament concerning the Food Safety Law Reform Bill and talked specifically about artisan cheese in New Zealand. In this they pointed out that the regulatory barriers are much stricter for domestic small producers than for overseas cheese-makers whose cheese New Zealand imported (Kath, personal communication, October, 2018). Kath feels that the Select Committee noticed and were very interested (personal communication, October, 2018). Kath and her partner were not alone in this action. Anna Jamieson and Eketahuna's beloved, and recently passed, artisan cheesemaker Biddy Fraser-Davies each made a separate submission on the same issue. All three submissions addressed the regulatory obstacles for small producers. Not only has this submission and discussion made a difference but Kath considers the election of the Labour Party in 2017 beneficial for this cause (personal communication, October, 2018).

Furthermore, MPI has split into Food Safety and Forestry and Fishing. Involved in these changes was the institution of a unit called Ease of Business that are looking specifically at ease of business for small producers (Kath, personal communication, October, 2018). In what Kath describes as a “huge show of good will” a Colmar Brunton survey was put out to all of their customers concerning what it was like to deal with the MPI; the feedback from which Kath suggests was taken very seriously (personal communication, October, 2018). Along with all the lobbying that was occurring from the cheese-makers and other small businesses Kath believes the MPI were instructed to ensure their new Food Safety Reform Bill did not adversely affect small producers (personal communication, October, 2018). This example offers the foundations for the necessary collaboration to implement direct regulation. However, in the present era, Kath’s perspective here seems reasonably optimistic, and is challenged by the newer and ongoing challenges outlined by Rachel, Jim and Joe in the present era defined by indirect, proactive regulatory forms.

Nevertheless, Kath's example does highlight that there can be collaboration between different actors at different levels to produce national and industry level regulation that is conducive to local regimes of accumulation. Be that as it may, in order to actually challenge the neoliberal form of the global regime of accumulation and the neoliberal architecture of the NMD in agriculture this sort of collaboration needs to embed in an alternative national regulatory template that is adopted around the globe. It is the only way to minimise the impact of neoliberal led global capitalism which centrally invokes a global competition imperative that constantly threatens local regimes of accumulation while nations are exposed to the logic of global capital.

Alternatives show us practical demonstrations of organically developing local food regimes of accumulation that challenge the neoliberal global regime of accumulation. These practices show us a way forward beyond the neoliberal era. Existing alternative local food regimes of accumulation demonstrate what labour processes, and beyond this, what local regimes of accumulation and ways of life should be actively encouraged through direct, counteractive regulation. Problematising the emancipatory potential of alternative local food regimes of accumulation in the present era is to concede that although there is much to be gained from learning from these experiences, these are presently subordinated to the dominant neoliberal global food regime of accumulation.

Thus, the organically developing bottom-up labour processes at the base of local food regimes of accumulation that are explored in this thesis must be coupled with the top-down conceptualisation and implementation of an alternative model of development in order to unleash their post-neoliberal potential. That is, we need to directly regulate labour processes, and more broadly, local regimes of accumulation to subordinate the power of capital, and in doing so allow place-based, flexible adaptations of traditional and new forms of peasant ways of life and alternative post-neoliberal agriculture to flourish under global cooperation that centres on an alternative model of development.

Conclusion

In the prevailing era defined by the NMD in agriculture it is clear that the role of the consumer is imperative to the success of alternative local food regimes of accumulation.

That is, alternative local food regimes of accumulation confronting the more competitive neoliberal global food regime of accumulation which is coupled with a regulatory architecture conducive to its success, must rely on consumers for viability. Of course, the role of the consumer in any regime of accumulation is imperative. Nevertheless, the consumers participating in the neoliberal global food regime of accumulation have very little choice in that matter due to the dominance of this neoliberal accumulation regime. Whether time poor or resource poor, or simply out of socialised convenience the supermarkets provide a readily accessible option.

Thus, although the vision for an alternative to the neoliberal global food regime of accumulation can be found through exploring alternative local food regimes of accumulation, the transformative potential of these is constrained. The prevailing NMD in agriculture constrains these local regimes of accumulation and as such they remain subordinated to the neoliberal global food regime of accumulation. In this era, the NMD in agriculture through both regime and regulation aspects dominates local regimes of accumulation that embody traditional and neo-peasantry and their ways of life.

