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Animals in Capital: A Marxist Perspective on the Use of Other Animals in Capitalist Commodity Production

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Statement of Originality

This work contains no material which has been accepted for the award of another degree or diploma in any university, and to the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made in the text of the thesis.

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Note on Terminology

When we talk about the relationship between humans and other animals, it is important not to lose sight of the fact that humans are animals too. One of the ways in which we justify treating other animals in the ways that we do, is by creating artificial boundaries between 'us and them' (Nibert, 2002). The words we use for example can influence our views of the world and thus it is important to use language that does not assist further widening of the gap between humans and other animals (Nibert, 2002). In this research I have attempted to use words and phrases that do not reflect a hierarchy between humans and other animals. For example, I largely reframe from using the terms people, nonhuman and animals, choosing instead to use humans and other animals. The use of this unfamiliar language may serve to highlight the duality present in common thinking about humans and other animals in our every day lives. Although the phrase 'humans and other animals' is an oversimplification and does not properly capture the diversity within the category of other animals, I have not yet found a more respectful way to proceed.

Introduction

Within most cultural traditions there is a long history of treating other animals as though they are little more than resources at human disposal. In prehistoric times interactions between humans and other animals consisted of predator-prey relationships, but with the Neolithic Revolution and the gradual domestication of some other animals, they became more integral and integrated into human society (Noske, 1997:7). Humans began to use other animals in sport and entertainment, religious rituals, warfare, as pets and companions, for experimentation, fashion, but above all, humans have used other animals' body parts and by-products for food (Nibert, 2002, Sorenson, 2011:219). Contemporary capitalism has not only continued this tradition, but also greatly increased the scale and intensity of suffering imposed on other animals (Nibert, 2002).

Over the last 60 years, predominantly in western countries, methods of animal agriculture have transformed from being small scale and relatively slow paced farms on acres of land into large-scale mass-producing factories (Singer, 2002:97). Farming has evolved into factory farming; a highly competitive and concentrated industry, where standardised assembly line methods have almost universally been adopted to produce the highest outputs at the lowest costs (Singer, 2002:97). In 2003, 1 million calves, 6 million pigs, 8 million cows, 13 million sheep, and 17 million lambs were slaughtered in Australia alone for meat consumption (O'Sullivan, 2011:69). Other animals, particularly cows, pigs and chickens, have been removed from outdoor pastures and permanently raised indoors in confined and overcrowded spaces, where food and water is controlled, where light is adjusted according to what is productively advantageous, their bodies are modified, they are systematically fed antibiotics to prevent disease, and their growth and reproduction are manipulated to increase efficiency (Singer, 2002:99). In her pioneering exposé on intensive factory farming methods in Britain, Harrison (1964:37) concludes that 'cruelty is acknowledged only where profitability ceases'. Around the world, 60 billion other animals (mostly mammals and poultry) are raised and killed for food annually and two out of three of these other animals are now raised in factory farm conditions (CWF, 2009:5). Much like factory farms, slaughterhouses have adopted mass production 'disassembly' line

methods for killing in order to process the bodies of animals in the most cost efficient ways (Singer, 2002:151). In analysing these phenomena, this thesis will examine how the capitalist mode of commodity production has shaped the way we use and treat other animals in the production of food.

The industrialisation of food production has coincided with a rapid rise in the global consumption of meat, dairy, and eggs (CWF, 2009). Worldwide meat production has tripled over the last four decades and increased 20% in the last 10 years alone (Stoll-Kleenmann and O'Riordan, 2015:35). But the industrialisation of production and growth in meat consumption has occurred at different rates in different regions around the world (HBF and FOEE, 2014). Humans in developed countries where incomes are relatively high consume on average 80kg of meat each per year, compared to those in the developing world who consume 32kg of meat per year (Stoll-Kleenmann and O'Riordan, 2015). However, standard industrialised food production methods are spreading to developing countries, particularly to those with rising middle classes, such as China and India (HBF and FOEE, 2014:10). Booming economies in Asia and elsewhere are predicted to see an 80% growth in the meat sector by 2022 (HBF and FOEE, 2014:10). The same technologies and practices that dominate factory farms and slaughterhouses in the developed world are being adopted in developing countries to accommodate the growing demand for meat (HBF and FOEE, 2014:10). Consequently, by 2050 it is predicted that meat production will have nearly doubled worldwide, for a projected total of more than 465 million tons consumed annually (CWF, 2009:24). This trend in consumption and these methods of production have severe consequences for the environment, the climate and the welfare of humans and other animals.

Factory farming and assembly line slaughter methods produce 'cheap' meat, dairy and eggs, but are creating serious problems of prolonged and persistent environmental and social degradation (CWF, 2009, HBF and FOEE, 2014). Factory farming is a carbon intensive process and is currently responsible for 18% of human induced greenhouse gas emissions; it also contributes to water and soil pollution, biodiversity loss and deforestation (CWF, 2009, Gunderson, 2011:260). Additionally, the intensive production of meat is one of the most resource inefficient methods of producing food (CWF, 2009). On average, to produce 1kg of animal protein using

factory farming methods requires 20kg of feed for beef, 7.3kg of feed for pigs and 4.5kg of feed for chickens (CWF, 2009:32). The production of 1kg of beef, as a global average, requires around 15,500 litres of water, which is nearly 12 times the quantity needed to produce 1kg of wheat (CWF, 2009:34). In a world with millions of humans dying from starvation and lack of access to clean drinking water, this method of food production is exacerbating issues of food and water scarcity (CWF, 2009:64). Furthermore, in this system of production, other animals are treated as objective factors of production rather than as sentient beings with physical and psychological needs (Gunderson, 2011). According to the Compassion in World Farming report (2009:24) 'good animal welfare implies that the animal is protected from suffering, hunger, thirst, weather, injury, disease, pain, distress and fear and also that the animal is free from the frustration caused by being unable to carry out the natural behaviour of its species'. Maximising productivity and producing a high quality product does not necessitate that these conditions are met (CWF, 2009). Therefore, intensive farming methods also have severe implications for animal welfare (CHBF and FOEE, 2014). With the predicted rise in global meat consumption these consequences are only deepening (CWF, 2009). Thus, questioning the production and consumption of other animals is an important contemporary issue, which will be followed up in this thesis.

Questions about our relationships with other animals are among the oldest of philosophical debates and have risen and fallen in popularity throughout history (Cochrane, 2010, Sorenson, 2011:219). The animal protection movement is made up of a diverse range of actors including individuals, academics and organisations, who campaign for different objectives and outcomes. Mainstream strategies usually draw on liberal rights theories, aiming to change legislation and improve consumer awareness (Benton, 1993). However, this movement is relatively small. Most humans have been deeply immersed, all their lives, in a 'culture that largely devalues other animals and legitimates humans' self-interested use of their lives and bodies' (Nibert, 2002:15). Consequently, challenges to such deeply ingrained ideas and practices are difficult for many to accept. Although the animal protection movement does valuable work in attempting to improve conditions for other animals, the members of the movement rarely consider the role of capitalism in contributing to the status and treatment of other animals in human society.

The aim of this research is to examine the usefulness of a Marxist framework for understanding how the nature of contemporary capitalist commodity production shapes the use and treat other animals in food production. In taking on this task, this thesis begins by examining mainstream debates surrounding the use of other animals in society. It explores the debate between animal rights and animal welfare, highlighting some of the weaknesses in these existing approaches to animal protection. Following on from this, chapter 1 also introduces the potential for using a Marxist conceptual framework for understanding the experiences of other animals used in food industries. Chapter 2 lays out some of the fundamentals of Marx's analysis and operationalises Marxist concepts using examples from contemporary factory farming and slaughterhouse practises and methods. The 2nd chapter thus aims to show how capitalist imperatives shape the conditions and treatment of other animals.

Chapters 3, 4 and 5 are dedicated to exploring the appropriateness of Marxist concepts for analysing the treatment of other animals. Marx's work has been criticised by scholars of the movement for being speciesist and anthropocentric. This thesis will investigate whether Marxism can still be useful for understanding the experiences of other animals. Chapter 3 addresses Marx's distinctions between humans and other animals and whether other animals can be incorporated into an analysis of alienation. Chapter 4 examines the appropriateness of Marx's concepts of labour, labour power, class, resistance, exploitation and surplus value, with reference to modern animal agricultural practices. Lastly, in chapter 5 the concept of commodity fetishism is used to discuss the importance of visibility to the way we use and treat other animals. The latter half of this thesis is dedicated to challenging and discussing the traditional definitions and reach of these concepts to ascertain whether they can be used to consider the experiences of other animals. In short, this thesis critically explores the question: How does capitalism shape our relationship with other animals used in food production and how appropriate is Marxism for understanding this relationship?

Chapter 1: The Animal Protection Movement and its Limits

Other animals occupy a paradoxical status in human society. On one hand, the animals we love are given personal names and are incorporated into our families, while others are routinely raised to be killed and eaten. Most humans are enculturated in societies that encourage the everyday use of other animals' lives and bodies (Nibert, 2002). The scale at which humans use other animals, whether in fashion, entertainment, for testing or food production, suggests that societies' response to the question of whether other animals should be raised and killed for human purposes is a resounding *yes*. However, most humans still profess to care about other animals and say they do not want to see them harmed (Loughnan et al, 2014). From this we can infer that other animals are regarded by the majority of humans as at least partial members of the moral community deserving of some legal protection. That is, they believe it is morally wrong to inflict 'unnecessary' harm on other animals (Francione and Garner, 2010).

Challenges to the inconsistencies in the relationship between humans and other animals have risen and fallen throughout history, however, they have never commanded the lasting attention of the majority (Francione and Garner, 2010). The work of individuals and groups concerned with the protection of other animals can roughly be divided into three areas, which are all necessarily interlinked: philosophical debate regarding the status of animals, legislative work, and direct action (DeMello, 2012). Mainstream literature concerning the moral status of other animals has largely been championed by moral philosophers (Taylor, 2009). Their intellectual frameworks have encouraged and informed the sentiment of activism and subsequent legislative change (Taylor, 2009:8).

The Animal Protection Movement: Roots, Developments and Debates

Philosophy concerned for the suffering of other animals can be traced back to early Hindu thought and Buddhist values of universal compassion and has evolved and resurfaced at different times and places throughout world history (Taylor, 2009). Early 18th century England marked a significant period for the consideration of the

moral status of other animals (Guither, 1998). During this period social reformers, writers and philosophers started to discuss the capacity of other animals and question their treatment in human society (Guither, 1998). This debate focused on the capacities of other animals, to feel pain and to suffer, use language, to be self-aware, and be able to reason, these capacities were used to defend the moral status of other animals (Taylor, 2009:8). Bentham an influential utilitarian figure of the eighteenth century crafted one of the first major challenges to the idea that other animals were unworthy of moral consideration. He famously claimed 'the question [for other animals] is not Can they reason? or Can they talk? but Can they suffer?' (Bentham, 1823:144). These debates prompted legislative changes and the creation of institutions, including, the first society for the protection of cruelty to animals, founded in London in 1824, which later became the Royal Society for the Prevention of Cruelty to Animals (Guither, 1998:2).

The fundamental questions and ideas raised in 18th century England informed the development of the animal welfare movement, which gained momentum in the 1800s. During this time the movement was particularly concerned with opposing vivisection and the protection of large working animals (DeMello, 2012:406). In the 20th century, not only was there greater scientific acknowledgment for the behavioural, cognitive and emotional capacities of different species of animal, but the scale and breadth in which we use other animals, in particular the mass slaughter of billions of other animals, began to draw growing attention from human members of society (Sorenson, 2011:219). Consequently, the issues, strategies, and arguments coming out of groups concerned with the treatment of other animals have diversified greatly. The current international animal protection movement contains a plethora of different approaches, with much debate about how to properly distinguish between advocacy groups. Animal welfare, animal rights, animal liberation, and animal abolition are all common terms used in the discourse of the wider animal protection movement, however, none of these categories are clearly defined and these groups and individuals do not hold a homogenous position on how to treat other animals in human society.

This thesis is not dedicated to the exploration of this complex movement, however, for the purposes of justifying the approach it takes to analysing other animals, a brief

and general description of the movement will follow. Broadly speaking, advocates involved in the wider movement are concerned with the protection of other animals. Furthermore, there are two main camps within this movement. Francione and Garner (2010) argue that the practical strategy of animal advocates must necessarily be informed by theory and the political, legal and social campaigns will be determined by whether this theory seeks ultimately to abolish exploitation via establishing rights or regulating it to protect welfare. Thus, animal welfarists tend to advocate for improving the conditions for other animals used in industry (Francione and Garner, 2010). Those that advocate for the abolition of humans using other animals tend to be in pursuit of animal rights (Francione and Garner, 2010). This debate between rights and welfare is at the centre of modern animal advocacy (DeMello, 2012).

While animal welfare has its roots in the utilitarian thinking of the 18th century, the central ideas remain and have been reiterated in contemporary animal welfare theory, particularly in the work of Singer (Francione and Garner, 2010:7). This discourse starts from the premise of sentience; which refers to a being's capacity to be perpetually aware (Francione and Garner, 2010). It is the characteristic of sentience that insinuates the presence of interests and thus, justifies the consideration of those interests (Francione and Garner, 2010:15). For example, other animals have the capacity to be aware of their own suffering, therefore, they have an interest not to suffer (Singer, 2002:7). Singer (2002) argues that impartiality requires equal consideration of other animals interests when assessing the consequences of actions, that is, consideration for other animals entails ignoring the species of a being as a determinant of moral significance. However, because Singer (2002) believes that other animals do not know what it is they lose when we kill them, he concludes that they do not have any interest in continuing to live and therefore death does no harm to them. This philosophy tacitly espouses the idea that other animals have lesser moral value than humans. Thus, welfare advocates that follow this logic care about preventing other animals from suffering but implicitly support the use and killing of other animals for human purposes (Taylor, 2009).

Although this debate is mainly taken up in the pages of academic literature, Singer's book *Animal Liberation* was significant in inspiring a more cohesive social and political animal welfare movement, particularly in Western countries (Taylor,

2009:8). Since the 1970s, particularly in the West, there has been an explosion of interest in the animal question (Taylor, 2009). Hundreds of books and articles have been devoted to the moral status of other animals and more organisations dedicated to preventing animal cruelty have been established then ever before in history (Sanbonmatsu, 2011:29, Taylor, 2009:7). Organisations including, People for the Ethical Treatment of Animals 1980, Animals Australia 1980, Animal Legal Defense Fund 1979, World Society for the Protection of Animals 1981 etc. (Guither, 1998). Generally speaking, these groups campaign, protest, and lobby governments to improve the conditions of other animals used in different industries.

The organisations and individuals that make up this movement have both social and political intentions. They engage in a range of methods from letter writing and petitions to demonstrate public opinion, while also promoting lectures, documentaries and television programs to draw public attention to the treatment of other animals and push for legislative reforms (Guither, 1998:5-6). The movement has been considerable in encouraging uncertainty towards the treatment of other animals, amongst human members of society (Higgins, 2011:173). Throughout the world there has also been important legislation enacted to improve conditions for other animals. For example, in 2002 Germany added an animal protection clause to its constitution and in 2008 the Spanish Parliament passed an unprecedented law granting protection to other primates (Sanbonmatsu, 2011:29). Francione (2010) argues that regulation may gradually improve the treatment of other animals, but it does not consider that other animals have a right not to be used as resources by humans. This logic is central to the philosophy of animal rights.

