IT'S JUST AN ANIMAL?

A THEORETICAL FRAMEWORK FOR UNDERSTANDING THE EMERGENCE OF ANIMAL CATEGORIES IN THE UNITED STATES

by

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ABSTRACT

This dissertation examines why so many Americans have come to accept physically arduous conditions for animal species categorized as "livestock," but have by contrast come to exhibit considerable concern for other animal species that comprise the "endangered species" category. To that end, the research presented here draws largely on Michel Foucault and Clifford Geertz to examine how the animal categories "livestock" and "endangered species" developed in the United States. This research suspends normative claims regarding animal treatment in the United States and employs a Foucaultian perspective to examine how these animal categories emerged in the United States starting in the nineteenth century and how they developed over time. An interpretative framework based on Geertzian analysis supplements the Foucaultian perspective by demonstrating that variations within the two animal categories may also reflect symbolic attachments and systems of self-understanding for Americans.

This dissertation yields three conclusions. First, the categories endangered animal species and livestock are not timeless objective technical definitions, but are categories that developed in the last two centuries out of material interests and competing scientific views. These categories function because various techno-scientific elements disconnect humans from animals and produce truths about different animals within a particular system of knowledge, or they operate in a system of meaning as Geertzian analysis reveals. Second, these categories supervene on the singular conception of "animality" that often serves as the conceptual foundation in animal welfare literature, suggesting that it is conceptually not viable to discuss animal welfare issues without reference to a particular category. Since the species in each category serve different functions in a system of managed population and are also situated in systems of meaning and self-understanding, this can explain why the differing standard of treatment that is often considered an ethical contradiction has been firmly maintained in the United States. Third, the following research demonstrates that Foucaultian analysis and Geertzian thick description do not present clear cut, mutually exclusive rival interpretations. Rather, these two approaches can complement one another and in some ways Geertzian analysis confirms the Foucaultian view in this research.

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LIST OF ABBREVIATIONS

Works by Michel Foucault are abbreviated in this dissertation as follows:

- MC (1965). *Madness and Civilization: A History of Insanity in the Age of Reason* (Original work published as *Histoire de la folie*, 1961).
- OT (1970). *The Order of Things: An Archaeology of the Human Sciences* (Original work published as *Les mots et les choses*, 1966).
- DL (1972). The Discourse on Language. In *The Archeology of Knowledge* (Original work published as *L'ordre du discours*, 1971).
- DP (1977). *Discipline and Punish* (Original work published as *Surveiller et punir: Naissance de la prison*, 1975).
- HS (1978). *The History of Sexuality: An Introduction* (Original work published as *La volenté de savoir,* 1976).
- TP (1980). Truth and power. In *Power/Knowledge: Selected Interviews and Other Writings*.
- TL (1980). Two Lectures. In *Power/Knowledge: Selected Interviews and Other Writings*.
- OS (1981). Omnes et Signulatim: Towards a Criticism of 'Political Reason.' In *The Tanner Lectures on Human Values, Vol. II.*
- SP (1982). Afterword: The Subject and Power. In *Michel Foucault: Beyond Structuralism and Hermeneutics*.
- NG (1984). Nietzsche, Genealogy, History. In *The Foucault Reader*.
- GV (1991). Governmentality. In *The Foucault Effect: Studies in Governmentality*.
- DS (1997). Il faut deféndre la société: Cours au Collège de France 1976.

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CHAPTER ONE:

INTRODUCTION

The [Donkey] said to himself: 'It makes me sick that just because he's small and sweet Dog should enjoy a life as a friend equal of Sir and his wife, whereas all I get is stick. Am I only fit to beat? What does Dog do? Lifts paw, gets kiss. If it's as simple as that why shouldn't I earn a pat as readily as the pup?'