Furthermore, although consumers have played a pivotal role in the success of the alternative local food regimes of accumulation in both Italy and New Zealand, what emerged from my research is that these consumers are from a very particular demographic. It is only a small niche of consumers who are participating in the active construction of these potentially non-neoliberal alternative regimes of accumulation; and even then doing this consciously to greater or lesser extents. For such alternative local food regimes of accumulation to become accessible to the majority of food consumers it is necessary for these practices to become dominant. This necessitates not just the bottom-up organic development of local food regimes of accumulation but the top down conceptualisation and implementation of an alternative model of development that is conducive to their success.

This is the crux of my argument. It also presents as a challenge to myself, other academics, social activists and interdisciplinary actors at all levels. That is, we must actively and intentionally begin to formulate an alternative model of development that takes lessons from the alternative local food regimes of accumulation that exist, that heed the lived experiences of the subordinated in order to weaponise regulation for the people. Against

the neoliberal threat to the environment and the ways of life of traditional and neo-peasantry worldwide we need to couple the organic development of resistant alternative local regimes of accumulation with local, national and transnational direct, counteractive regulation in an alternative model of development. This is the challenge and the task.

Conclusion

This thesis works to bring in a critically revised version of regulation theory in order to address impasses in food regime theory. This theoretical innovation enables me to identify McMichael's (2005; 2009a; 2009b; 2013) third food regime as the neoliberal model of development in agriculture; and also discuss a possible democratic, counter-hegemonic post-neoliberal model of development in agriculture. More broadly, this conceptual framework distinguishes the present neoliberal era from the previous Fordist era, and in turn, the Fordist era itself from the long history of capitalism. The indirect, counteractive regulation of the 1940s to the 1970s defines the Fordist era and is understood to have weighed capitalism down and humanised it. On the other hand, the largely indirect, proactive regulation deployed from the 1980s to the present defines the neoliberal era which stimulates the core logics and relations of capitalism. That is, this thesis builds on a mid-range perspective which provides the conceptual capacity to consider different eras across the long durée of capitalism. It is in periodising that a thorough picture of the contemporary can be established and critiqued. Furthermore, in periodising the capitalist history we can also begin to consider and actively construct what the next era of capitalism might look like.

Extending on McMichael's (2005; 2009a; 2009b; 2013) position was key to fully conceptualising what makes this present neoliberal era distinct. The key revision in this respect was to bring regulation to the fore. That is, the underlying conceptual framework in this thesis redefines a food regime as the model of development as it applies to the agricultural sector. Thus, the present era of capitalist accumulation in agriculture can be defined by the neoliberal model of development in agriculture. This explicitly links regulation to agriculture and enables consideration of how food regimes of accumulation, that is, food production, distribution, consumption and investment, are affected by regulation. Using this conceptual framework I have demonstrated how the neoliberal model of development in agriculture affects agricultural labour processes, traditional and neo-peasantry, and dominant and resistant forms of agriculture. This recentres regulation and enables an understanding of the development of the neoliberal global food regime of accumulation and facilitating abstract regulatory dialectic at the national and transnational

level that defines global relations in terms of competitive and non-competitive nation states.

In the prevailing neoliberal era, all ways of life confront the concrete neoliberal form of the capitalist mode of production. It is the widespread adoption of the neoliberal national regulatory template around the world, leading to the neoliberal globalisation of regulation, and the consequential elevation of the neoliberal global food regime of accumulation that confronts diverse ways of life around the world. It is in resistance to this that the traditional and neo-peasantry can be positioned. They participate in non-neoliberal forms of agriculture that directly resist the prevailing neoliberal model of development in agriculture.

Great narratives offer developmentalist histories that see naught but the juggernaut of capital and the destruction of all else before the feet of the endless expansion of the capitalist mode of production (Marx, 1976; Braverman, 1974). Many more have critiqued this developmentalism for failing to account for the various continuities with the past that challenge the unilinear and inevitable account of a homogenous process of capitalist development (Carlsson & Manning, 2010; Coulthard, 2014; Federici, 2012). This thesis challenges both positions by positing a mid-range theory that enables us to see how the capitalist mode of production is overdetermined in different eras by models of development that define distinct regime and regulation features. The deployment of models of development have affected the concrete form of the objective logic of capitalism and given rise to distinct periods within our capitalist history. It is by noting the impact of abstract regulation that deeper explanation of the uneven, non-homogenous development of capitalism is permitted.