The animal rights movement emerged in the late 20th century out of existing animal welfare efforts, however, it involves some important differences (DeMello, 2012:398). The animal rights position rejects two welfarists notions, firstly, that the differences between humans and other animals mean other animals have no interest in continuing to exist and secondly, that the sentient experiences of other animals have lesser moral value than those of humans (Francione and Garner, 2010:14). There are significant differences in the abilities of members within the human species, for example, some humans have capacity for sight and others cannot see another example is that some humans have the capacity to move their limbs and for

various reasons other humans do not. The point here is that we do not treat the lives of those humans who have greater capacities with more moral significance; therefore, it does not logically follow that the differences other animals possess should stipulate moral inferiority either (Regan, 1983). Thus, prejudice in favour of members of our own species and against those members of other species is a reflection of internalised bias Singer (2002:9) calls speciesism. Speciesism, like racism and sexism, deprives beings with interests of equal consideration of their interests based on irrelevant criteria i.e. their species (Francione and Garner, 2010:83, Singer, 2002). Francione (2010:22) argues that if other animals matter morally then we have to apply the principle of equal consideration and should not discriminate based on species. Furthermore, as long as we treat other animals as property they cannot be members of our moral community and we cannot extend equal moral consideration to them (Francione and Garner, 2010:22).

What follows from this philosophical conclusion necessitates a different aim for the rights movement than that of the welfare movement, although the movement still strives from legislative change and public awareness, its priority is to challenge the legal status of other animals. Regan (1983) argues that other animals have a right not to be used as resources as they have inherent value. This position is in opposition to the animal welfare philosophy that comes out of Singer's work. By this Regan means that by virtue of being subjects of life, other animals have value independent of the way they are used. The rights position therefore, advocates that other animals have inherent value and the right not to be used by humans (Regan, 1983). Francione and Garner (2010:15) argue that animal rights 'applies the notion of equal consideration to animal use and not merely to animal treatment and maintains that we cannot justify using other animals as human resources, irrespective of whether we treat animals 'humanely' in the process'. Consequently, the aim of this approach is to change the property status of other animals (Francione, 2010).

The rights position provides definitive normative guidance for change both for society and the individual. The movement promotes ethical veganism, which involves rejecting the commodity status of other animals through abolishing their use on an individual level, and challenges legislation concerned with the status of other animals. For example, The Nonhuman Rights Project is an American organisation

working through the common law to achieve legal rights for members of species other then our own; they aim to change the legal status of other animals from 'things' to 'persons' (NhRP, 2015). Among many cases the Nonhuman Rights Project has recently won a court case were for the first time in world history a judge has recognised two chimpanzees as legal persons (NhRP, 2015).

The Limits of Animal Rights and Animal Welfare

In recent decades, the animal protection movement has raised important issues surrounding the conflicts inherent in living so connected to and dependent on other animals. In doing so it has also increasingly engaged the attention and emotions of the wider public (Cochrane, 2010). However, despite the breadth of the views represented in the existing movement, there are limits to an exclusively liberal approach. Liberal theory focuses on equality and freedom of the individual (Cochrane, 2010). The animal rights and animal welfare approaches share two important commonalities: they respond to the structural violence experienced by other animals with solutions focused on achieving more freedom and legal protection for the individual animal, and they target the human individual as a key agent of change. Predominantly, they focus on understanding and arguing that the ontologies or capabilities (e.g. sentience or the ability to experience pain) of individual animals justify recognition and ethical treatment. Whilst this is an important dimension of the debate and has been crucial for bringing about change, this downplays the role that economic power and structures play in shaping the relationship we have with other animals

Although the use of other animals for material gains is not an invention of capitalism, the explosion in the industrialised use of other animals in our economic system is intricately connected with the necessarily expanding nature of accumulation under capitalism (Gunderson, 2011). Today, over 60 billion land animals are slaughtered annually for human food consumption (FAOSTAT, 2010). Mills and Williams (1986:31) suggest 'no social formation has been so deeply implicated in the maintenance and proliferation of the mistreatment of animals as capitalism'. The nature of the capitalist mode of production has profitably integrated other animals

into productive and consumptive processes, shaping the way they are raised, fed, housed, slaughtered, packaged and consumed (see chapter 2). Consequently, any movement challenging the position of other animals in society could benefit from considering the nature of capital, as change to the moral status of other animals would necessarily have an impact on capital. Accordingly, the power and interests of capital are important obstacles for change. This thesis is aimed at developing a parallel narrative that highlights the role of capitalism, which could possibly complement the liberal ethics of animal rights and animal welfare approaches.

Marxism, Commodity Production and Other Animals

Over the years, Marxism has been taken up by many social movements, including civil rights movements, union movements, antiwar movements and women's movements to explain relations of power and domination, the nature of social structures, and the role of capital (Llorente, 2011). Although Marx's analysis of capitalism predominantly focuses on the way the capitalist mode of production organises different human beings, the experiences of humans and other animals are inevitably linked, as they can be seen to have a common origin in the same system of production and exchange. Marx (1959) argues that capitalism reduces nature, including other animals, to a means of production and an object of consumption; he proposes that nature for capital is mechanical and dead. In this way Noske (1997) suggests that just as 'capitalism dehumanises humans it denatures nature'. This same system, Marx characterises as depending on the exploitation of humans also in many ways dependents upon the use of other animals as resources. Therefore, Marxism as a framework for understanding the way that our economic system organises power and relationships has the potential to be particularly insightful for exploring the way capitalist commodity production impacts other animals.

Boggs (2011:71) argues 'it goes to the core of industrialisation and modernity to relentless efforts by privileged interests to commodify and exploit all parts of the natural world including most natural habitats and the species within them'. This reflects Marx's (1987) analysis of the way capitalism commodifies human labours' capacity to work, which is at the heart of the alienation and exploitation of humans

subsumed into capitalist commodity production. The *Agricultural Dictionary* defines factory farming as 'a type of farming which is usually operated on a large scale according to modern business efficiency standards, solely for monetary profit' (Llorente, 2011:128). The commodification of other animals lives and bodies in factory farms and slaughterhouses too seem to be in a large way shaped by capitalist logic. The treatment of humans and other animals within capitalism is justified in terms of profit and property relations; thus, there are similar economic forces influencing the experiences of human workers and other animals. The animal protection movement challenges domination and exploitation and Marxist analysis draws attention to structures and patterns of domination and exploitation that exist within capitalism.

Breaking with traditions that have framed the treatment of other animals as a problem of rights or welfare, and utilising a Marxist conceptual framework, this thesis primarily examines the use and treatment of other animals as an economic question and attempts to explore the importance of capitalist institutions and imperatives. There can be little doubt that Marxists and even the critical left in general, have paid scant attention to the contemporary animal movement (Sanbonmatsu, 2011). However, it has been argued by animal protection scholars that Marxism has the potential to be a useful framework for incorporating animals into an analysis of capitalism, provided the revision of some of the more anthropocentric concepts (Benton, 2011, Boggs, 2011, Llorente, 2011). Although I do not propose that it is as simple as just appropriating Marx's conceptual framework to fit the experiences of other animals, both Marxism and animal protection seem as though they are useful allies. This thesis will investigate the appropriateness of using a Marxist conceptual framework for analysing the treatment of other animals used in the production of food.

Chapter 2: Marx's *Capital* and Other Animals in Food Production

A number of prominent animal protection commentators including Benton (1993), Eckersley (1992) and Elster (1985) accuse Marx and his work of being speciesist and anthropocentric, and dismiss its ability to make any theoretical contribution to the animal protection movement. Marx did go to some lengths to conceptually distance other animals from humans in his analysis of capitalism (See chapter 3). Nevertheless the insights he provides into the social relations of production characterised by capital, still have the potential to provide understanding into the ways other animals engage with our economy. The objective of this thesis is to investigate the ways a Marxist conceptual framework can be useful for examining the treatment of other animals used in food production. First, it is necessary to outline some of the key ideas in Marx's analysis of the capitalist mode of production.

The Basics of Marx's Capital

Marx (1887:26) begins his study of capital in the realm of production with the concept of the commodity, which is the basic form of wealth within a capitalist mode of production. A commodity refers to the diversity of things exchanged which meet human wants and needs (Marx, 1887:26). For example, a loaf of bread can be used to satisfy hunger, clothing keeps us warm, and books communicate stories and spread knowledge. It follows from this that commodities have to possess both a use value, that is, they have value as a result of their usefulness and that they are also the 'bearers of exchange value' (Harvey, 2010:16). Exchange value reflects the feature of a commodity that makes them commensurable for exchange in the market (Marx, 1887). This feature is not an intrinsic quality of the commodity, as all commodities have different material qualities, rather, it has to be something that all commodities share (Marx, 1887:27). Marx (1887:27) argues that all commodities are products of human labour. Thus the value of a commodity is the human labour it embodies and the exchange value is the representation of this labour time (Marx, 1887:27). However, it is not the actual or concrete labour time that establishes exchange value, it is the socially necessary labour time, the average time, intensity and skill level

required to produce any use value (Marx, 1887:28). Therefore, value is dialectical, as the socially necessary amount of labour required to produce a commodity is sensitive to changes in productivity. "Productiveness is determined by various circumstances, amongst others, by the average amount of skill of the workmen [or woman], the state of science, and the degree of its practical application, the social organisation of production, the extent and capabilities of the means of production, and by physical conditions" (Marx, 1887:28).

Harvey (2010:37) emphasises that a vital point Marx makes is that 'value is immaterial but objective'. Value (socially necessary labour time) cannot be seen by simply looking at a commodity, as value is a social relationship that exists contextually, however, commodities also have an objective presence and measure (Harvey, 2010). Marx (1887) proposes that the immateriality of value is dependent upon a means of representation. This is where the rise of the monetary system and of the money form as means of storing value come to represent this social relationship. Consequently, whilst capitalism organises production in definite social relationships, these relationships are expressed and appear as relationships between things (See chapter 5) (Fine and Saad-Filho, 2004:13). Marx (1887:47) calls this concealment of the social character of labour in the objective characteristics of products, commodity fetishism. This fetishism is 'inseparable from the production of commodities' within a capitalist mode of production (Marx, 1887:47). It follows that the value form is not a fact of nature, but a social relationship that arises specifically out of the conditions of capitalism.

According to Marx (1887) capitalism is not just characterised by the exchange of commodities produced by human labour, but also by the purchase and sale of workers' ability to labour. In the capitalist system, the means of production (tools and raw materials) are privately owned by a group of humans that Marx refers to as the bourgeois, or the capitalist class (Marx, 1887). Consequently, those who do not own the means of production must sell their labour power (their capacity to work) in exchange for a wage, in order to subsist (Marx, 1887). Marx (1887) argues that this is a distinguishing feature of capitalism, as labour power becomes a commodity. Labour power, not labour, is a commodity because it has a use value (the creator of value) and it is exchanged or purchased by capitalists for its value i.e. a wage. Therefore,

Marx's idea of value as socially necessary labour time not only captures the distributional relationship of the exchanging use values, but also embodies the fundamental relations of production specific to capitalism (Fine and Saad-Filho, 2004:13).

Another significant characteristic of capitalism is the expansion of value (Marx, 1887). This requires examining the exchange of various use values. Marx (1887) identifies a couple of circuits of commodity exchange that exist in a capitalist economy. These trace the transformation of commodity into money and money into commodity. First, a commodity, such as labour power, is exchanged for money (a wage), which is then used to purchase other commodities like food; this circuit is represented as C-M-C (Marx, 1887:71). This is known as a simple commodity exchange, where both commodities have the same value and reproduction occurs without expansion (Marx, 1887). In contrast, in a circuit of capital that begins and ends with money M-C-M', the motive is to expand value (Marx, 1887:103). In reality this is the general form in which capital appears within the sphere of circulation (Marx, 1887). Note that capital appears in many forms including money, commodities or factors of production, but these things only constitute capital when they are used to generate more value (Marx, 1887:102). In an M-C-M' relationship, money M is exchanged for commodities C, and during production, value is expanded and exchanged for the numerically greater M' (Marx, 1887:106). Marx (1887) calls the added value that occurs during the production of commodities, surplus value.

For surplus value to occur, during production there must be a commodity that produces more value than it costs to purchase. The commodity used in production that contributes more value to outputs than it cost to purchase as an input is labour power (Marx, 1887:149). The value of labour power is the cost of its reproduction, a wage (equal to the subsistence of the worker), and the value workers contribute to the output is labour time; thus, surplus value is created when the wage is less than the labour time contributed (Marx, 1887:149). For example, if a labourer works a 10 hour day, but the necessary labour time to produce/cover a wage is 5 hours, then 5 hours of the day is used to create surplus value necessary for capital to expand (Fine and Saad-Filho, 2004:39). This is called the rate of exploitation (Marx, 1887). Therefore,

exchange value, value, surplus value and some use values are created by human labour, which is extracted through the exploitation of labour.

The value invested in hiring labour power is referred to as variable capital as the amount of value added by it (surplus value) is not fixed in advance but depends on the degree of exploitation (Marx, 1887:150). This is in contrast to constant capital, which includes the factors of production used to produce commodities (Marx, 1887:143). Constant capital contributes a fixed amount of value to the overall production process (Marx, 1887:143). Due to the expanding nature of capital, the objective of capitalists is to increase the degree of exploitation, thereby the rate of profit. This can be done in a number of ways. If the real wage remains unchanged then absolute surplus value can be increased by having more labour performed in exchange for the value of labour power (Marx, 1887:355). This can be done through increasing the length of the working day or increasing the intensity or pace of work in any given working day (Marx, 1887:355). However, there are obvious limits to increasing absolute surplus value indefinitely, therefore, relative surplus value is the dominant method for increasing the degree of exploitation.

Relative surplus value is connected to increases in the productivity of labour (Marx, 1887). When the productivity of labour power is increased, the labour time necessary to produce a commodity is reduced, lowering the value of labour power, and leaving more time in the day for the creation of surplus value (Marx, 1887:220). Marx (1887) argues that there are several ways to achieve this result including increased cooperation and finer division of labour, use of better machinery, scientific discovery, and innovation. In particular, relative surplus value and labour productivity is connected with technological change (Marx, 1887). For example, new machinery increases productivity because it allows a great amount of raw materials to be worked into final products within a given amount of labour time (Marx, 1887). These processes satisfy capitalist tendencies towards increasing relative surplus value and thus expanding value, which plays a crucial role in the accumulation of capital.

The practices involved in increasing the absolute and relative surplus value for the expansion of capital create competition between capitalists, as they create a necessity to accumulate (Harvey, 2010:257). A capitalist's ability to compete is limited by their

potential to accumulate, which can be achieved through the concentration and centralisation of capital. The concentration of capital tends to diminish the degree of competition in the market by eventually minimising the amount of players (Marx, 1887). Marx (1887:444) argues that capitalist accumulation also requires competition in the labour market to maintain low wages, crucial to this process is a group of permanently unemployed or a reserve army of labour. In sum, competition and accumulation exist in a dialectical relationship as competition contributes to accumulation and accumulation creates competition, as those who fall behind in the accumulation process cannot compete.