-From Jean de La Fontaine's Fables

1.1. Background

"It's *just* an animal." People who do not regard animals as entities that warrant emotional attachments sometimes use this phrase in response to others who express strong emotions toward an animal. For instance, though a person may view a pet in familial terms, he or she will likely not get bereavement leave from work when that pet dies since it's just an animal, and not a human family member. Or, as Arnold Arluke (2006) recounts, a judge dismissed a case of an overt and intense physical beating of an animal because it involved "just a dog" (p. 1). Part of the reason why such a stark distinction between humans and animals has been maintained over time is the apparent difference in cognitive capacities. However, perceptions of animal cognitive capabilities and relevant standards of moral consideration have not remained static throughout history. The dominant Cartesian division between humans and animals stands in stark contrast with, for example, Aristotle's view that it is possible to measure differences between humans and animals along a sliding scale for different skills. According to Aristotle:

almost all animals present traces of their moral dispositions, though these distinctions are most remarkable in man. For most of them, as we remarked, when speaking of their various parts, appear to exhibit gentleness or ferocity, mildness or cruelty, courage or cowardice, fear or boldness, violence or cunning; and many of them exhibit something like a rational consciousness, as we remarked in speaking of their parts. For they differ from man, and man from other animals, in a greater or less degree; for some of these traits are exhibited strongly in man, and others in other animals (Fourth Century BCE/2005, p. 194).

Aristotle's view as expressed in his writings on animals did not therefore demarcate a fixed line between animals and humans, but instead distinguished between different kinds of skills in which animals could sometimes actually surpass human beings. Going back before Aristotle's time, "in the covenant with Noah," animal trials historian E.P. Evans (1906) writes, "it was declared that human blood should be required not only 'at the hand of man,' but also 'at the hand of every beast'" (p. 168). This means, accordingly, that if an animal kills a human being, then that animal should be stoned to death, but its "flesh shall not be eaten" (p. 169). Animals, or "beasts," were thus not so different from humans in that their harmful actions were treated equally to some extent, unlike the later Cartesian view that saw only human beings as rational and accountable, in contrast with thoughtless animals.

As Evans notes, the idea of prosecuting animals and treating their actions as crimes "seems to us irrational and absurd, that we can hardly believe that sane and sober men were ever guilty of such folly; yet the idea was quite familiar to our ancestors even in Shakespeare's day" (p. 157). For example, Shakespeare's Gratiano in *The Merchant of Venice* states:

Thy currish spirit govern'd a wolf, who, hang'd for human slaughter, even from the gallows did his fell soul fleet, and, whilst thou lay'st in thy unhallow'd dam, infus'd itself in thee; for thy desires are wolfish, bloody, starv'd, and ravenous (Evans, p. 157).

Indeed there have been numerous historically documented instances in Europe during the Middle Ages of animal trials, with cows, horses, pigs, and various other animals put on trial for crimes such as killing small children. As Evans recounts:

In ancient and mediaeval times domestic animals were regarded as members of the household and entitled to the same legal protection as human vassals. In the Frankish capitularies all beasts of burden or so-called juments were included in the king's ban and enjoyed the peace guaranteed by royal authority: Ut jumenta pacem habent similiter per bannum regis Old Germanic law also recognized the competency of these animals as witnesses in certain cases (p. 10-11).

There have been some examples of such animal prosecutions in colonial America as well: "a cow, two heifers, three sheep and two sows" were hung at the gallows in 1662 for committing acts of bestiality with a New Haven man (p. 149). Vestiges of ecclesiastical excommunication for animals remained in the United States even until the late 1800s. One such instance entailed serving to rats letters that warned them of impending extermination, giving the rats a chance to vacate of their own volition the premises concerned, and "lest the rats should overlook and thus fail to read the epistle, it is rubbed with grease, so as to attract their attention, rolled up and thrust into their holes" (p. 129).

These instances are relatively alien in relation to human-animal relationships today in the United States, as animals are not considered moral agents subject to legal ramifications for their actions. Throughout American history, wild animals and farm animals have primarily served as entities for human interests and animal welfare did not become an issue of significant concern until the late nineteenth century, when Henry Bergh created the first American animal welfare organization in 1866, called the American Society for the Prevention of Cruelty to Animals (Garner, 2004, p. 44). This did not represent legal standing for animals as in the extreme cases found in late Medieval and Renaissance Europe, and even in Colonial America, but rather marked an attempt to improve the treatment of animals and make humans take responsibility for animal welfare. Animal welfare became an increasingly more prominent, albeit contentious, issue in the United States during the late twentieth century when Alex Hershaft's campaigns and organized conferences in the 1970s helped push forward the shift from animal welfare as an issue of compassion to one of rights—which led to the formation of strong activist groups like the People for the Ethical Treatment of Animals

(PETA), the Farm Animal Reform Movement (FARM), and Trans-Species Unlimited (p. 45). The awareness-raising efforts of such groups have generated debate about animal welfare, but they ultimately have had little impact on changing the living conditions for animals that serve as food.