Presented through empirical work, I consider labour processes in agriculture at the base of food regimes of accumulation, and how these unfold in this era. This work was completed in Italy in 2016 and New Zealand in 2018/2019. I investigated some examples of alternative local food regimes of accumulation in the global North. These demonstrate ways of life that are alternative to the dominant neoliberal global food regime of accumulation. That is, these agricultural practices and ways of life represent the organic bottom-up development of initiatives that resist the neoliberal model of development in agriculture. What emerged from my research is that the prevailing indirect, proactive regulation is enabling, on a

planetary scale, the neoliberal global food regime of accumulation and resulting in the consequential subordination of alternatives that are increasingly threatened by a specifically neoliberal-led assault. All forms of agriculture are exposed to the logic of global capital in this neoliberal era. Thus, alternative local food regimes of accumulation must confront the specific neoliberal global regime of accumulation and proactive national-transnational regulatory architecture that is not conducive to the success of alternative practices.

In order to harness the post-neoliberal potential of alternative local food regimes of accumulation and move towards addressing some of the environmental and social crises that plague the contemporary era, the organic development of bottom-up alternatives must be coupled with a top-down regulatory architecture conducive to their success. The intentional conceptualisation and mobilisation of both direct and counteractive regulation that subordinates capital's prerogative is key to achieving this. That is, direct regulation subordinates capital's long held autonomy to organise the labour process to a democratic collaboration which produces a labour process model that directly regulates the organisation of the labour process. Furthermore, counteractive forms of regulation constrain the core logics and relations of capitalism thus humanising the objective form of the capitalist mode of production. Together, direct and counteractive regulation functions to produce a regulatory architecture conducive to the success of alternative local food regimes of accumulation. Furthermore, the deployment of these two regulatory forms could define the regulatory nexus of a post-neoliberal democratic model of development that could define the next era of capitalism.

Lipietz (1992) suggests that major crises of models of development are the "crossroads of history, when initiatives for change override the dead weight of routine; they are open periods, where the outcome remains uncertain... periods when blueprints or 'projects' are redefined" (p. xi). I argue that we are in such a period now. I am seeking to contribute to the defining of a new blueprint by focussing on bringing regulation to the fore in the conceptualisation of this era and how this is linked to the emergence and nature of food regimes of accumulation due to both direct and indirect regulation. It is necessary to consider food regimes of accumulation in light of the fact that numerous reports have emphasised the need for extensive change to our global food system given the

environmental crises (OECD, 2019; IPCC, 2019) and social crises (FAO, 2019) to which it contributes.

In 1992 Lipietz wrote of his book that “it is a contribution to debates by social movements determined to change the world to save it from the catastrophes which threaten it” (Lipietz, 1992, p. viii). It is with the same goal in mind that I put forward these theoretical innovations and case studies of alternative local food regimes of accumulation; to provide the tools and some examples of alternatives in practice which can be made viable through the mobilisation of specific forms of direct, counteractive regulation. If in 1992, Lipietz was saying that “the alternative is no longer merely desirable; it is becoming ecologically indispensable” (p.146), what might be said in 2021 of the immediate need for an alternative? A time when the IPCC has given humanity a period of twelve years to make drastic change.

This era has been defined by the neoliberal model of development that mobilises indirect, proactive regulation. In this way, capital’s prerogative is exacerbated. Even when direct regulation has been mobilised in this era, in the rare case of Japan, the collaborative effort to design the principles of actual labour processes worked to enhance capital’s prerogative. Namely, albeit regulation being direct, it was also *proactive* regulation in this instance. What I have presented is the need for direct regulation that defines a labour process model that regulates actual production principles and organisation, but which is reached collaboratively with all groups, including those often marginalised. Through such direct regulation that is based on collaboration between regulators, workers and their representatives, community groups and capital, capital’s prerogative could be actively and intentionally subordinated. This form of direct regulation should be coupled with counteractive indirect regulation which constrains capitalism’s core logics and relations and can permit of different priorities. The mobilisation of direct regulation that intentionally subordinates capital’s prerogative alongside counteractive regulation which constrains the core of capitalism provides the chance to transform the world.

My empirical research is limited by the number of case studies I have investigated. Further investigation around the world would be beneficial in order to continue to examine the relationship between regulation and labour processes in agriculture at the base of food

regimes of accumulation, and the various ways of life that coalesce around these. It would be important to investigate how more post-neoliberal alternatives are marginalised, particularly the experience in the global South, due to the deployment of particular regulatory forms and the threat of competition in the present era. Furthermore, investigations should expand to include case studies that participate in the neoliberal global food regime of accumulation and benefit from the prevailing national-transnational regulatory architecture of the neoliberal model of development in agriculture.