So far this chapter has outlined some of the main components in Marx's analysis of the capitalist mode of production and revealed the logic and consequences of its compulsion toward accumulation. Marx also dedicated significant space to his analysis of the way production develops under capitalism Marx (1887) argues that for developed capitalism, the factory system predominates, within which the production of relative surplus value is pursued through the introduction of new technology. In this way, factory farming and assembly line slaughterhouse methods involved in the production of meat, dairy, and eggs, offer relevant examples to demonstrate elements of Marx's conceptual analysis of capitalism. Marx's framework can also shed light on the way the industry operates, which will be explored in the next section.

Marxism Applied to Factory Farms and Slaughterhouses

Although our meat, dairy and egg packaging still portray contented cows, chickens, pigs and sheep on green pastures in front of red barns and fields of luscious grass, these idyllic scenes are far from the current reality of how other animals are often used in the production of food. Before World War II, most food animals were raised in relatively small-scale enterprises, typically outside and were able to feed on grass and sometimes grain (Guither, 1998:86). In Europe and the U.S, many other animals were kept in small or medium sized herds on grazing land, and were slaughtered and processed on the farm or in a nearby abattoir (HBF and FOEE, 2014). However, the number of other animals on small to medium sized farms decreased substantially between 1982 and 1997, as other animals raised in factory farming conditions in the

U.S, parts of Europe and Australia increased by 88% (Kellogg et al, 2000:34). The rise in global demand for meat, dairy and eggs, and increased availability of cheap inputs e.g. low-cost subsidised grain and highly relevant technological progress, has contributed to the advancement of the factory farming system (CWF, 2009, Gurian-Sherman, 2008). Although western countries are the ones that predominantly use this system, booming economies in Asia and other parts of the world are slowly adopting these methods of livestock production (HBF and FOEE, 2014:10). Today, in these countries, pastoral farming as a method of food production has almost completely died out (HBF and FOEE, 2014). By the end of 20th century factory farming had become globalised and 'agricultural policymakers typically viewed industrial animal production as an unquestioned necessity and as a normal part of economic development' (CWF, 2009:19).

With the rise in the adoption of factory farming methods, we have also seen the concentration and centralisation of market players (HBF and FOEE, 2014:12). To increase economies of scale, reduce market competition, and improve profit margins, companies in the food industry are getting bigger through mergers and acquisition resulting in fewer industry players (HBF and FOEE, 2014). Between 1989 and 2006, the world's number of major suppliers of poultry in the broiler (bred for meat) sector was reduced from eleven to four companies and in the laying hen sector from ten to three companies (BD and EcoNexus, 2013:7). Economic imperatives drive the concentration of the industry, resulting in bigger operations and efficiency driven standardised methods of raising and killing other animals (HBF and FOEE, 2014).

Factory Farming Practices

Factory farming has developed out of the desire for higher productivity and efficiency in the production of food, thus, the aim has been to use more capital, less human labour and increase the number of outputs. Today, 60 billion other animals are used to produce food annually around the world and over 50% of pigs and 70% of chickens are raised in these industrialised conditions (CWF, 2009:5). Although methods and conditions vary between countries such as the degree of confinement, factory farming and slaughterhouse practices are similar enough across countries that they can be explained as standard practices with representative examples (CWF,

2009). Factory farming is characterised by large-scale production with systems ranging from moderate to total confinement and high-density captivity (DeMello, 2012:133). The physical environment is often human made and human controlled, with no open air, artificial temperatures, and unnatural light (CWF, 2009). Most other animals are fed on a grain-based diet and are genetically and chemically altered (CWF, 2009, DeMello, 2012). Gains in efficiency achieved through the employment of technologies, aim to produce more commodities faster with fewer inputs using less human labour, thereby, increasing relative surplus value. This process has come about through exerting greater control over the bodies and lives of other animals and to a large extent ignores the needs of other animals (Galusky, 2014).

Pigs:

During gestation pregnant sows are caged in stalls or crates so narrow that they cannot turn around (Gunderson, 2011). When they are about to give birth they are moved to farrowing crates where they are restrained to laying on their side on concrete or slatted floors (Gunderson, 2011:265). This kind of prolonged and cramped confinement denies pigs their natural behaviours such as nesting before giving birth, and negatively affects their physical health causing lameness, unitary tract problems, foot injuries and bone weakening (Gunderson, 2011:265). Within the first week of life, piglets are castrated, their tails are docked and teeth severed with wire cutters, all generally without anaesthetic (Holden and Ensminger, 2006).

Chickens:

Some egg-laying chickens are kept in battery cages throughout their short productive lives, a number of hens are kept together in these small wire cages, each having less space than A4 sheet of paper (Winders and Nibert, 2004:85). In these cramped conditions birds cannot stretch their wings, perch, or nest and they frequently suffer from server feather loss, bruising and abrasions (Winders and Nibert, 2004:85). Chickens beaks are also trimmed without anaesthesia to prevent pecking and it is industry practice to starve them for around 18 days to induce moulting in order to force another laying cycle (Gunderson, 2011:263).

Cows:

Through selective breeding and unnatural cereal diets, dairy cows are pushed to their

limits to produce huge amounts of milk, around 10 times as much as they normally would (Gunderson, 2011:264). A leading welfare problem in dairy cows is mastitis, (Gunderson, 2011:264). Mastitis is a painful bacterial infection of the udder tissues largely caused by unsanitary conditions, unnatural diets and cramped conditioned (Gunderson, 2011:264). Cows usually have a life span of around 20 years, however, due to the intensive conditions of the industry they are usually slaughtered at 4-5 years when they can no longer keep up with 'economic demand' (Gunderson, 2011:264). Additionally, to sustain milk production, cows are manually impregnated consecutively and after birth a calf can be taken away as early as one day (Gunderson, 2011:264). Dairy cows suffer the trauma of having their calves taken away and often bellow for days (Gunderson, 2011:264).

In factory farming conditions other animals' entire surroundings, their bodies, the food they eat, and the interactions they have, are all manipulated to reduce the cost of raising them and turning their bodies into various commodities. In this process their psychological and physical needs are not considered and they are treated like any other inanimate factor of production (Gunderson, 2011).

Well before the rise of capitalism other animals' subsistence cycles were disrupted and changed. For example, in feudal society, some cows and horses were domesticated and used as beasts of burden in agriculture and some horses were raised with the specific purpose of being used in combat during war (Murry, 2011:91-92). However, within capitalism other animals have come to be totally incorporated into production technology as instruments and objects of labour in commodity production (Noske, 1997:14). As was discussed above, Marx (1887) argues that capitalism has a tendency towards increasing productivity by decreasing the amount of labour time necessary to produce a commodity. This drive to improve relative surplus value in many cases is connected with scientific discovery and technological innovation. Other animals' natural reproductive and physiological cycles are considered too slow and unpredictable, consequently, a great number of scientific and technological devices have been developed to improve the productivity of other animals used in food production (Noske, 1997:16). This includes mutilations, selective breeding, bodily alterations via genetic engineering and medication such as antibiotics.

Factory farming often leads to reactions of stress, agitation and fear in other animals, the reactions that incur economic losses are in most cases met with technological solutions (CWF, 2009). For example, each year millions of farm animals are physically altered, usually without anaesthesia, to prevent damage to the quality of the commodities they will become or produce (CWF, 2009). This includes tail docking of piglets and cows, beak trimming and toe removal of hens and turkeys, castration of lambs, piglets and calves, dubbing of poultry (removing the comb), and teeth clipping of piglets (CWF, 2009). In most of these cases, mutilations occur to combat behavioural side effects of confinement, which can have costly results e.g. other animals sometimes die or their bodies are permanently maimed from fighting (Gunderson, 2011). Additionally, modern industrial farms are ideal breeding grounds for germs and diseases. The close confinement and copious amounts of waste on and around other animals makes them prone to infection (Horrigan et al, 2010). To combat this, industrial farms have been feeding cows, pigs, poultry, sheep and fish low doses of antibiotics on a daily basis both to keep them alive in their stressful and unsanitary conditions, and to make them grow faster (Horrigan et al. 2010). The Food and Drug Administration (2010) reported that up to 80% of antibiotics sold in the U.S are sold for agricultural purposes. Other animals' bodies are changed physically and chemically in the quest for profit.

Selective breeding and growth hormones are other methods utilised by the industry to improve productivity, food quality and disease resistance. For example, selective breeding and growth hormones are used to speed up the growth rate of broiler chickens (ACMF, 2011). In 1975 it took approximately 64 days for a chicken to reach slaughter weight, now a chicken can be ready for slaughter in just 35 (ACMF, 2011). This unnatural growth rate has enormous costs to the welfare of the chickens involved (ESFA, 2010). They often suffer from heart problems, leg problems and distorted anatomies (ESFA, 2010). Around 20 million chickens die in sheds every year in Australia as a direct result of farming practices (ESFA, 2010).

The industry also uses genetic engineering to permanently alter other animals at the genetic level so they can become more efficient for use in production. The manipulation of other animal's bodies involves a wide range of practices including reprogramming their maternal behaviour, transforming digestive systems to fit

corporate feeding practices, and preventing the contraction of disease (Hanson, 2010:430). For example, researchers at the University of Wisconsin have identified the 'mothering gene' in laying hens and by 'silencing' it they will be able to remove the brooding instinct thereby reducing the impact this has on the hens capacity to lay (Hanson, 2010:432). Maximising the productivity of other animals involves encouraging rapid growth and excessively high yields by selecting for these traits and altering the bodies of other animals. In this system other animals are treated as machines and inputs into production, with little consideration of their physical and psychological wellbeing. The welfare of other animals is only considered where it has the potential to impinge upon profits or the quality of the resulting commodity.

The Industrialisation of Slaughter

The industrialisation of slaughter and the gains in efficiency achieved through the employment of time saving technologies involves a complex relationship between the means of production, human workers and other animals. Every year 520-620 million other animals are killed in slaughterhouses in Australia alone, including, chickens, turkeys, ducks, pigs, cows, caves, and sheep (Aussie Abattoirs, 2015). In this high-volume, low profit margin industry faster production lines are the primary path to profit (Cook, 2010). This is achieved through a strict division of labour and rapid relentless paced work (Cook, 2010). In the U.S. by the start of the 21st century, it took just 15 minutes for a cow to be killed, fully eviscerated, cut up, and packaged in uniform, neat, plastic wrapped containers to be exchanged in the market (HBF and FOEE, 2014). Therefore, the battle for the lowest prices is fought on the backs of workers and other animals. As Marx (1887) argues these commodities we purchase in the supermarket conceal the social relations and exploitation involved in capitalist commodity production.

With the industrialisation of slaughter came the adoption of production line methods of 'disassembly', strict divisions of labour, mechanisation, and deskilling (HBF and FOEE, 2014). The use of assembly line production methods on the kill floor reduces the need for highly skilled workers, a tactic that makes workers easily replaceable and more exploitable, so slaughterhouses can hire cheap, unskilled human labour (Nibert, 2002:66). In general, the greater the productivity of labour, the less labour

time required to produce a commodity, which reduces the cost of producing commodities (Marx, 1887). Consequently, the cost of reproducing labour power is cheaper and purchasing labour power is also cheaper (Marx, 1887:29). Slaughterhouse practices decrease the labour time necessary to turn other animals into commodities, thereby, lowering the cost of labour and increasing relative surplus value.

When analysing the production of relative surplus value: within the capitalist system all methods for raising the social productiveness of labour are brought about at the cost of the individual labourer; all means for the development of production transform themselves into means of domination over, and exploitation of, the producers; they mutilate the labourer into a fragment of a man, degrade him to the level of an appendage of a machine...they transform his life-time into working-time, and drag his wife and child beneath the wheels of the Juggernaut of capital. But all methods for the production of surplus value are at the same time methods of accumulation; and every extension of accumulation becomes again a means for the development of those methods. It follows therefore that in proportion as capital accumulates, the lot of the labourer, be his payment high or low, must grow worse (Marx, 1887:445).

The harsh treatment of humans who work in slaughterhouses is also mirrored in and inextricably entangled with the treatment of other animals. Other animals, such as cows and pigs, arrive in varied shapes and sizes, each distinct and unique. They are then prodded, jabbed and driven up ramps where they are zapped, shackled, suspended by one leg and propelled downward to where their necks are cut, after which they are thrust onto a disassembly line (Nibert, 2002, Pachirat, 2011). In his undercover work at a Great Plains cattle slaughterhouse, Pachirat (2011) documents that there were 121 job functions on the kill floor, each with a very specific and repetitive role. For example, function 39 'third hock cutter - uses hydraulic shears to sever front left and right hoof of a cow', function 56 ' brisket saw operator - uses an electric saw to follow the incision made by the brisket marker and cut through brisket of cow, allowing access to gullet clearer', and function 115 'tendon cutter - uses hands to push cow feet through band saw to cut of tendons on each foot, tosses cut

feet onto food table'. (Pachirat, 2011: 261-269). The degree to which the labour is divided in the slaughterhouse aids productivity, and in this particular slaughterhouse 2,500 cows were killed per day (Pachirat, 2011). During this process, they are stripped of all their individualising qualities including their hide, horns and sex (Pachirat, 2011). The dead bodies are then further homogenised when they are carved and cut, and then wrapped into neat plastic packages (Pachirat, 2011). These methods are employed to raise the productiveness of labour, thereby, increasing output. In this process other animals are mechanised, their lives are 'transformed', they are 'fragmented', and 'degraded' to the level of an 'appendage of a machine' (Marx, 1887).

Reflections on Marxism

Although Marx was analysing the development of capitalism in 19th century Europe, his concepts and understanding of the capitalist mode of production seem relevant when attempting to understand the behaviour and structure of industry today. We still live in a capitalist system, commodities are still produced for exchange, most humans still work as wage labourers, workers are still routinely exploited for profit, and production processes are still motivated by capital accumulation. This chapter has outlined some of the basics of Marx's analysis of capitalism and used factory farms and slaughterhouse practices to demonstrate the relevance of this conceptual framework. The technologies and methods of factory farms and slaughterhouses are all embedded in the context of global capitalism. Thus, they are shaped by capitalist imperatives that aim to reduce the amount of human labour required to produce commodities, and increase the level of outputs to improve capital accumulation. In this process, the welfare and needs of both human workers and other animals are overlooked as they are utilised by the system in the pursuit of profit. Marx focused on the way that capitalist commodity production positions and treats the working class. However, many of his ideas and concepts could arguably be extended to examine the way other animals are treated in the capitalist production of food commodities. The remainder of this thesis will be dedicated to investigating the appropriateness of Marx's theory for understanding the way other animals are used and treated in the production of food.