Similarly, the discovery that some species had become extinct or were facing the threat of extinction as a result of human activities generated concerns for wildlife conservation in the United States at the end of the nineteenth century. William Hornaday helped spark American concern for wildlife conservation by raising awareness of the impending extinction of bison during the late 1800s. Endangered species conservation has proven much more effective in achieving its objectives than animal welfare efforts, particularly with respect to animals that are used for food. By the late twentieth century, wildlife facing the threat of extinction in the United States received extensive legal protection and considerable resources were devoted to their conservation.

1.2. Research Questions

Robert Wennberg (2003) highlights the potential tension in animal welfare issues today by pointing out how concern for species survival might morally conflict with animal welfare. Since animal welfare is supposed to focus on the well being of animals, giving special attention to endangered species seems to prioritize some animals simply because they are part of species with low populations. As Wennberg writes: With the passing of the Victorian era, a new kind of animal concern began to manifest itself, a concern that we have come to call ecological. That is, we have a shift away from concern with the individual animal to a concern for species survival and the place of species in an environment that must be respected as a well-functioning totality ... it is rather something quite different, indeed possibly something that is ideologically at odds with the animal welfare movement (p. 6).

Species facing extinction, it seems to Wennberg, are thus treated as a species and there is little concern for the individual animals that comprise this species. It goes without saying that many individual animals from species not facing the threat of extinction appear to receive no concern either. In terms of concern for the health and safety of animals in the United States, devoting extensive resources to endangered animal species conservation does indeed stand in stark contrast with the lack of popular concern for animals labeled livestock, such as cows and pigs. Wennberg touches on a notable feature of human-animal relations: vastly differing standards of treatment according to species.

This raises key questions, questions that are often not the primary focus in the animal protection literature: why do these varying standards of treatment exist, and how have human beings come to feel the way they do about different kinds of animals? As chapter two will clarify, much of the literature focusing on animal protection expounds an anthropocentric explanation for human-animal relations, which focuses on explaining the justification for using animals to satisfy human interests. This line of

explanation can indeed elucidate the justification for using animals to satisfy human interests, and derivatively, this can explain that different animals best serve different interests. Current human-animal relations may result from factors more complex than anthropocentric beliefs and straightforward human interests, however, and this line of explanation does not reveal the historical and cultural forces that have entrenched specific human-animals relations and shaped the interests themselves for which specific animals best serve to satisfy. For instance, Jacques Derrida (2002) intimates a complex process behind some human-animal relations, suggesting that they result from "une guerre au sujet de la pitié" (p. 279).¹ This "war on pity" could indeed make it possible to preserve care for some species solely due to their miniscule numerical situation and not care for others as purely consumable groups—without any sentimental motivation on either count. If it is a war on pity, however, what kind of war is this? How has this war been waged?

Derrida focuses his answer on the subject of animality in general and the delimitation of the human-animal boundary. While Derrida does not engage the construction of different animal categories and the selection of species within them, he does acknowledge that his singular notion of animality is far-removed from the plural reality that has developed recently:

Au cours des deux derniers siècles, ces formes traditionnelles du traitement de l'animal ont été bouleversées, c'est trop évident, par les développements

¹ "...a war against the subject of pity" (quote translated by François de Soete).

conjoints de savoirs zoologiques, éthologiques, biologiques et génétique toujours inséparables de techniques d'intervention ... par l'expérimentation génétique, par l'industrialisation de ce qu'on peut appeler la production alimentaire de la viande animal, par l'insémination artificielle massive, par les manipulations de plus en plus audacieuses du génome, par la réduction de l'animal non seulement à la production et à la reproduction suractivité (hormones, croisements génétique, clonage, etc.) de viande alimentaire mais à toutes sortes d'autres finalisations au service d'un certain être et supposé bien-être humain de l'homme (Derrida, p. 276.).²

Derrida is fully aware that in practice the human-animal divide does not reflect a singular animal category. "Animal" is a far more complex term due to various technological and scientific developments. For Derrida, however, the challenge is to understand how animals have been juxtaposed with human beings, which reveals how language and logic have been used as criteria for determining the humanity boundary. Derrida therefore does not examine why and how different animal categories have developed.