Nevertheless, despite this limitation, this thesis provides the capacity to conceptualise this era of capitalism and how this unfolds in relation to agriculture. I have presented some elements of labour processes in agriculture that are at the base of alternative local food regimes of accumulation that need to be facilitated by an alternative post-neoliberal regulatory architecture. I also provide the tools to begin thinking about how the next era of capitalism might be actively constructed.

This thesis works to build a mid-range understanding to define and investigate this era of neoliberal led global capitalism and consider the potential next post-neoliberal era. Pivoting on regulation I have linked this to the actual process of work in agriculture, to the emergence of new forms of peasantry and the persistence of traditional peasantry and to the dominance of neoliberal forms of conventional agriculture and the subordination of alternatives to this. However, this is only the beginnings of this theorisation, far more empirical and theoretical work is needed to strengthen this argument beyond what is presented here. Furthermore, in order for this argument to facilitate actual change and provide the Left with a practical project around which to unite, much more collaborative work is needed. It is unlikely that this thesis is going to revolutionise the field, nevertheless, it is my call to arms. By revisiting and revising key theory that presents powerful, but politically neutralised and therefore impotent concepts, not only have the theories been made contemporarily applicable, but in turn have been imbued with a sense of agency. This agency can then be consciously applied in a politically active way to challenge the neoliberal project and the prevailing indirect, proactive regulation which is exacerbating the core logics and relations of capitalism at the expense of people and the planet. In turn, these theories can then be applied to consider the next era of capitalism, that is premised on the construction, both theoretical and practical, of an alternative model of development.

Future research needs to consider the full conceptualisation of an alternative model of development that is applied to the agricultural sector that prioritises the direct regulation of local food regimes of accumulation via a national-transnational regulatory nexus that is defined by counteractive regulatory forms. This regulatory architecture of an alternative model of development in agriculture must be flexible and able to be adopted in place-based variations around the world. Nevertheless, this flexibility must be constrained by universal features to ensure that environmental and social prerogatives are prioritised and harmonised with food regimes of accumulation that implicitly or explicitly maintain these goals. The entire aim of an alternative model of development should be to enable variable, diverse and culturally appropriate ways of life to flourish. By contrast the neoliberal form of a global food regime of accumulation that together with the neoliberal regulatory architecture defines the prevailing neoliberal model of development in agriculture destroys diverse ways of life by rendering alternative food regimes of accumulation unviable. We must directly regulate labour processes through the construction of a labour process model that forms part of the national regulatory template of an alternative model of development that counteractively weighs down capitalism and directly subordinates capital's prerogative whilst providing the space for culturally appropriate place-based adoptions of the template. As Friedmann and McMichael (1989) put it "relocalization combined with global co-ordination may be the protective movement of our times" (p. 114).

In order for practical application to occur, more research is needed which crucially must leave space for postcolonial and indigenous perspectives. A collaborative effort to encourage the dispersion of a politically charged praxis is necessary. A political praxis will form part of future research to come, and I hope part of future research of other varied scholars who take up the challenge to actively create a better world. This is a project that can only be achieved in a multi-disciplinary collaborative process that involves groups from every level representing a variety of interests. The conceptualisation of an alternative model of development is a massive project far beyond the scope of a PhD thesis. Nevertheless, this is my call to arms. Now the Left needs to turn to the strategy; the active conceptualisation and implementation of an alternative model of development.

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Appendices

Appendix A – Information sheet for in-depth interviews 2016

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:

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Dr Fiona McCormack
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Appendix B – Consent form for in-depth interviews 2016

UNIVERSITY OF WAIKATO
FACULTY OF ARTS & SOCIAL SCIENCES

PARTICIPANT CONSENT FORM

Name of person interviewed:

I have received a copy of the Information Sheet describing the research project. Any questions that I have, relating to the research, have been answered to my satisfaction. I understand that I can ask further questions about the research at any time during my participation, and that I can withdraw my participation at any time up to four weeks after the interview.

During the interview, I understand that I do not have to answer questions unless I am happy to talk about the topic. I can stop the interview at any time, and I can ask to have the recording device turned off at any time.