Chapter 3: Discontinuities between Humans and Other Animals

The reduction of humans and other animals to isolated mechanical productive and consumptive units comes about as a result of the same capital accumulating forces of production (Berger, 1980:11). Capitalism is concerned with 'accumulation for accumulation's sake, [and] production for production's sake' not with the welfare of the creatures it uses to do so (Marx, 1887:412). However, the way that other animals and humans are used and treated within this system is different in many ways. Marx (1887) theorises about both the continuities and discontinuities between humans and other animals. There is still much disagreement over what Marx's position was on the relationship between humans and nature (including other animals) and whether he wrote about humans in an essentialist way. Benton (1993:43-44) claims that Marx's distinction between humans and other animals constitutes a dualism that positions human needs as superior. Perlo (2002:304) goes as far as to call Marx's theorising about other animals 'ideological violence'. Conversely, other scholars such as Wilde (2000:38) argue that the distinction Marx makes between humans and other animals is entirely free of prejudice and that Marx drew attention to the way capital accumulation disregards 'all natural feelings'. The intention of this thesis is not to resolve these theoretical disagreements, rather, the challenge attempted here will concern the way Marxist concepts of alienation, labour, labour power, value, exploitation and commodity fetishism relate to other animals used in food production. But first, what did Marx say about humans and other animals?

Marx on Other Animals

Although humans and other animals are different in many ways, Marx is concerned predominantly with the uniqueness of the way humans produce their means of subsistence. Marx (1887:124) argues that both humans and nature are necessary for production, 'labour is, in the first place, a process in which both man and Nature participate' for 'the worker can create nothing without nature' and he acknowledges that both humans and other animals produce. However, the difference for Marx (1959:31-32) is that 'an animal only produces what it immediately needs for itself or

its young. It produces one-sidedly, whilst man produces universally'. The significance of this for Marx is that humans have the conscious capacity to produce with a plan in mind, to produce free from the 'dominion of immediate physical needs' and with the knowledge of how other species produce, whereas other animals produce out of instinct (Marx, 1959:32).

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 bees is this, that the architect raises his structure in imagination before he erects it in reality. At the end of every labour-process, we get a result that already existed in the imagination of the labourer at its commencement (Marx, 1887:124).

According to Marx (1959) life activities (the means of satisfying subsistence) characterises a species. For human labour, life activities are the subject of our own will, rather than just a means to satisfying a need, and this is what distinguishes us as a species being (Marx, 1959:32). In contrast, 'the animal is immediately one with its life activity. It does not distinguish itself from it. It is its life activity' (Marx 1959:31). Therefore, humankind's specific capacities are intimately connected to our capacity to choose and control what we make and to realise not just instinctual promptings but intellectual and social projects. For Marx this means that the way humans and other animals engage in labour and experience labouring are different.

The distinction Marx makes between the imaginative labour of humans and the instinctual, responsive behaviour of other animals has not held up in the decades since. Recent research into other animal cognition increasingly notes that different species of other animals have the capacity for consciousness, self-awareness, intelligence, language, a concept of time, and the use of tools (Vint, 2009). This creates two main problems for theorising about other animals using Marx's distinction. Firstly, these advances in research suggest that due to the specificity of capabilities and life activities of different species of animal, the experiences of other animals' cannot be homogenised in any significant way. The bees, beavers, ants, elephants, whales and pigs all have different cognitive abilities that impact the way they think, experience and conduct their life activities. To suggest that humans as a

species produce in a somewhat unique way is not necessarily untrue; in fact it is evident in the way humans have come to dominate other animals with our economic activities. However, although it is important to acknowledge that other animals engage in life activities differently to humans, it is also important to emphasise that other species of animals do not produce things in the same way as each other either. Secondly, developments in scientific knowledge suggest, at the very least, that we cannot be certain other species do not share some cognitive capabilities that humans possess. Thus, the distinction that Marx makes between humans and other animals may not be as clear and straightforward anymore.

This thesis is not going to focus on disputing the distinction Marx makes between humans and other animals. Rather, the goal is to argue that this distinction is not strong enough to claim that only humans can be denied the essence of their species life when the means of their subsistence is privatised and they are subsumed into the capitalist mode of commodity production. The way that Marx theorises about other animals requires readdressing in this context to ascertain the way other animals are impacted by being used in industrialised food production. This investigation will be taken up in the following section.

Alienation According to Marx

Marx (1959) discusses humans as species beings in context to explaining how the capitalist mode of production affects the human condition. Marx (1959) was interested in how large scale mechanised production of commodities, the division of labour, waged work and the private ownership of the means of production impoverishes the human psyche and reduces human beings to existence as commodities, valued solely as labour power. In doing this Marx (1959) outlines a number of interrelated dimensions of alienation that result from humans participating in commodity production.

Marx (1959) argues that workers are alienated when they are estranged from the products that embody their labour. He wrote that labour gives life to objects and that, as labour is separated from these objects under conditions of capitalist commodity

production, part of the workers' life is estranged from them (Marx, 1959). Marx (1959:29) notes that labour embodied in the products becomes material as if the object has power over the worker and in this way labour is objectified. When this happens, nature becomes an alien object on which the worker depends for their means of subsistence (Marx, 1959). In this process of becoming estranged from the products of their labour, workers are also alienated from the activity of work itself. When humans sell their labour power, their productive activity no longer belongs to them it is 'forced labour' and it is no longer spontaneous or creative (Marx, 1959). Rather, the life activity 'confronts him [the worker] as something hostile and alien' (Marx, 1959:29-30). Marx (1959) describes this as self-estrangement.

Alienated from their labour and the objects of their labour, Marx (1059:30) argues that the worker 'only feels himself freely active in his animal function – eating, drinking, procreating or at most in his dwelling and in dressing up etc. and in his human functions he no longer feels himself to be anything but an animal. What is animal becomes human and what is human becomes animal.' In saying this Marx (1959) acknowledges that humans share qualities with other animals, but that to express their true species being humans must realise their essence of socially creative life activity. When humans are prevented from performing their life activity in this way they experience de-humanisation and alienation (Marx, 1959). Consequently, another type of alienation humans experience is estrangement from their species being (Marx, 1959). 'In the estranging from man (1) nature and (2) himself, his own active functions, his life activity, estranged labour estranges the species from man' (Marx, 1959:31). Thus, according to Marx (1959) the human species is distinctive when humans are consciously and freely engaged in life activity, but when they are unable to participate in their life activity in this way, labour becomes a means to physical existence and is more animalistic. Furthermore, for Marx (1959), as species beings, humans develop their sense of self in relations to others through social activities, thus he suggests that capitalist commodity production also separates workers from each other (Marx, 1959:32).

These forms of alienation are particularly evident in the examples of industrialised slaughterhouse production that were mentioned earlier. As the number of other animals passing through slaughterhouses increase, the working conditions of those

killing the other animals are worsened (Winders and Nibert, 2004:88). On the kill floor, labour is divided into very specific and segregated jobs. For example job number 11 'the bung capper uses hand knife to cut around anus of the cow' (Pachirat, 2011:165). The workers are engaged in repetitive actions in every moment of the day, they are completely removed from the producing anything in totality and from the final product of their labour. For example, only 5 humans on the kill floor see the cow while it is whole before it starts to be dismantled (Pachirat, 2011). The roles that are performed keep workers segregated from one another and the nature of the work is not free and creative. Rather, the work of humans on the kill floor could be better described as forced and detached from any overarching goal or blueprint. In these ways human labour is alienated in the process of commodity production. Therefore, the estrangement and objectification of labour alienates humans through imposing a mode of existence in which distinctive species attributes cannot be manifested, in this way the capitalist mode of production dehumanises humans.

Alienation as it Relates to Other Animals

In many ways these forms of alienation seem as though they could explain the experiences of other animals used in food production. Two theorists in particular have attempted to appropriate Marx's idea of alienation to explain the impact of intensive capitalist production methods on other animals. Noske's (1997:18-21) 'theory of de-animalization' posits that other animals used in human industries are alienated from their own products e.g. their offspring and bodies, their productive activity, fellow animals, surrounding nature, and 'species life'. Benton (1993:59) states 'a good deal of the content of Marx's contrast between a fulfilled or emancipated human life and a dehumanized, estranged existence can also be applied in the analysis of the conditions imposed by intensive rearing regimes in the case of nonhuman animals'. It is the case that other animals engaged in food production are removed from many of the conditions that characterise their lives apart from humans and thus in many ways Marx's concept of alienation appears to capture these experiences. However, Marx's whole theory of alienation presupposes that the essence of what makes us human is our ability to labour freely, consciously, and creatively but that capitalism has stunted and distorted this opportunity. Therefore,

the alienation and estrangement of humans from the products of our labour, our life activity and social nature is predicated on us being species beings. Whereas, according to Marx (1959:32) other animals are not. The assumption that other animals are alienated in a similar way to how Marx thought about human alienation is theoretically problematic.

Marx's concept of 'species being' has a checkered history; it has been dismissed by many and read in a number of different ways (Roelvink, 2012:67). Benton (1993) criticises Marx's concept of species being as humanist, whilst Noske (1997) appropriates it to describe the experiences of other animals. Marx (1959) is explicit that humans are species beings because the nature of our productive activities have specific characteristics. Although it could be argued that in reality some species of animal possess these qualities and thus fit Marx's definition of species being, for the purposes of this thesis I will not dispute the human exceptionalism of Marx's concept of species being. Rather, this thesis disputes the idea that only species beings' can experience loss because of the way they are subsumed into capitalist commodity production. This thesis proposes to move beyond this anthropocentric conception and consider in similar terms the damage capitalism does to all life.

Other animals used in human industries (especially, but not exclusively) within current conditions, are in many ways estranged from their natural behaviours and surroundings. This hinders the development of other animals' essential capacities and thwarts their fundamental needs, resulting in physical and emotional consequences (HBF and FOEE, 2014). Cows, chickens, pigs and sheep do not have much more in common than humans do with other animals; they are not the same species, they have different cultures, social relationships, methods of communications, habits and behaviours (Hribal, 2012). Each species has its own characteristics specific to its life belonging to that species therefore, cannot be collapsed into the same category in this regard. However, other animals have long been subjected to the same status within capitalism (Hribal, 2012). Other animals are treated as property to be raised, bought and sold in order to accumulate capital. Their bodies are modified, mutilated and controlled to make certain humans more money, and thus their welfare is considered only when it is in conflict with capitalist's ability to make profit. For example, other animals are fed because that is necessary for commodity production. Subsequently,

other animals can be said to experience the negation of their needs in similar ways to each other. Other animals' participation is clearly different to that of humans in the market, but they participate nonetheless, and are subjected to much the same market logic and pressures. A less species centric way to think about the impact of economic and social relations is required.

Although other animals are not alienated and estranged in the same way as humans, they can be said to suffer due to some of the circumstances that alienated human labour suffers from. A report done by the Compassion in World Farming group states that 'good animal welfare implies that the animal is protected from suffering, hunger, thirst, weather, injury, disease, pain, distress and fear and also that the animal is free from the frustration caused by being unable to carry out the natural behaviour of its species' (CWF, 2009). However, the objective of intensive animal farming is to maximise the output and cost effectiveness of each animal, even when this conflicts with other animals' welfare needs. Kalof (2007:135) has linked the growing commodification and intensification of animal industries with increased misery of other animals. Other animals in factory farming conditions are robbed of their own subsistence cycles, control over life supporting activities, removed from natural surroundings, fed unnatural diets and are unable to perform their natural behaviours (CWF, 2009). The loss of these circumstances has been documented to have a range of behavioural and physical consequences including stress, agitation, cannibalism, and violence (HBF and FOEE, 2014).

Intensive production involving other animals, conflicts with animal welfare in a number of ways. Other animals raised in factory farms are crowded indoors in barren sheds, are unable to perform many of their natural behaviours including nest building, foraging for food, exploration of the environment and exercise (Noske, 1997:14). For example, hens in battery cages cannot stretch their wings, sows in gestation crates and farrowing crates, and calves in veal crates are not even able to turn around (CWF, 2009:24). Instead, in many cases other animals develop a number of abnormal and often injury causing behaviours which result from boredom, frustration and social stress (Gunderson, 2011). These include feather pecking and body pecking, cannibalism, tail biting, vulva biting, bar biting, air chewing, belly nosing, fighting, mounting, and harassing other animals who are unable to move away as they would

do in natural conditions (CWF, 2009:24). Additionally, as ruminant animals cows have grazed outdoors for most of their natural and husbandry histories, however, for most of their lives meat and dairy cows are kept in feedlot pens indoors, where they are fed an unfamiliar diet of grains and hormones, often standing on concrete without adequate area to lie down (Gunderson, 2011:264). Fraser and Broom (1990) observe that these confined conditions and the subordination to one activity prevents cows from socialising properly, which often leads to aggression, and fighting. Furthermore, the unnatural grain feed causes a variety of digestive disorders including acidosis, bloat and liver abscesses (Fraser and Broom, 1990). Factory farming conditions can be characterised as having low welfare potential, other animals raised in these conditions have many of the characteristics of their natural lives taken away from them, and in most cases these conditions fail to meet the behavioural and physical needs of the animals, which has the potential to cause them pain and suffering.

Ethological study has revealed that other animals have the capacity for complex social lives (Benton, 2011, Murry, 2011). Many other animals display organised social behaviour in the form of communication, skin contact, social play and social learning, they are also observed make lasting connections with other members of their species (Murry, 2011:99, Noske, 1997:19). For example, mother cows, like most mammals have a strong maternal bond with their carves, who usually suckle from their mothers for several months, even up to a year (Animals Australia, 2015). However, in the dairy industry, calves are taken from their mothers within 12-24 hours of birth (Animals Australia, 2015). When calves are removed mother cows will frantically bellow for their offspring as it puts enormous emotional stress on both the cow and the calf (Animals Australia, 2015). As the emotional welfare of other animals does not impinge on the quality of the commodity they produce, the importance of social relationships are not considered and accounted for in the productive process.

It has been established that other animals used in food production are denied many characteristics and aspects of their natural lives. This thesis has identified a couple, including; access to natural habitat, natural behaviours and social relationships, however, this is far from a complete list. These are crucial elements in the life activities of the other animals used in food production. Additionally, it is well

documented that other animals display certain 'unnatural' behaviours when denied these elements of their lives. Therefore, other animals cannot simply be seen as inert objects used by humans, but as subjects that experience an alteration and a loss in their lives due to the conditions they experience in industrialised food production. If we take seriously that other animals have the capacity to suffer and that in factory farming conditions they are denied important elements of their natural lives, then reducing their existence to beings for capital is a violation of the central characteristics of their species. The implication here is that we recognise this as similar to, but not exactly the same as, human alienation from their species being.

Chapter 4: Human Commodification of Non-Human Life

Marx (1887) proposes that commodities are things that satisfy our human needs, but that they also represent a socio-historically dependent form of labour rooted in dynamics of class exploitation. The nature of value creation in the capitalist commodity production produces a distinctive social relation between wage labour and capital (Marx, 1887). Capitalists control the means of production and the production process, while workers sell their labour power in return for wages (Marx, 1887). Production occurs in the context of this class relationship, which is key to Marx's theory of social transformation. Other animals are also caught up in this circuit of commodity production in contemporary capitalism. With the extension of industrialised practices into animal husbandry, other animal's bodies and their lives are commodified to produce the most profits with the fewest inputs and least time possible. The nature of these interactions and the way that we commodify other animals is based on a distinctive organisation of relations between human capitalists, human labour, and other animals, which are historically and economically contextual.