² "Over the last two centuries, traditional forms of animal treatment have obviously been turned upside down by the joint developments of zoological, ethological, biological, and genetic knowledge which are always inseparable from techniques of intervention ... by genetic experimentation, by industrialization of what we can call the nutritional production of animal meat, by large-scale artificial insemination, by more and more audacious genetic manipulation, by the reduction of the animal not only to production and overproduction (hormones, crossbreeding, cloning, etc.) of consumable meat but of all sorts of other ends that serve a certain being and the supposed human well being of man" (quote translated by François de Soete).

The research presented here takes up this question that Derrida sets aside by trying to understand how this war on pity has been waged, and by asking: how have the technological and scientific developments Derrida mentions served as artillery that made possible the development of livestock and endangered species as animal categories? Likewise, how has what Wennberg terms the "ecological" helped increase concern for species labeled endangered species, while species labeled livestock experience arduous living conditions? These two questions comprise the thematic research question for this dissertation, which asks: how have the animal categories livestock and endangered species developed in the United States so that most Americans have come to accept the physically arduous conditions for certain species like those labeled livestock, but have by contrast come to exhibit considerable concern for some species that are part of the endangered species category?

The roles of technology and science as productive forces are very much staples of Foucaultian analysis. This research suspends ethical and moral analyses of animal treatment in the United States and employs a Foucaultian perspective to examine these two animal categories in the United States in order to answer the research question above. At the same time, however, there is considerable evidence indicating that an understanding of symbolism and systems of meaning can illuminate the dynamics in human-animal relations. An interpretative framework based largely on Geertzian analysis therefore supplements the Foucaultian perspective by explaining variations within the two categories. This entails what Geertz terms "thick description," which in this research means focusing on the symbolism and meaning that different species have for Americans, and requires what Charles Taylor suggests is an explanation based on the group's own self-understanding. As such, employing these two lines of analysis raises a secondary question for this research: how does a Foucaultian analytical framework relate to Geertzian thick description?

This dissertation yields three conclusions. First, endangered animal species and livestock are not simply timeless technical terms, but are categories that developed in the last two centuries out of material interests, new production methods, competing scientific views, and cultural standards. The anthropocentric ethic discussed by animal protection authors can explain why human beings use animals to benefit human interests: humans use animals for food and protect other animals because different animals benefit human beings in different ways. However, this line of explanation does not adequately explain the historical and cultural specificities that have shaped humananimal relations in different contexts. A Foucault-based genealogical approach, on the other hand, demonstrates how these two categories emerged and how they have entrenched specific types of relationships between humans and specific kinds of animals in the United States: the role of visibility in accelerating meat production; the normalization of meat as a dietary staple that today remains firm despite growing medical evidence that links consuming meat with serious illnesses; and the emergence of ecology and maintaining an ecological balance even at the expense of dominant human interests. This line of historical analysis reveals that contemporary relations

between humans and the animals in these two categories in the United States do not stem solely from an anthropocentric position that employs different animals for different interests, but also from historical processes that have shaped and entrenched particular relations over time.

Likewise, a Geertzian examination of these animal relations demonstrates the role of culture and symbolism in shaping human-animal relations in the United States. While an anthropocentric view would suggest that humans use animals for benefits that relate to an animal's particular features, which can include keeping some species alive for aesthetic reasons, it does not explain the reasons for particular species satisfying particular interests-why does a particular species, rather than another, satisfy a particular human interest? A Geertz-based analysis of human relations with the animals that comprise these two categories in the United States thus demonstrates: how setting and purpose determine conceptualizations of "violence" against animals; how perceptions of the human location on the food chain determine what species are appropriate to eat; and how culture and history influence concern with endangered animal species. This line of analysis therefore explains the forces behind the patterns of species selection for different purposes that an anthropocentric view holds as results of using animals to benefit humans due to the former's widely perceived moral irrelevance. That is, people in the United States may indeed use different animals to satisfy different human interests, but a Geertzian view can explain why specific types of animals rather than other types of animals are selected to satisfy those interests.