When I sign this consent form, I will retain ownership of my interview, but I give consent for the researcher to use the interview for the purposes of the research outlined in the Information Sheet.

I will receive a copy of the transcript of my interview to check

I have discussed the representation of my identity and the identity of my institution with the researcher and I would like

“I consent to being interviewed about my involvement in a local food practice for this research on the above conditions”

“I agree to abide by the above conditions”

Participant :	_____	Researcher :	Darelle Howard
Signature :	_____	Signature :	_____
Date :	_____	Date :	_____
ContactDetails :	_____	ContactDetails :	_____

Appendix C Information sheet for those involved in administrative roles in Farmers' Markets NZ 2018

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

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

Research Topic:

"The indirect regulation of agricultural systems and their emergence in the era of neoliberal led global capitalism"

Researcher: Darelle Howard

Supervisors: Dr David Neilson & Associate Professor Bruce Curtis

INFORMATION SHEET

What is this research about?

I am doing this research as part of my study for my PhD Sociology Thesis at the University of Waikato, New Zealand.

My thesis will investigate the impact of regulation on our everyday experiences with food. I suspect there are problems with existing regulations, but to improve these we need a better understanding of the different ways people produce and purchase food.

What participation in this research project involves

I would like to interview you to learn about your involvement with Farmers' Markets New Zealand. I hope to gain an understanding of how a farmers' market operates, any problems that prevent effective operation, and any values that are associated with the market.

I have some questions to ask you, but my hope is that we can treat this interview as a conversation. I expect the interview to last approximately 40-45 minutes. With your permission the interview will be audio-recorded, transcribed, and I may take handwritten notes during the interview. The audio recording, the transcript, and any other data will be kept by securely stored by me, and will only be available to my supervisors and me.

The information from the interview will be used in my PhD which will be made up of published articles, available in journals. My PhD will be freely available online and it will be available in

hardcopy in the University of Waikato's library. The information from the interview may be used in further publications beyond my PhD 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 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, because of the site-specific nature of my research, so I cannot guarantee confidentiality.

If you wish, I will give you a copy of the transcript to check and change in any way you want. 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 stop 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."

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Associate Professor Bruce Curtis
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Appendix D Information sheet for producers involved in the Tauranga Farmers' Market

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

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

Research Topic:

"The indirect regulation of agricultural systems and their emergence in the era of neoliberal led global capitalism"

Researcher: Darelle Howard

Supervisors: Dr David Neilson & Associate Professor Bruce Curtis

INFORMATION SHEET

What is this research about?

I am doing this research as part of my study for my PhD Sociology Thesis at the University of Waikato, New Zealand.

My thesis will investigate the impact of regulation on our everyday experiences with food. I suspect there are problems with existing regulations, but to improve these we need a better understanding of the different ways people produce and purchase food.

What participation in this research project involves

I would like to interview you to hear your story about your involvement with local food production. My aim is to understand the realities of your food practices.

I have some questions to ask you, but my hope is that we can treat this interview as a conversation. I expect the interview to last approximately 40-45 minutes. With your permission the interview will be audio-recorded, transcribed, and I may take handwritten notes during the interview. The audio recording, the transcript, and any other data will be kept by securely stored by me, and will only be available to my supervisors and me.

The information from the interview will be used in my PhD which will be made up of published articles, available in journals. My PhD will be freely available online and it will be available in hardcopy in the University of Waikato's library. The information from the interview may be used in further publications beyond my PhD 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 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, because of the site-specific nature of my research, so I cannot guarantee confidentiality.

If you wish, I will give you a copy of the transcript to check and change in any way you want. 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 stop 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:

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Associate Professor Bruce Curtis
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Appendix E Information sheet for consumers frequenting the Tauranga Farmers' Market 2018.

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

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

Research Topic:

"The indirect regulation of agricultural systems and their emergence in the era of neoliberal led global capitalism"

Researcher: Darelle Howard

Supervisors: Dr David Neilson & Associate Professor Bruce Curtis

INFORMATION SHEET

What is this research about?

I am doing this research as part of my study for my PhD Sociology Thesis at the University of Waikato, New Zealand.

My thesis will investigate the impact of regulation on our everyday experiences with food. I suspect there are problems with existing regulations, but to improve these we need a better understanding of the different ways people purchase food.

What participation in this research project involves

I would like to interview you to learn about your reasons for buying food at the market.