Humans and other animals participate in the market in very different ways, but they both participate nonetheless. Other animals occupy a particularly complex location in the nexus of production. They are property and they are often used as means of production but other animals are also sentient and possess a measure of agency. This conundrum makes them hard to place and classify in economic and social relations of production and exploitation. Do other animals labour? Can a class framework explain the experiences of other animal? Are other animals exploited? Investigating the way other animals are commodified and the position they occupy in the process of value creation is key to understanding the way other animals are used and treated in contemporary food production. The next section of this thesis will look at how economic structures influence the positionality of other animals used in the production of food.

Labour

As was discussed in chapter 3, Marx (1887) presupposes why other animals are not

labourers from the start. According to Marx (1887:124) human labour is purposeful activity with a creative vision in mind, whereas other animals do not possess these capacities. When other animals produce, it is out of necessity (Marx, 1887:124). For example, when a chicken makes a nest and bees build a hive it is only instinct guiding this process (Marx, 1887:124). However, in chapter 3, it was argued that the distinction Marx makes between the way humans and other animals produce things is not this clear cut. Progress in research on the behaviour and cognition of other species suggests that it is difficult to talk about other animals as a homogenous group and also that it is hard to be clear exactly how other animals experience life activities. To be clear, this argument does not deny that human labour is unique, however the degree to which it is unique is blurry. Clarke (2014:151) argues 'the uniqueness of human labour is likely to be a matter of degree rather than kind'.

Nevertheless, Marx's (1887) definition of labour is very specifically referring to the uniqueness of human labour. Humans are not the only animals that transform nature, however, human labour does it with a high level of consciousness (Marx, 1887). This definition requires a demonstration of intention, which is difficult to prove in the case of different species of animals. Thus, trying to expand Marx's narrow category of labour to include other animals, considering the heterogeneousness of their capacities might stretch the concept of labour beyond breaking point. Furthermore, to gain any ground for other animals in relation to their moral status in society, it is important to base this in the reality of their uniqueness not due to their commonalities with humans. Consequently, this section will discuss the uniqueness of the way other animals engage in the labour process of food production.

Marx (1887:124) divides the labour process into three main elements; the activity of human labour, the objects on which work is performed and the instruments used for that work. Together the objects and instruments of labour constitute the means of production and it is here that Marx classifies the contribution of other animals to the productive process. In the labour process 'man's activity, with the help of the instruments of labour, effects an alteration in the object of labour, designed from the commencement' (Marx, 1887:126). For Marx (1887) whether something is classified as an instrument, an object or both is determined not just by its nature but also by its specific function in the labour process. An instrument of labour includes 'all the

objective conditions necessary for carrying on the labour process... i.e. animals which have been bred for the purpose, and have undergone modification by means of labour, play a chief part as instruments of labour' (Marx, 1887:125). For example, chickens' bodies are modified, bred, raised, and commodified by human labour to assist in the production of eggs. Human labour is involved in selecting the breed of chickens used, overseeing the hatching of chicks, discarding the male chicks, debeaking, feeding and watering them, monitoring behaviour, and removing eggs (Torres, 2007:40-44). Objects of labour refer more to the raw materials and objects which human labour plays no part in the creation of. For example, Marx (1887:126) classifies uncaught fish as 'objects of labour spontaneously provided by nature'.

Industrialised practices in factory farms and slaughterhouses do treat other animals as instruments and objects of labour, they are used as mindless tools to aid capital accumulation. As was discussed in chapter 3, other animal's bodies are subsumed into the labour process in ways that deny their natural behaviours and environments, for the benefit of the capitalist and to the detriment of the animal's welfare. In this way other animals are used as instruments of labour. Other animals' biologically inherited powers of growth and reproduction are utilised in ways that contribute to the realisation of surplus value and have become integral parts of the production process. For example, intensive pig operations control the reproductive process of pigs to ensure that they occur in the most efficient ways (Gunderson, 2011). Boar semen is either bought from laboratories or the boar itself is bought and trained to mount stationary objects known as 'dummy sows' by being aroused in various ways, the semen is then assessed for quality and later squeezed through a inseminating catheter into the female pigs cervix to impregnate her (Gunderson, 2011:265). However, Marx's (1887) explanation of other animals, in particular domesticated animals, as examples of instruments of labour was not a reference purely to a capitalist mode of production. Marx's (1887) ideas about the labour process are independent of any specific social formation; rather, he argues that the labour process is a necessary condition of human existence. Implicit in this is that other animals can only be instruments of labour in any mode of production.

The capitalist mode of production may treat other animals as instruments and objects of labour, but that does not mean that theories about their contribution to the labour

process have to categorise them only in this way. Additionally, just because other animals are used and treated like instruments and objects of human labour under certain modes if production does not mean that this has to be the case for all modes of production. Marx's (1887:125) classification of other animals alongside primitive tools such as 'stones, wood, bones and shells' relegates them to the status of submissive, inanimate, impartial objects. For living beings to be physically and theoretically treated in this way rather than as active entities involved in production requires the denial that they have interests and disregards their abilities. 'To regard the animal as a mere tool', Ingold (2000:207) writes, 'is to deny its capacity for autonomous movement... tools cannot 'act back' or literally interact with their users, they only conduct the users' action on the environment'. There are plenty of examples where other animals act for themselves. Noske (1993:153) documents that other animals have the capacity to cry, struggle, and attempt escape. For example, whales sometimes attack-whaling ships. Hribal (2007) argues that other animal's respond to threats using different methods and tactics, they resist, rebel, attack, and fight back. He documents accounts where cows ignore commands, drag their hooves, refuse to move, break equipment, where chickens peck each other and humans, and pigs escape pens (Hribal, 2007). Although other animals can and are used in the labour process as instruments to aid human labour, their contribution does not seem completely reducible to the contribution of inanimate factors of production.

Haraway (2008:80) argues that 'animals are working subjects not just worked objects' or the instruments with which that work is done. This is significant as it suggests that other animals are not inherently instruments of labour or labourers, but that they possess the capacity to be both, potentially even at the same time.

Additionally, that these conditions come about as a consequence of the specific mode of production. Marx (1887) talks about the alienation of human labour from their species being (the attribute that makes human labour unique) within systems of capitalism and slavery, yet still refers to humans producing things under these systems as labour. This suggests that the work human's do is considered labour even if the quality of it being purposeful is absent. It has been established that other animals are not just objects but have the capacity to resist and to work. Therefore, is it possible to talk about the work of other animals as a form of labour? Whether other animals are labourers or means of production (or both) comes down to the role that

the particular animals play in a particular labour process, which depends upon the intentional structure of that process (Clarke, 2014:147).

Although Marx's definition of labour cannot necessarily be stretched to include other animals, it is important to acknowledge other definitions of labour for understanding the unique contributions of other animals to the labour process. Marx (1887) on a simple level defines labour as a process of transforming something into something else. Whether or not this process is done actively may distinguish human labour but it does not necessarily exclude the work done by other animals. Other animals participate in the labour process where something is turned into something else. Maybe a definition of labour that enables the inclusion of all other animals stretches to include biological labour. For example, the milk produced by dairy cows, the eggs produced by chickens, or the flesh produced by chickens, cows, pigs and sheep. Although it is difficult to identify and distinguish the contribution of the animal because human labour is in most circumstances involved in producing a commodity, there is a contribution made by that animal. This contribution could constitute a form of labour not identical to human labour, but a form of labour that is not as narrowly defined by the characteristics of its contributor. This reminds us that much like humans, other animals can be enrolled in the labour process not just as means of production but also as labourers. Marx's (1887) classification of other animals only as instruments or objects of labour, does not consider that other animals can labour, albeit labour that does not necessarily fit the mould of the exclusively human form of labour he defines in Capital.

Taking other animals seriously as workers could potentially strengthen the plight for improving the conditions of other animals in food production. Refashioning the category of labour to include other animals could help to challenge the paradigm of human exceptionalism that helps justify so much violence against other animals (Clarke, 2014:157). At the very least remembering that other animals have the capacity to labour and that their inclusion in the labour process in some cases commodifies this capacity reminds us that they are subjects that are treated as objects. A labour process that treats other animals as objects and that commodifies their bodies and biological capacities highlights the relations of domination to which other animals are subjected. To understand this relationship of domination and how it

differs to human subjugation under capitalism further we will now turn to an analysis of labour power and class.

Class, Labour Power and Resistance

Marx (1973) was concerned with revealing the experiences of human labour under capitalism by demonstrating how the nature of capitalist commodity production positions the working class in exploitative relationships with capital. For Marx, the basis of capitalism is an exploitative social relationship between a property owning capitalist class and a property-less class of free wage labourers (Murry, 2011:89). Our relationship with many other animals is also characterised by this system of globalised capital accumulation. Like any other commodity that comes out of the capitalist system, animal products are produced in the context of social relations characterised by dominance, unequal power (derived from property relations), and exploitation (Murry, 2011). A reoccurring theme amongst some animal studies scholarship is an attempt to fit other animals into Marxist class relations. This next section will look at the adequacy of using a class framework to understand relations between humans and other animals in industrialised food production.

Hribal (2003) Perlo (2002) and Torres (2007) argue that in many ways other animals are like the working class in a Marxist analysis of labour. Other animals are propertyless, their bodies serve as commodities when their flesh is turned into meat, and they produce commodities such as eggs, milk, and cheese (Torres, 2007:38). The commodification of other animals occurs within a system that is designed to leverage other animals' abilities and bodies to produce products for profit. Thus, as unwaged labourers, other animals not only become commodities themselves but these commodities also support the development and maintenance of industrial capital (Hribal, 2003). Hribal (2003:436) claims that the labour of other animals although unwaged has a history of 'expropriation, exploitation and resistance' like human labour in Marx's working class. Hribal (2003:435) argues that the enclosure of other animals into factory farming conditions has made them far more dependent upon humans for their feeding and care, 'as their customary rights of pasture and pannage' have been removed. This relationship of dependency can be in some ways compared

to the illusionary freedom the human worker has to sell their labour power to capitalists in order to subsist. Although there may be some similarities between the way that the working class and other animals are treated within contemporary capitalism, there are far more differences.

According to Marx a key characteristic of human labour under capitalism is that it is waged labour. At the heart of human waged labour is the nature of property relations under capitalism. As the capitalist class has a monopoly over the means of production, in order to subsist, human labour must sell their labour power. 'Labour power or the capacity for labour is to be understood as the aggregate of those mental and physical capabilities existing in a human being, which he exercises when he produces a use value of any description' (Marx, 1887:117). What characterises capitalism as a distinctive mode of production is the commodification of labour power (Marx, 1887). The capitalist purchases the workers capacity to labour and produce use values for a certain period of time. These exchange conditions come about because; the proprietor is dispossessed of access to the means of production thus not in a position to sell another commodity, and the labourer is free to sell their own capacity to labour (Marx, 1887:117). Therefore, there are some significant ways in which other animals are not like the working class.

The position other animals occupy is significantly different to that of human labour under capitalism. The dubious freedoms enjoyed by human workers, particularly the freedom to commodify our labour, are conspicuously absent from the lives of other animals used by humans. In most western legal systems, other animals are relegated to the status of things, or more specifically the property of humans and have only extrinsic or conditional value as a means to an end (Francione, 1995). As a result of their proprietary status, other animals are not afforded legal rights. As far as the law is concerned other animals are nothing more than commodities, and are only very basically protected from 'unnecessary suffering' (Francione, 1995). Other animals, therefore, are not free to engage in exchange for their labour. Due to their legal status they are disposed of their autonomy and thus they do not possess what Marx defines as labour power.

It has also been argued that other animals are somewhat more like slaves throughout history (Murry, 2011). As a source of free labour that can be bought and sold at the will of their 'owners', the experiences of other animals may be more akin to the unwaged labour of human slaves and serfs (Dickens, 2003). The enslavement of humans has been practiced throughout the world at various times and instituted in various ways, notably in the Americas (1492-1865) and during the Roman Empire (150BCE-350CE). Therefore, it is difficult to talk about slavery as a uniform class system. However, broadly speaking Marx (1973) characterises slavery as a system where humans are purchased in the same way that machinery is purchased. Marx (1973:940) argues that just like the means of production, slaves have an exchange value and the price paid for the slave represents the anticipated profit, 'which is to be ground out of him'.

In the same way, other animals' whole lives and bodies are purchased and commodified. Other animals do not have a split between home and work life and there is no end to their working day. They are serving the interests of those who wish to profit from them 24 hours a day from birth to their early deaths, never outside of the grasp of this productive system (Torres, 2007: 38). Other animals do not naturally become private property any more than humans naturally come to sell their labour power; these conditions are historically contextual. These conditions of unwaged labour are just as they have been for past exploitative economic systems, part of accumulation (Hribal, 2003). However, to what extent do other animals fit into a Marxist analysis of slavery? Although Marx (1973:464) acknowledges that slavery was involved in the development of early capitalism, he argues that slavery appears 'as an anomaly, opposite the bourgeois system itself'. However, if we are considering other animals to be slaves within this system, then slavery has not at all disappeared in contemporary capitalism. Rather than appearing as an anomaly, the enslavement of other animals has become embedded in and an intrinsic component of capitalist economies (Murry, 2011).

There are two main issues with trying to apply Marxist class analysis to understand the position other animals hold in society. Firstly, the nonhomogeneous nature of the category of other animals and the diversity in the ways they are used and treated in human society potentially makes it hard to use one class category to explain the position of all other animals. Secondly, for Marx (1887) key to the concept of the working class and even slavery (to a lesser extent) was the revolutionary potential of these human groups. However, other animals are more limited in their abilities to unite and revolt. There has been some discussion about the capacity for other animals to resist and struggle. Hribal (2003) and Kowalczyk (2014) argue that other animals do indeed struggle against capital, they are able to resist and fight back, disrupting the productive process in which they are being used. However, other animal's capacity for struggle is necessarily quantitatively different than the global proletarian revolution that Marx had in mind in his understanding of class struggle (Torres, 2007:39). Compared to humans, other animals are limited in their capacity to unite and fight back as a collective group.

Kowalczyk (2014:193) argues that we need to re-conceptualise agency away from treating the 'male waged worker' mode of resistance as universal, rather we should take a broader interpretation of the word. Perceiving the actions of other animals as resistance has the potential to refocus the debates about the role of other animals in production (Kowalczyk, 2014). Rather than being victimised, it could empower the movement through blurring hierarchical divisions imposed by capital (Kowalczyk, 2014). The idea of class struggle as a transformative force is inadequate for theorising about change for other animals within this productive system. Kowalczyk (2014) argues that using a definition of resistance and struggle that excludes other animals could legitimize the existing system of capitalist power relations rather than undermine it. Additionally, using the concept of the working class or slavery to describe other animal's labour and contribution to the production process can obscure some key differences between humans and other animals and the forms of domination they each experience.

It seems that other animals do not neatly fit into a traditional Marxist class analysis of social relations within capitalism. While other animals have played a role in the development and maintenance of industrial and agricultural capital that looks a bit like slavery, and a bit like unwaged labour, it may be more useful to create another category that more accurately explains where other animals fit. Defining a class category that can encompass the conditions and experiences of other animals within the capitalist relations of production is a little outside the scope and capacity of this

thesis. This section has been aimed at drawing attention to some of the inadequacies of the traditional Marxist class analysis in being able to include other animals. Marx's class analysis is key to understanding exploitative relations of production and is important to theorising about change; thus, it is an important area for further research. It has been discussed that in the productive process other animals are used as means of production, as labour, that they have the capacity to resist and that they occupy a precarious position as living commodities. Now let's turn to characterising the nature of these relationships. Are we exploiting other animals?