I have some questions to ask you, but my hope is that we can treat this interview as a conversation. I expect the conversation to last approximately 10 minutes. With your permission the interview will be audio-recorded and transcribed. The audio recording, the transcript, and any other data will be kept by securely stored by me, and will only be available to my supervisors and me.

The information from the interview will be used in my PhD which will be made up of published articles, available in journals. My PhD will be freely available online and it will be available in hardcopy in the University of Waikato's library. The information from the interview may be used in further publications beyond my PhD 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 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, because of the site-specific nature of my research, so I cannot guarantee confidentiality.

If you wish, I will give you a copy of the transcript to check and change in any way you want. 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 stop 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

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Appendix F Information sheet for participant observation 2018

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

Participant observation for PhD "Sociology Thesis"

Research Topic:
"The indirect regulation of agricultural systems and their emergence in the era of neoliberal led global capitalism"

Researcher: Darelle Howard
Supervisors: Dr David Neilson & Associate Professor Bruce Curtis

INFORMATION SHEET (Participant observation)

What is this research about?

I am doing this research as part of my study for my PhD Sociology Thesis at the University of Waikato, New Zealand.

My thesis will investigate the impact of regulation on our everyday experiences with food. I suspect there are problems with existing regulations, but to improve these we need a better understanding of the different ways people produce and purchase food.

What participation in this research project involves

I would like to visit the Tauranga Farmers' Market once a month between winter 2018 and up until the end of the summer 2018/2019, this will be a total of nine visits. I will be using a field work diary, in which I will take notes, to be written up in detail after I leave. It would be impractical and intrusive, to approach every person that enters the market and talk them through a consent form and an information sheet, thus I am hoping you will give me consent to take notes on the following things:

- Demographic of customers
- Demographic of producers
- Type of produce sold
- Prices of produce
- Relationships between producers and customers
- Market set-up and structure
- Impressions of the environment

I will try and ensure my presence does not inconvenience anyone by remaining at a distance from market exchanges. In order to behave unobtrusively I will carry myself in the manner of any other customer at the market and I will only engage in casual

conversation when I am approached.

I will observe the activities in an open manner in the sense that I intend to be transparent about my note taking and, when it's appropriate, engage with the participants about the content of my notes.

The information from the participant observation will be used in my PhD which will be made up of published articles, available in journals. My PhD will be freely available online and it will be available in hardcopy in the University of Waikato's library. The information from the interview may be used in further publications beyond my PhD 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, and that of the Tauranga Farmers' Market to be represented in the research. You can choose to be identified by your name and/or the market to be identified, or you can choose to keep your identity and that of the market confidential. If you want to keep your identity confidential I will attempt to do so by replacing your name with a pseudonym. If you want the market to remain unidentified, I will use a general term, e.g. "a NZ farmers market". Nevertheless, there is a risk that you may be identified, even with the use of pseudonyms, because of the site-specific nature of my research, so I cannot guarantee confidentiality for you or the market.

My hand-written field notes 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 agree to permit this participant observation, you have the following rights:

- a) To ask me to leave at any time
- b) To ask any further questions about the participant observation or research project that occur to you, either during the time I spend at the market or at any other time by contacting me (see details below).

"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

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Supervisors

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Appendix G Consent form for interviews for those involved with the Tauranga Farmers' Market in a consumer, producer or administrator capacity

UNIVERSITY OF WAIKATO
FACULTY OF ARTS & SOCIAL SCIENCES

PARTICIPANT CONSENT FORM

Name of person interviewed (if provided):

I have received a copy of the Information Sheet describing the research project. Any questions that I have, relating to the research, have been answered to my satisfaction. I understand that I can ask further questions about the research at any time during my participation, and that I can withdraw my participation at any time up to four weeks after the interview.

During the interview, I understand that I do not have to answer questions unless I am happy to talk about the topic. I can stop the interview at any time, and I can ask to have the recording device turned off at any time.

When I sign this consent form, I will retain ownership of my interview, but I give consent for the researcher to use the interview for the purposes of the research outlined in the Information Sheet.

I will receive a copy of the transcript of my interview to check and to change in any way I want.