Exploitation and Surplus Value

Although we frequently claim that acts or practices are exploitative, the concept of exploitation is typically invoked without much analysis or argument as if the meaning is self-evident. However, the concept of exploitation has a long history of use and the definition is still the subject of much debate. Marx does not share such an all-encompassing account of exploitation, rather, he rejects the moral framing of the notion and uses the concept to characterise a specific labour relationship. Marx's (1887) theory of exploitation is related to the unequal exchange of labour and the existence of profits. These features reflect the way in which capitalist's appropriate surplus value (Marx, 1887). Marx (1887:227) wrote, 'the end and aim of capitalist production, is to extract the greatest possible amount of surplus value, and consequently to exploit labour-power to the greatest possible extent'. The notion of exploitation is tied up with the nature of commodity production and remains a central concept in any Marxist analysis of the capitalist mode of production.

Capitalist commodity production and exchange is aimed at the expansion of value and accumulation of capital. The question this raises is where is the surplus value coming from? Marx (1887) argued that in production there is a commodity that produces more value than it is worth and that commodity is labour power. The labourers sell their labour power to the capitalist for its exchange value – a wage, which represents the socially necessary labour time required to reproduce labour power (Marx, 1887:119). That is, the wage should equal the value of the commodities needed reproduce labour power. Thus, labour power is a unique commodity, as its

use-value, (the creation of use-values) is a source of value, and the exchange value of labour power is worth less than the value that it can create. A portion of the working day is spent completing the labour time necessary to produce the wage (and sustain the workers) and the extra hours in the day are spent producing surplus value (Marx, 1887). The ratio of the labour in which the worker produces the capitalist's surplus to the labour time in which the workers produces their own wage, Marx (1887) calls, the rate of exploitation. Therefore, Marx's definition of exploitation is very technical and is specifically used to describe the extraction of surplus value from labour power, in the context of waged labour.

For Marx (1887), value, unlike the labour process, is fundamental to capitalist production. It reflects the class relationship between wage labour and capital and thus is not universal (Harvey, 2010:36). The exchange of commodities requires an equivalent form, a characteristic that makes them commensurable (Marx, 1887:39). Marx (1887) argues that abstract human labour is the common characteristic that all commodities share and thus is responsible for establishing exchange value. This can only be the case in a system of waged labour, where the value of commodities is merely a mode of expressing all human labour as equal in its exchange value (Marx, 1887:39). 'Exchange cannot take place without equality and equality not without commensurability' (Marx, 1887:39). Marx (1887:39) observes that this is why Aristotle was unable to attribute value to commodities, because Greek society was founded upon slavery, which is based on the inequality of human labour and labour power. Marx (1887:39-40) argues that value cannot be 'deciphered until the notion of human equality has already acquired the fixity of a popular prejudice'. Therefore, for Marx, exploitation is confined to describing relations between waged labour power and capital, and to cases of surplus extraction in the labour process. This framework does not take into account categories of workers such as the unemployed, volunteers, homemakers and other animals, who can work but do not sell their labour power and do not produce any surplus value for the capitalist to appropriate (Verma, 1998).

As was discussed in the previous section, other animals do not participate in food production in the same way that wage labour does. According to Marx, other animals cannot be considered to have labour power, as they are not free to sell their capacity to labour, thus, their participation in production is not exchanged for its value. This

means that other animals do not spend a portion of the working day or their working lives covering the cost of reproducing their labour power. Therefore, other animals may produce use values and they may even produce surpluses, but according to Marx's framework they do not produce surplus value or add exchange value to commodities (Marx, 1887). Therefore, the relationship other animals have with capital is not exploitative. Marx (1887) saw other animals as fixed capital along with inanimate factors of production; they contribute value to the finished commodity only via the congealed human labour that was involved in their production. This is difficult to refute because where other animals contributed to the production of commodities, human labour is also involved, making it hard to point to the contribution made specifically by the animal. Thus, it is difficult to argue that other animals contribute to surplus value in this way they are excluded from Marx's analysis of exploitation.

Although Marx's definition of exploitation refers to a specific relationship of appropriating value, the term exploitation is frequently invoked in ordinary moral and political discourse, including in describing the way humans treat other animals. Donald Watson, who first outlined the ideology of veganism in 1944 suggested that 'veganism denotes a philosophy and way of living which seeks to exclude, as far as is possible and practical, all forms of exploitation of and cruelty to, animals for food, clothing, or any other purpose' (Stepaniak, 2000:3). Animal protection organisations such as PETA, Animals Australia, and Voiceless also use the terminology of exploitation to describe the way humans treat other animals. Academic debate about other animals adopts this discourse too. Singer (2009:504) argues 'if possessing a higher degree of intelligence does not entitle one human to use another for his or her own ends, how can it entitle humans to exploit nonhumans?' Although exploitation in these cases is not well defined and in some cases is used as a catchall term for oppressive relations, it is important to be able to include other animals in the discussion about unequal economic/power relationships and look at the ways that capitalist accumulation motives are responsible for this kind of relationship.

Marx's theory of capitalist exploitation is not only aimed at identifying relationships of power and domination in an attempt to challenge and change them. Rather, it was part of a wider class analysis aimed at identifying conflicting class interests and

understanding class struggle. Whereas, the term exploitation used in context to new social movements is aimed at identifying a relationship that is 'unfair' (Omevedt, 1993). Omevedt (1993) argues that many social movements represent groups that were ignored as exploited by traditional Marxism. These challenges to class methodology she argues must be met by a reconstruction of a concept of exploitation to consider categories such as caste, gender and ethnicity (Omevedt, 1993). This approach allows for the consideration of certain social groups e.g. other animals that are ignored in Marx's theory of exploitation, as well as understanding this in context to other kinds of oppression.

Most factory farmed animals can not walk, run, stretch freely, or be part of a family or herd, they live for only a fraction of their normal life span, they are bought and sold at the will of humans, and their bodies and their labour are used for human ends with little consideration of their own needs and interests (Singer, 2002:227). The industrialised nature of food production is centred on manipulating other animals and their environments for the purposes of increasing efficiency and profitability. This relationship between humans and other animals is significantly impacted by the nature of capitalist commodity production. The way we commodify and modify other animal's bodies, the way we use them as objects in production, and the way we alienate them from their natural surroundings and behaviours is a relationships characterised by dominance and reflects the kind of system they are being subsumed in. Our culture is saturated in this type of relationship with other animals, whether it is in zoos, laboratories, circuses, and particularly in factory farms and slaughterhouses (Adams, 2010:94). The question is how do we conceptualise this relationship?

Other animals can be seen to be oppressed to the extent that they are denied species-specific behaviours, are treated as resources for humans use, and they are incarcerated and physically harmed (Cudworth, 2011:169). A possible way to proceed from this point is by engaging in Marx's views on exploitation, which seek to understand the material basis of oppression of other animals. Young (1990) argues that the injustice of exploitation consists in social and economic processes that are about a transfer from one group to another, which produces unequal distributions and enable a few to accumulate while they constrain many more. This explanation of

oppression and exploitation is more applicable to the describing the relationships between humans and other animals in society, in particular in food production. Exploitation in this context refers to the use of some being, space or entity as a resource for human ends, such as the labour and bodies of other animals used in agriculture. This is the definition of exploitation I will refer to from here onwards.

Our capitalist economic system and supporting legal, political and educational institutions legitimise the commodification and exploitation of other animals. This involves placing other animals in conditions that eliminate their enjoyment, that frustrate their natural instincts, cause acute discomfort, boredom, and denial of welfare (Harrison, 1964:3). Our culture generally accepts the oppression of other animals and finds nothing ethically or politically disturbing about their exploitation for the benefit of humans (Adams, 2010:94). 'For those who hold the dominant viewpoint in our culture, the surprise is not that animals are oppressed (though this not the term they would use to express human beings' relationship to the other animals), the surprise is that anyone would object to this' (Adams, 2010:94). This is consistent with Marx's theory about the superstructure (the social and political institutions of society) playing the role of legitimising mechanisms in the existing economic order.

Young (1990) argues that injustices of exploitation cannot be eliminated just by redistribution of goods, for as long as institutionalised practises and structural relations remain unaltered, unequal power dynamics will be replicated. For example, Singer (1995) identifies the ideology of speciesism, the moral prejudice in favour of humans based on being a member of a certain species, as important for legitimising the exploitation of other animals for human ends in western societies. This is reflected by Aristotle's inability to see the equality of slaves because of the class nature of Greek society. In the same way, institutionalised practices and structural relations distort the ability to see the character of human relationships with other animals. These social and economic relations as Marx suggests are not natural, they are historically and economically contingent. To understand another feature at the heart of exploitation of other animals let's now turn to how the commodity form conceals the nature of the relationship between humans and other animals.

Chapter 5: Visibility and the Animal Protection Movement

When's the last time you saw a pig? (Babe doesn't count.) Except for our pets, real animals – animals living and dying – no longer figure in our everyday lives. Meat comes from the grocery store, where it is cut and packaged to look as little like parts of animals as possible. The disappearance of animals from our lives has opened a space in which there's no reality check, either on the sentiment or the brutality (Pollan, 2002).

For most humans who live in western urban communities the most direct form of contact we have with other animals is at meal times and in our supermarkets (Singer, 2002). It is here where we buy meat, eggs and dairy uniformly and neatly packaged, it barely bleeds and rarely resembles the body of the living, breathing, walking, suffering animal from which it came. It is here, that we are brought into contact with the most extensive exploitation of other animals that has ever existed (Singer, 2002:95). Over the past 200 hundred years as large urban centers emerged and populations centralized, other animals have been progressively moved out of the vicinity and sight of most western populations (O'Sullivan, 2011:2). Today, although other animals remain an important part of the economy, in research, fashion and food, the contribution they make and the work they do remains confined to the fringes of society out of sight (O'Sullivan, 2011:3). As a strategy to combat the exploitation and suffering of other animals used in humans society, organisation and individual's part of the animal protection movement attempt to enhance the visibility of other animal suffering amidst a sea of decontextualized consumer products (Soron, 2011). This kind of campaigning suggests that the inaccessibility of animal suffering, hidden away in factory farms and slaughterhouses contributes to the perpetuation of that suffering (O'Sullivan, 2011).

Pollan (2006:333) argues that 'were the walls of our meat industry to become transparent literally or even figuratively, we would no longer continue to raise, kill and eat animals the way we do. Tail docking and sow crates and beak clipping would disappear over night, and the days of slaughtering 400 head of cattle an hour would come to an end. For who could stand the sight?' Activists and organisations

attempting to enhance the visibility of animal suffering, appear to perceive this as their primary function, circulating disturbing images of abattoirs, vivisection facilities, fur farms, kill floors etc. in order to make humans aware of the realities that are often obscured or concealed from society (Soron, 2011). Organisations around the world such as Compassion in World Farming, People For the Protection of Animals, the British Union for the Abolition of Vivisection, Mercy for Animals, Anonymous for Animal Rights and Animals Australia spend much of their time and money on uncovering operations, the purpose of which is to obtain images of animals in contexts the public are not normally exposed to (O'Sullivian, 2011:47). For example, both Animals Australia (2015b) and the RSPCA (2011) have a fact page on sheep mulesing in Australia. Mulesing is a practice that aims to reduce the incidence of flystrike (where fly's lay eggs under the sheep's skin) (Animals Australia, 2015b). This involves cutting away the skin and tissues from around the lamb's anus usually without anaesthetic to produce a scar free wool, without faecal/urine stains and skin wrinkles (Animals Australia, 2015b). In making these images and this information accessible for the public, organisations emphasise a link between visibility and the way other animals are treated in food production.

Documentaries such as Food Inc. and Earthlings have also unveiled slaughterhouse and factory farm practices, attempting to instil a higher level of consciousness to eating, making the invisible, visible. The People for the Ethical Treatment of Animals (PETA, 2002) produced a short documentary called *Meet Your Meat*, which includes the assertion that 'once you see for yourself the routine cruelty involved in raising animals for food, you'll understand why millions of compassionate people have decided to leave meat off their plates for good'. The film depicts cattle being castrated, their horns being removed, branding without anaesthetic, the removal of calves from their mothers shortly after birth, and chickens bred and drugged to grow so quickly that their hearts, lungs, and limbs cannot keep up (PETA, 2002). This idea of the metaphoric glass walled slaughterhouse permeates the campaigns of the animal protection movement. Actors at every level of the movement, including individuals, organisations and academics, adopt this as a central strategy and tactic (Soron, 2011). In doing so they attempt to 'counter distance and concealment as mechanisms of power by making them accessible for the eye to see (O'Sullivan, 2011). The assumption underlying this is that the community does not realise the many ways in

which they are complicit in the harming of other animals and that these practices would come to a halt if there were a breach in the confinement of what is invisible. Thus, animal advocates commonly place the possession of visibility firmly at the centre of the equation for change.

The 'glass abattoir' strategy to improve visibility is a powerful and concrete expression of the relations between 'power through transparency' (Pachirat, 2011:247). However, this does not properly acknowledge the role of economic imperatives in the treatment and use of other animals. Pachirat (2011:253) argues that the relation between sight and transformation is more nuanced than 'simple binaries between visible/invisible, plain/hidden and open/confined can accommodate'. This approach to social and political transformation has the potential to be hijacked to generate more effective ways of assisting capital accumulation. For example, the American Meat Institute (2013) developed a campaign to combat the glass wall approach of the animal protection movement. The American Meat Institute (2013) created both print and video tours of two large beef and pork slaughterhouses in an effort to give consumers and the media interested in animal welfare 'accurate' information about how other animals are handled and slaughtered in U.S. meat packing plants. Another example is Fair Oaks Farms (2015) in the U.S who have turned their pig and dairy farm into a tourist attraction. Fair Oaks Farm (2015) is a commercial factory farm with 36,000 dairy cows and where 2700 sows are impregnated to produce 75,000 pigs for slaughter annually. On daily tours humans can tour farrowing and gestation barns, watch calves being born, and cows being milked on giant mechanised carousels (Fair Oaks Farms, 2015). This large commercial factory farm aims to provide transparency by connecting consumers with the story behind their food and educating the public about modern farming efforts (Fair Oak Farms, 2015). In these examples, industry marketing has in many ways defied the logic of transparency campaigns employed by the animal protection movement. The logic of 'who can stand the sight' has been used in an attempt to restore faith in the meat industry, transform the image of factory farms, and harnessed to make profit. Making the exploitation and oppression of other animals visible 'may as well result in apathy as action' (Pachirat, 2011:254).

The animal protection movement has advanced powerful and compelling messages and campaigns against the treatment of other animals as commodities; however, it has tended to regard commodification as a matter of morally inappropriate attitudes rather than as a basic drive of the capitalist mode of production. The conditions other animals are subjected to exist to a large degree because of the definition of other animals as commodities and as food (a social construction exacerbated by the fundamental processes of the capitalist market), and the drive for capital accumulation (Winders and Nibert, 2004). Francione (2000:166) argues that the acceptance of the commodity status of other animals underpins our 'moral schizophrenia' towards them. This paradoxical relationship with other animals is most apparent in relation to the way we consider them both as friends and as food. Some other animals we view as subjects – those companion animals that we love and are part of our families – and other animals we treat as objects – those that humans stick their forks into at the dinner table (Morgan and Cole, 2011:112). Without acknowledging this link between capitalism and the exploitation of other animals, the animal protection movements will face obstacles in alleviating all the various forms of entangled oppression (Winders and Nibert, 2004). Therefore, visibility may be a necessary but not sufficient element for change. Marx's concept of commodity fetishism enables us to retain a sense of moral opposition to the commodification and exploitation of other animals, while considering how this relationship is impersonally mediated through market exchange and tied directly to the capitalist commodity production.