I have discussed the representation of my identity with the researcher and I would like to

☐ Use my first name only

☐ Use a pseudonym

"I consent to being interviewed about my involvement in the Tauranga Farmers' Market for this research on the above conditions"

Participant : _____

Signature : _____

Date : _____

Contact: _____

"I agree to abide by the above conditions"

Researcher : _____

Signature : _____

Date : _____

Contact: darelle.howard@hotmail.com

+64 2102556134

Appendix H Consent form for participant observation 2018

UNIVERSITY OF WAIKATO FACULTY OF ARTS & SOCIAL SCIENCES

PARTICIPANT CONSENT FORM

Name of market manager:

I have received a copy of the Information Sheet describing the research project and the conditions under which the participant observation will be conducted. Any questions that I have, relating to the research, have been answered to my satisfaction. I understand that I can ask further questions about the research at any time during my participation, and that I can withdraw my participation at any time up to four weeks after the participant observation.

During the participant observation I understand that I can ask the researcher to leave at any time.

When I sign this consent form, I will retain ownership of field notes taken by the researcher that pertain to the details of the market and its frequenters, but I give consent for the researcher to use these notes for the purposes of the research outlined in the Information Sheet.

I have discussed the representation of my identity and the identity of Tauranga Farmers' Market with the researcher and I would like to

☐ Use my first name only

☐ Use a pseudonym

☐ Identify the market as 'Tauranga Farmers' Market'

☐ Use the general phrase 'a farmers' market'

“I consent to the researcher conducting participant observation for this research on the above conditions”

Participant : _____

Signature : _____

Date : _____

Contact: _____

“I agree to abide by the above conditions”

Researcher :

Signature : _____

Date : _____

Contact: _____

darelle.howard@hotmail.com

+64 2102556134

Appendix I Information sheet for case study two (Jim)

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

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

Research Topic:
"The indirect regulation of agricultural systems and their emergence in the era of neoliberal led global capitalism"

Researcher: Darelle Howard
Supervisors: Dr David Neilson & Associate Professor Bruce Curtis

INFORMATION SHEET

What is this research about?

I am doing this research as part of my study for my PhD Sociology Thesis at the University of Waikato, New Zealand.

My thesis will investigate the impact of regulation on our everyday experiences with food. I suspect there are problems with existing regulations, but to improve these we need a better understanding of the different ways people produce and purchase food.

What participation in this research project involves

I would like to interview you to learn about your "peasant model of agriculture" and any values that motivate you.

I have some questions to ask you, but my hope is that we can treat this interview as a conversation. I expect the interview to last approximately 40-45 minutes. With your permission the interview will be audio-recorded, transcribed, and I may take handwritten notes during the interview. The audio recording, the transcript, and any other data will be kept by securely stored by me, and will only be available to my supervisors and me.

The information from the interview will be used in my PhD which will be made up of published articles, available in journals. My PhD will be freely available online and it will be available in hardcopy in the University of Waikato's library. The information from the

interview may be used in further publications beyond my PhD 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 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, because of the site-specific nature of my research, so I cannot guarantee confidentiality.

If you wish, I will give you a copy of the transcript to check and change in any way you want. 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 stop 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
darelle.howard@hotmail.com
Ph: 021 02556134

Supervisors
Dr David Neilson
poli1215@waikato.ac.nz

Associate Professor Bruce Curtis
b.curtis@auckland.ac.nz

Appendix J Consent form for case study two (Jim)

UNIVERSITY OF WAIKATO
FACULTY OF ARTS & SOCIAL SCIENCES

PARTICIPANT CONSENT FORM

Name of person interviewed:

I have received a copy of the Information Sheet describing the research project. Any questions that I have, relating to the research, have been answered to my satisfaction. I understand that I can ask further questions about the research at any time during my participation, and that I can withdraw my participation at any time up to four weeks after the interview.

During the interview, I understand that I do not have to answer questions unless I am happy to talk about the topic. I can stop the interview at any time, and I can ask to have the recording device turned off at any time.

When I sign this consent form, I will retain ownership of my interview, but I give consent for the researcher to use the interview for the purposes of the research outlined in the Information Sheet.

I will receive a copy of the transcript of my interview to check and to change in any way I want.

I have discussed the representation of my identity with the researcher and I would like to

☐ Use my first name only

☐ Use a pseudonym

"I consent to being interviewed about my peasant model of agriculture for this research on the above conditions"

Participant : _____

Signature : _____

Date : _____

Contact: _____

"I agree to abide by the above conditions"

Researcher :

Signature : _____

Date : _____

Contact: _____

darelle.howard@hotmail.com

+64 2102556134