Commodity Fetishism

Commodity fetishism refers to the way in which the exchange process detaches commodities from the social relations of their production (Marx, 1887). As discussed in chapter 3, Marx (1887) argues that in the exchange of use values the social relationship between humans and their labour becomes merely a relationship between things. In the realm of exchange we are presented with commodities removed from their productive origins and we experience them primarily as objects to be exchanged (Marx, 1887:46). Therefore, we perceive the value of commodities in relation to one another rather than the labour that went into them (Marx, 1887:46). It is this

condition that defines the fetishism, which attaches itself to the products of labour as soon as they are produced as commodities. The result is that the social relations of production are disguised by the objective materiality of commodities and the type of value that prevails in the sphere of exchange. Therefore, the invisibility of the conditions in which commodities are produced is related to the fetishism of commodities as Marx conceived it. However, there is a difference between making something visible and actually being able to understand the network of relationships and processes that are at work in the production of commodities. Other animals used in food production even when depicted in images of factory farms and slaughterhouses in many ways still maintain object status.

In looking at the commodification of other animals, it can be seen how commodity fetishism works to hide the exploitation of other animals. For example, when humans consume chicken nuggets there is no remnants left of chicken that died to produce it, nor of the overcrowded, hot tin shed he or she lived in for their short, painful life before they were slaughtered. Commodities appear as simple consumables, divorced from their entire productive history characterised by exploitation and oppression. However, the fetishism of commodities cannot be challenged and the exploitative relations are not necessarily apparent simply through visual depictions of productive conditions. Harvey (2010:41) argues that attempts like this that aim to bridge the distance between production and exchange usually fail to challenge the social relations that produce and sustain the conditions of inequality and exploitation. Recall that Marx viewed value to be a concept specific to capitalism; thus, the fetishism of commodities is an unavoidable condition of the capitalist mode of commodity production. 'The whole mystery of commodities, all the magic and necromancy that surrounds the products of labour as long as they take the form of commodities, vanishes therefore, so soon as we come to other forms of production' (Marx, 1987:49). Therefore, revealing how animal products are fetishized requires an analysis of how other animals are used and objectified in production, and how this is inextricably linked to the way that capitalist production produces commodities.

The objectification of other animals does not just happen on the shelves at supermarkets, it happens in the production process as discussed in chapter 2-4 and it also pervades the way we culturally conceive of other animals. Inevitably other

animals are used by most of the population through one form or another as resources. Thus, there is a role to be played by culture in the construction of other animals as commodities as well. Although an analysis of the ideological commodification and objectification of other animals falls outside the scope of this thesis, it is important to acknowledge that the social and cultural realms of society reinforce and justify the economic commodification and exploitation of other animals (Nibert, Torres, 27). Therefore, visually revealing the conditions of other animals in factory farms and slaughterhouses does not necessarily make apparent all of the intricacies of productive relations, such as, alienation, exploitation, or the capacity of other animals to labour and resist. Transparency in the food industry is not enough to restore that subjectivity of other animals required for challenging the way commodification objectifies and 'de-animalises' other animals (Adams, 2010).

In conclusion, the concept of commodity fetishism enables us to understand how capitalist commodity production can contribute to the complacency of consumers. Commodities materiality conceals the social relations in which they are produced, and they appear on the shelves detached from their productive origins. Animal advocates often focus on this disconnect and ascribe considerable importance to bridging this gap by making the community more aware of animal suffering. The impulse to link sight and political transformation is strong, however, this does not properly acknowledge the role of economic imperatives in shaping the treatment and use of other animals. Commodity fetishism is important for understanding how the structure of capitalist commodity production itself is caught up in this process of distancing humans from the realities of production. Therefore, the concept helps us understand how the commodity form is at the heart of animal alienation and exploitation.

Conclusion

In 2011, ABC's Four Corners program did an exposé on the treatment of live Australian cattle exported to Indonesia (Animals Australia, 2011). The program depicted graphic footage of cows being beaten and slaughtered in troubling ways in an Indonesian slaughterhouse (Animals Australia, 2011). At the time it received widespread media attention, including articles in The Age and Sydney Morning Herald, it featured in major news programs, Animals Australia and RSPCA launched campaigns to ban live animal export and petitions were set up even by non-animal NGOs including GetUp. Consequently, on the 8th of June 2011, Prime Minister Gillard announced a suspension on the live cattle trade to Indonesia (Animals Australia, 2011). This live export ban was lifted a mere month later without much public protest (Animals Australia, 2011). Condemnation also spread through Australian social and public media recently in reaction to coverage on the annual Yulin dog eating festival in China and in response to the spectacle of bullfighting in Spain (Koziol, 2015). However, the gigantic mechanized apparatus whose sole function is to produce, destroy and process the bodies of millions of other animals each year receives little to no mainstream public attention. Acts of violence against other animals are a daily norm in most societies around the world. The violence has become so normalised that we only become aware of it when the apparatus is unexpectedly disrupted (Sanbonmatsu, 2011). Only then does an otherwise invisible system of 'mass killing emerge briefly from the background of daily life to enter the public's consciousness and then only as a spectacle' (Sanbonmatsu, 2011:3).

Similarly, questions about our relationships with other animals have ebbed and flowed throughout the history of philosophical thought (see chapter 1). The most influential statements of moral concern for other animals have come from theories of utilitarianism and liberal rights theory, which inform much of the current advocacy work of both individuals and organisations (Nibert, 2002). Their strategies for change tend to focus on promoting increased individual awareness, and improving legislative protection for other animals. On one hand, it is true that important animal protection advances have been made within the framework of liberal rights theory. As more legislative progress has been made around the world in the last ten years than in the

previous two hundred (Sanbonmatsu, 2011:29). However, although there is a trend of states offering greater protection to animals, we also raise, kill and eat more other animals than at any other point in history (Cochrane, 2010:2). The global per capita consumption of meat has more than doubled between 1961 and 2007 and is expected to double again by 2050 (Cochrane, 2010:2).

Mainstream animal protection literature makes the conditions in factory farms and slaughterhouses seem as if they in some way exist in isolation from the global economic system. In chapter 1 it was argued that while the animal movement criticises the treatment of other animals as commodification is not viewed as a feature of capitalist production (Soron, 2011:61). Although economic factors that primarily lead to the oppression of other animals go back thousands of years to the latter stages of hunting and gathering societies, the nature of our current relationship with other animals is particularly shaped by capitalist imperatives (see chapter 2) (Nibert, 2002:237). 'In the early stages of domestication humans invaded and became part of the animal social systems ... but under industrial capitalism these systems are no longer intact so that animals have become reduced to mere appendages of computers and machines...Present day capitalism tends eliminate anything in the animal which cannot be made productive. The animal is modified to suit the production system and its offending parts simply cut off' (Noske, 1997:20). Chapter 2 argues that to increase profitability, capitalists adopt practices and technologies that reduce the amount of labour time necessary for producing commodities by increasing the efficiency and productivity of production (Gunderson, 2011). Capitalism is predominantly concerned with accumulating capital, which is at odds with the welfare of other animals.

This is not to say that the numerous books, articles, pamphlets, lectures, conferences and protests challenging the oppression of other animals in the last quarter century are unimportant, however, such critiques tend to focus on the morality of how we treat other animals. Concerns for the suffering of other animals may be ethical, but the way we treat and use other animals is integrally linked to the nature of capitalist commodity production. Furthermore, animal suffering has significantly increased and is intrinsically linked to the rise and spread of capitalist commodity production. Some critical theorists have started to point to capitalism as key to animal suffering

including Benton (1993), Gunderson (2011), Nibert (2002), Noske (1997), Sanbonmatsu (2011), and Torres (2007). These theorists have begun to provide an explanation for animal suffering rather than just a description of it (Gunderson, 2011:260). This thesis has attempted to contribute to this growing body of literature in arguing that capital's drive for expansion and accumulation is in a large way contributing to the suffering of other animals used in food production. To make this argument, this thesis has predominantly used a Marxist conceptual framework.

It has become common for animal protection scholars to accuse Marx and his work of being speciesist and anthropocentric (Kowalczyk, 2014). Benton (1993:42) argues that Marx was 'wrong about animals in ways which cut him off from a powerful extension and deepening of his own ethical critique of prevailing modes of appropriation of nature'. As was discussed in chapter 3, Marx did go to some lengths to highlight the discontinuities between humans and other animals in his analysis. In contrast, mainstream animal protection philosophy tends to emphasise the commonalities between humans and other animals to justify moral consideration (Cochrane, 2010). Whether it be the shared capacity for suffering as emphasised by Bentham and Singer, or the shared capacity for intentional action as emphasised by Regan, these continuities serve as the central argument for the extension of justice to other animals (Cochrane, 2010:96). Consequently, many advocates feel accepting any discontinuity between humans and other animals detracts from the case for animal liberation (Cochrane, 2010). However, Marx's account of the uniqueness of human labour, whilst not entirely accurate, is not necessarily detrimental to the protection of other animals. It is important to recognise that other animals are different to humans and that they are a heterogeneous group, all with different capacities. The moral consideration of other animals should not be attached to their similarities to humans. Therefore, the disparities between humans and other animals that Marx emphasises do not necessarily discredit his ability to contribute to an analysis of other animals.

Marx's critique of capitalist logic of expansion and accumulation, his analysis of value, the commodity form, and the way that the class system leads to alienation and exploitation provides insight into the way other animals are treated within current agricultural conditions. However, just because Marxist concepts and forms of analysis can be applied to other animals does not mean that Marxism is perfectly

suitable for an analysis of other animals. For Marx, the qualitative differences between humans and other animals mean that other animals are not important subjects in his analysis of the economic system. Chapter 3, 4 and 5 are dedicated to reconsider other animals using Marx's conceptual framework.

This thesis challenged Marx's exclusion of other animals from the analysis of alienation, labour and exploitation. Chapter 3 disputed the idea that it is humans' species being, (our ability to intentionally labour) that results in us being alienated when subsumed into the productive process. This chapter argued that other animals may not experience loss in the same way as human labour in production; however, they do experience a form of alienation. Chapter 4 argued that although other animals may not fit accurately into a traditional Marxist class analysis and the emancipatory potential the working class, it is possible to broaden categories of labour, resistance and exploitation to capture the way capitalist relations shape the experiences of other animals particularly in food production. Lastly, chapter 5 demonstrated that commodity fetishism is useful in understanding the way that the commodity form conceals the reality of relations between humans and other animals in the production of commodities.

In sum, it is possible to include other animals in the analysis of capitalism using a Marxist framework. However, the concepts cannot be simply appropriated to include other animals. Some concepts are specifically designed to exclude other animals as unimportant actors. Marxism is particularly useful for historicising the relations of production and treatment of other animals, dispelling ideas that normalise and naturalise conditions such as the commodification of other animals. Marxism reorients the economic in an analysis of societal power relations.

So what is the relationship between the treatment of other animals and capitalism? Firstly, it is clear that capitalism does not cause the exploitation of other animals. Other animals have been used as resources throughout history in war, in transport, to aid hunting, as food and as entertainment (Torres, 2008). However, this thesis argued that certain features of capitalist production exacerbate the suffering of other animals. Furthermore, capitalism shapes the nature of animal exploitation and alienation in contemporary society. The industrialised nature of food production, the demand for

huge quantities of meat and the capitalist imperative to accumulate capital has led directly to other animals being bred, confined, fattened, and slaughtered in the most cost effective ways. These intensive forms of production produce cheaper meat, dairy and eggs for consumers, and wider profit margins for capitalists at the expense of other animals. Other animal's whole lives are shaped by this capitalist logic, from the food they eat, to the length of time they live, their interactions with other animals, their physical surroundings, and contact with nature. Capitalism may not be the cause of the suffering of other animals, but it certainly has been a contributing factor in increasing both its scale and severity.

Is capitalism a necessary impediment for achieving justice for animals? This thesis has predominantly been about understanding how and why other animals are being treated in the way they are in modern capitalists societies, not explaining how other animals should be treated. However, it is important to address why that was not considered in this thesis. Firstly, Marxism is not primarily a normative theory; the concept of how we should treat other animals is largely irrelevant for Marxists. Secondly, Marx's insights into overcoming exploitative capitalist relations, involves fundamental social and economic transformation. However, as argued above capitalism is not entirely responsible for the status of other animals in society. Therefore, the implications of this analysis do not follow the natural Marxists conclusions (i.e. overthrow capitalism and instituting socialism).

Putting all this aside, the answer probably depends on the definition of justice used. If justice means improving the conditions of other animals and decreasing the level of suffering, then legislative change and consumer awareness might be powerful enough to achieve these changes. However, if justice means abolition of the use of other animals as resources then this may require more substantial structural change. As this kind of change would have considerable impacts for powerful capitalist vested interests. In sum, while Marxism has been useful for providing insight into the way other animals are used in food production, it does not mean that Marxism is necessarily suitable for extending justice to animals. However, Marxism is important for acknowledging the role of economic forces in the treatment of other animals, which is important for achieving change for other animals.

Where to from here? This thesis has left many unanswered questions. Many Marxists concepts rely on binary thinking that relegates entities involved in production to either object status or human subject status. However, this thesis argued that other animals are neither machines nor humans in the production process, they occupy a complex position as commodities and labour, thus, it is important to theoretically distinguish them. Including other animals as labour could potentially help allocate them more accurately as subjects in the productive process, however, the concept of labour needs broadening. A was discussed in chapter 4, Marx's definition of labour is quite specifically describing the capabilities of humans in production. Although other animals may not meet this narrow definition, there are particular cases where they display qualities that could be considered labour by another definition. Other animals do actively contribute to the production of commodities in factory farms and slaughterhouses, whether it is through their biological capabilities of reproduction and growth or just their ability to move. Thus, 'objective factors of production' does not seem to properly describe the way other animals participate in production. Classifying the contribution of other animals as labour could also potentially aid the animal protection movements attempt to emphasise the subjectivity of other animals. Additionally, the concept of resistance needs to be reworked to capture the capabilities of other animals and not just in context to humans' capacity for resistance. This too could restore subjectivity to other animals in theory.

In conclusion, this thesis has been about providing an explanation for the suffering of other animals. Using a Marxist framework, the suffering and exploitation of other animals has been linked to the alienating nature of labour, the use of other animals for human gains, the nature of capitalist commodity production and the capitalist profit motive. The exploitation of other animals in food production to a large extent is a result of the definition of other animals as commodities and as food (Adams, 2010). However, the drive to commodify nature and the conditions in factory farms and slaughterhouses are constructed fundamentally by the capitalist drive for expansion and accumulation. Marxism has been particularly useful in contextualising the treatment of other animals and analysing the way capitalism exacerbates the suffering of other animals. Overall it is clear that economic components of oppression are crucial for understanding the suffering and exploitation of other animals in food production.

References:

Adams, C. (2010) *The Sexual Politics of Meat: A Feministe Vegetarian Critical Theory*. New York: Continuum

American Meat Institute (2013) 'If Meat Plants Had Glass Walls', *American Meat Institute*, accessed on 28/9/2015 at:

http://www.animalhandling.org/ht/a/GetDocumentAction/i/89462

Animals Australia (2011) 'Ban Live Export', *Animals Australia*, accessed on 28/9/2015 at: http://www.banliveexport.com/features/live-export-investigation-on-four-corners.php

Animals Australia (2015a) 'Dairy Cow fact Sheet', *Animals Australia*, accessed on 28/9/2015 at: http://www.animalsaustralia.org/factsheets/dairy cows.php

Animals Australia (2015b) 'Mulesing', *Animals Australia*, accessed on 28/9/2015 at: http://www.animalsaustralia.org/issues/mulesing.php

Aussie Abattoirs (2015) 'The Facts: Overview', *Aussie Farms*, accessed on 28/9/2015 at http://www.aussieabattoirs.com/facts

Australian Chicken Meat Federation Inc., (ACMF) (2011) 'Industry Facts and Figures: Efficiency of Chicken Meat in Australia accessed at http://www.chicken.org.au/page.php?id=4.

Bentham, J. (1823) An Introduction to the Principles of Morals and Legislation. New York: W. Pickering

Benton, T. (1993) *Natural Relations: Ecology, Animal Rights and Social Justice*. London: Verso

Benton, T. (2011) 'Humanism = Speciesism? Marx on Humans and Animals' in J. Sanbonmatsu's (eds) *Critical Theory and Animal Liberation*, New York: Rowman & Littlefield Publishers. Inc.

Berger, J. (1980) About Looking, New York: Pantheon

Berne Declaration (BD) and EcoNexus (2013) 'Agropoly: A Handful of Corporations Control World Food Production', *Berne Declaration & EcoNexus*, accessed on 28/9/2015 at:

http://www.econexus.info/sites/econexus/files/Agropoly Econexus BerneDeclaration.pdf

Boggs, C. (2011) 'Corporate Power, Ecological Crisis and Animal Rights' in J. Sanbonmatsu's (eds) *Critical Theory and Animal Liberation*. New York: Rowman & Littlefield Publishers. Inc.

Clark, J. (2014) 'Labourers or Lab Tools? Rethinking the Role of Lab Animals in Clinical Trials' in R. Twine & N. Taylor's (eds) *The Rise of Critical Animal Studies: From the Margins to the Centre*, New York: Routledge

Cleaver, H. (2000) Reading Capital Politically. Leeds: Anti/Theses

Cochrane, A. (2010) *An Introduction to Animals and Political Theory*. London: Palgrave Macmillan

Compassion in World Farming (CWF) (2009) 'Beyond Factory Farming: Sustainable Solutions for Animals, People and the Planet', *Compassion in World Farming*, accessed on 28/9/2015 at: https://www.ciwf.org.uk/media/3817096/beyond-factory-farming-report.pdf

Cook, C. (2010) 'Sliced and Diced: The Labour You Eat' in D. Imhoff's (eds) *The CAFO Reader: The Tragedy of Industrial Animal Factories*, London: Foundation for Deep Ecology

Cudworth, E. (2011) 'Most Farmers Prefer Blondes: Social Intersectionality and Species Relations' in B. Carter & N. Charles' (eds) *Human and Other Animals: Critical Perspectives*, New York: Palgrave Macmillan

DeMello, M. (2012) *Animals and Society: An Introduction to Human-Animal Studies*, New York: Columbia University Press

Dickens, P. (2003) 'The Labour Process: How the Underdog is Kept Under', *Society & Animals*, 11:1:69-72

Drake, P. (2015) 'Marxism and the Nonhuman Turn: Animating Nonhumans, Exploitation and Politics with ANT and Animals Studies', *Rethinking Marxism*, 27:1:107-122

Eckersley, R. (1992) Environmentalism and Political Theory. Albany: SUNY Press

Elster, J. (1985) Making Sense of Marx. New York: Cambridge University Press

European Food and Safety Authority (EFSA) (2010) 'Scientific Opinion on the Influence of Genetic Parameters on the Welfare and Resistance to Stress of Commercial Broilers', *EFSA Journal*, 8:7:1-82

Fair Oak Farms (2015) accessed on 28/9/2015 at: http://fofarms.com/

Ferkiss, V. (1993) *Nature, Technology and Society*. New York: New York University Press

Fine, B., and Saad-Filho, A. (2004) Marx's Capital. 4th edn. London: Pluto Press

Food and Agriculture Organization of the United Nations (FAOSTAT) (2010) 'Data', *The United Nations*, accessed on 28/9/2015 at: www.faostat.fao.org/

Francione, G., and Garner, R. (2010) *The Animal Rights Debate: Abolition or Regulation?* New York: Columbia University Press

Francione, G. (1995) *Animals Property & The Law*. Philadelphia: Temple University Press

Francione, G. (2000) *Introduction to Animals Rights: Your Child or the Dog?* Philadelphia: Temple University Press

Fraser, A., and Broom, D. (1990) Farm Animal Behaviour and Welfare. Philadelphia: Bailliere Tindall

Galusky, W. (2014) 'Technology as Responsibility: Failure, Food Animals and Labgrown Meat', *Journal of Agricultural and Environmental Ethics*, 27:6:931-948

Guither, H. (1998) *Animal Rights: History and Scope of a Racial Social Movement*. Carbondale: Southern Illinois University Press

Gunderson, R. (2011) 'From Cattle to Capital: Exchange Value, Animal Commodification and Barbarism', *Critical Sociology*, 39:2:259-275

Gurian-Sherman, D. (2008) CAFOs Uncovered: The Untold Costs of Confined Animals Feeding Operations. Cambridge: Union of Concerned Scientists

Hanson, J. (2010) 'Genetically Engineered Farm Animals: A Brazen effort to Make Nature Fit the Industrial Mold' in D. Imhoff's (eds) *The CAFO Reader: The Tragedy of Industrial Animal Factories*. London: Foundation for Deep Ecology

Haraway, D. (2008) When Species Meet. London: University of Minnesota Press

Harrison, R. (1964) *Animal Machines: A New Factory Farming Industry*. London: Stuart

Harvey, D. (2010) A Companion to Marx's Capital. New York: Verso

Heinrich Boll Foundation and Friends of the Earth Europe (HBF and FOEE) (2014) 'The Meat Atlas: Facts and Figures about the Animals we Eat', *Heinrich Boll Foundation and Friends of the Earth Europe*, accessed on 28/9/2015 at https://www.foeeurope.org/sites/default/files/publications/foee_hbf_meatatlas_jan2014.pdf

Higgin, M., Evans, A., and Miele, M. (2011) 'A Good Kill: Socio-Technical Organisations of Farm Animal Slaughter' in B. Carter and N Charles' (eds) *Humans and Other Animals: Critical Perspectives*, New York: Palgrave Macmillan

Holden, P., and Ensminger, M. (2006) *Swine Science*. Upper Saddle River, NJ: Pearson Prentice Hall

Horrigan, L., Graham, J., and McKenzie, S. (2010) 'Antibiotic Drug Abuse: CAFOs Are Squandering Vital Human Medicines' in D. Imhoff's (eds) *The CAFO Reader: The Tragedy of Industrial Animal Factories*, London: Foundation for Deep Ecology

Hribal, J (2003) 'Animals Are Part of the Working Class: A Challenge to Labour History', *Labour History*, 44:4:435-453

Hribal, J. (2007) 'Animals, Agency and Class: Writing the History of Animals from Below', *Human Ecology Review*, 14:1:101-112

Hribal, J. (2012) 'Animals Are Part of the Working Class Reviewed', *Borderlands*, 11:2:1-37

Ingold, T. (1983) 'The Architect and the Bee: Reflections of the Work of Animals and Men', *Man, New Series*, 18:1:1-20

Kellogg, R., Lander, C., Moffit, D., and Gollehon, N. (2000) *Manure Nutrients Relative to the Capacity of Cropland and Pastureland to Assumulate Nutrients: Spacial and Temporal Trends for the United State*, Natural Resources Conservation Service U.S. Department of Agriculture, Washington

Kowalczyk, A. (2014) 'Mapping Non-Human Resistance in an Age of Biocapital' in N. Taylor & R. Twine's (eds) *The Rise of Critical Animal Studies: From the Margins to the Centre*. New York: Routledge

Koziol, M. (2015) 'Yulin Dog Meat Festival of Cruelty to Slaughter 10,000 dogs', *Sydney Morning Herald*, accessed on 28/09/2015 at: http://www.smh.com.au/environment/animals/yulin-dog-meat-festival-of-cruelty-to-slaughter-10000-dogs-20150615-ghouxx.html

Llorente, R. (2011) 'Reflections on the Prospects for a Non-Speciesist Marxism' in J. Sanbonmatsu's (eds) *Critical Theory and Animal Liberation*. New York: Rowman & Littlefield Publishers. Inc.

Loughnan, S., Bastian, B., and Haslam, N. (2014) 'The Psychology of Eating Animals', *Current Directions in Psychology Science*, 23:2:104-108

Marx, K. (1959) *Economic and Philosophic Manuscripts of 1844*. Moscow: Progress Publishers

Marx, K. (1973) Grundrisse. London: Penguin

Marx, K. (1887) *Capital: A Critique of Political Economy. Volume 1: The Process of Production of Capital.* Moscow: Progress Publishers, accessed on 28/9/2015 at: https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf

Mills, S., and Williams P. (1986) 'Political Animals', Marxism Today, 1:30-34

Morgan, K., and Cole, M. (2011) 'The Discursive Representation of Nonhuman Animals in a Culture of Denial', in N. Charles, & B. Carter's (eds) *Human and Other*

Animals: Critical Perspectives, New York: Palgrave MacMillan

Murry, M. (2011) 'The Underdog in History: Serfdom, Slavery and Species in the Creation and Development of Capitalism', in N. Taylor & T. Signal (eds) *Theorizing Animals: Rethinking Humanimal Relations*. Boston: Brill

Nibert, D. (2002) *Animal Rights/Human Rights: Entanglements of Oppression and Liberation*. New York: Rowman & Littlefield Publishers Inc.

Nibert, D. (2013) *Animal Oppression and Human Violence: Domesecration, Capitalism and Global Conflict.* New York: Columbia University Press

Nonhuman Rights Project (NhRP) (2015) 'Judge Recognises Two Chimpanzees as Legal Persons, Grants them Writ of Habeas Corpus', *NhRP*, accessed on 28/9/2015 at: http://www.nonhumanrightsproject.org/2015/04/20/judge-recognizes-two-chimpanzees-as-legal-persons-grants-them-writ-of-habeas-corpus/

Noske, B. (1997) *Beyond Boundaries: Humans and Animals*. New York: Black Rose Books

Omvedt, G. (1993) Reinventing Revolution: New Social Movements and the Socialist Tradition in India. New York: M.E. Sharpe

O'Sullivan, S. (2011) *Animals, Equity and Democracy*. Hampshire: Palgrave Macmillan

Pachirat, T. (2011) Every Twelve Seconds: Industrialised Slaughter and the Politics of Sight, London: Yale University Press

People for the Ethical Treatment of Animals (PETA) (2002) Meet Your Meat, *PETA*, accessed on 28/9/2015 at http://www.peta.org/videos/meet-your-meat/

Perlo, K. (2002) 'Marxism and the Underdog', Society and Animals, 10:3:303-318

Pollan, M. (2002) 'An Animal's Place', *New York Times Magazine*, accessed on 28/9/2015 at http://michaelpollan.com/articles-archive/an-animals-place/

Pollan, M. (2006) *Omnivores Dilemma: A Natural History of Four Meals*. New York: Penguin Press

Regan, T. (1983) *The Case for Animals Rights*. Berkeley: University of California Press

Roelvink, G. (2013) 'Rethinking Species-being in the Anthropocene', *Rethinking Marxism*, 25:1:52–69

Royal Society for the Prevention of Cruelty for Animals (RSPCA) (2011) 'Prevention and Control of Blowfly Strike in Sheep', *RSPCA*, accessed on 28/9/2015 at: http://www.rspca.org.au/sites/default/files/website/Campaigns/Mulesing/Research_re port - Prevention and control of flystrike August 2011.pdf

Sanbonmatsu, J. (2011) 'Introduction', in J. Sanbonmatsu's (eds) *Critical Theory and Animal Liberation*. New York: The Rowman & Littlefield Publishing Group, Inc.

Singer, P. (2002) Animal Liberation. New York: HarperCollins Publishers

Singer, P. (2009) 'All Animals Are Equal' in J. Sterba's (eds) *Ethics: The Big Questions*, New Jersey: Wiley-Blackwell

Sorenson, J. (2011) 'Constructing Extremists, Rejecting Compassion: Ideological Attacks on Animal Advocacy from Right and Left', in J. Sanbonmatsu's (eds) *Critical Theory and Animal Liberation*. New York: Rowman & Littlefield Publishers. Inc

Soron, D. (2011) 'Road Kill: Commodity Fetishism and Structural Violence', in J. Sanbonmatsu's (eds) *Critical Theory and Animal Liberation*. New York: Rowman & Littlefield Publishers, Inc.

Stepaniak, J. (2000) Being Vegan. Los Angeles: Lowell House

Stoll- Kleenmann, S., and O'Riordan, T. (2015) 'The Sustainability Challenges of Our Meat and Dairy Diets', *Environment: Science and Policy for Sustainable Development*, 57:3:34-48

Taylor, A. (2009) *Animals and Ethics: An Overview of the Philosophical Debate.* 3rd edn. Ontario: Broadview Press

Toledo, V. (1996) 'The Ecological Crisis: a Second Contradiction of Capitalism', in T. Benton's (eds) *The Greening of Marxism*. London: The Guilford Press

Torres, B. (2008) *Marking a Killing: The Political Economy of Animal Rights*. Oakland: AK Press

United States Food and Drug Administration (FDA) (2010) Summary Report on Antimicrobials Sold or Distributed for use in Food Producing Animals, Department of Health and Human Services, Maryland

Verma, V. (1998) 'Exploitation and Justice: Should we be Interested in a Theory of Exploitation?' *Economic and Political Weekly*, 33:3:115-121

Vint, S. (2009) 'Species and Species-Being: Alienation Subjectivity and the Commodification of Animals' in M. Bould & C. Mieville's (eds) *Red Planets: Marxism and Science Fiction*, Connecticut: Wesleyan University Press

Wilde, L. (2000) 'The Creatures, Too, Must Become Free': Marx and the Animal/Human Distinction', *Capital & Class*, 24:3:37-53

Winders, B., and Nibert, D. (2004) 'Consuming the Surplus: Expanding 'Meat' Consumption and Animal Oppression', *International Journal of Sociology and Social Policy*, 24:9:76-96

Yoshihara, N., and Veneziani (2013) 'Exploitation of Labour and Exploitation of Commodities: A New Interpretation', *Review of Radical Political Economy*, 45:4:517-524

Young, I. (1990) *Justice and the Politics of Difference*. Princeton: Princeton University