Second, the animal categories livestock and endangered species supervene on the singular concept of animality that has often served as a conceptual foundation in the animal protection literature. This American example suggests that it is not conceptually and analytically adequate to discuss animal protection issues without reference to a particular category. This line of analysis therefore offers an explanation for the differing standard of treatment in the United States that may be considered an ethical contradiction: the animals that fall in each category serve different functions in the same system of managed population, which necessitates radically different roles for different species. These categories function in the United States because of various technoscientific elements that disconnect humans from animals and produce truths about different animals and their role in human existence, or according to Geertzian analysis they operate in a system of meaning.

These analyses lead to a third conclusion: Foucaultian analysis and Geertzian thick description do not present mutually exclusive rival interpretations. Rather, these two approaches can complement one another. Looking at everyday understanding as revealed through examples that defy standard realities for some animals labeled livestock and some animals labeled endangered species in some ways confirms the Foucaultian view, particularly with regard to visibility and meat production. Moreover, the Geertzian interpretation supplements Foucaultian analysis by demonstrating that cultural and symbolic elements also influence how animals are situated within these categories. Moreover, as a commentary on Foucault and his

genealogical method in particular, the research presented here demonstrates how it is possible to bracket questions regarding how humans should treat animals while trying to explain how some human-animal relations developed in the United States. Thus, while Foucault himself has debatably been unsuccessful at bracketing Western liberal values in his research, the idea of bracketing remains viable.

1.3. Significance

Despite the extensive protections afforded to animal species categorized as endangered in the United States, they nevertheless remain in danger of going extinct. The threat of extinction makes endangered species conservation an important topic with ethical implications, for as Frank Bachmura (1971) points out: "Individually wild animals constitute a renewable resource. Species are not renewable however. The species exists as a stock of one." The finality of extinction clearly makes wildlife conservation an especially important issue today as human population growth continues to accelerate and spreading developments threaten animal habitats. Just as genocide is an especially grave concern even in relation to other forms of violence and human rights abuses, the possibility that a species could disappear in its entirety makes endangered species issues paramount in contemporary debates about the environment. That is, whether or not one values a particular species, the fact that its extinction is irreversible makes it an important issue that can only be debated beforehand, and the implications of that debate could be permanent. Seen in this way, the loss of wildlife

represents a key issue today, thus making this analysis significant given the potential for an irreversible loss of entire species.

Large-scale meat consumption patterns in the United States and the conditions that animals are subject to during meat production-such as confinement, physical alteration, and forced feeding-make this kind of human-animal relationship in the United States an important issue as well. Regardless of normative commitments, the conditions that such animals experience are indisputably dangerous in terms of physical effects: if in fact these animals have sentience, these conditions may represent a large-scale system of exploitation and mass suffering. Perhaps the conditions that such animals experience are justified, according to some people, or perhaps they are not, according to other people; perhaps endangered species conservation should be prioritized over other interests, perhaps they should not. Making such determinations is not the purpose of the research presented here. However, given that the conditions experienced by many animals categorized as livestock typically place these animals in physical and possibly psychological duress, and given that extinction is irreversible, it is important to understand how these human-animals relations have come about. Doing so will not answer how humans should treat animals, but determining how these relations developed will help redefine the conditions of possibility, in James Tully's (2002) words, and will contribute an understanding through which human beings can choose what relations they believe are appropriate with the animals that comprise these two categories.

The relationship between human activities and animal welfare goes beyond ethical concerns over animal suffering or species loss since it also entails issues that pertain to human security and human health. Recent threats to public safety stemming from meat production have elevated the importance of questions relating to the treatment of animals given that human beings face direct physical threats from the current system of human-animal relations, thus making this analysis relevant beyond the welfare of animals. As a significant source of food in the United States, animal health is a matter that relates to human safety. The American meat industry has changed since the days of Upton Sinclair's The Jungle, largely due to the United States amending its Animal Welfare Act of 1966 as a part of the 1985 Food Security Act, but the overall relationship between livestock and human beings remains nearly identical. In many ways the production conditions are causes for even greater concern today due to advances in farm sciences (Guither, 1998), and there now exist several threats to human safety resulting from meat production. Bovine Spongiform Encephalopathy (BSE) and Bird Flu are the results of meat production practices such as those found in the United States (Greger, 2006; Lyman, 2001). Raising livestock may even pose a threat to the global ecology given that it is responsible for 18% of global greenhouse gas emissions (CO₂ equivalents), which exceeds the transportation sector's greenhouse gas emissions of 13.5% (Steinfeld et al., 2006).

Endangered species protection is also becoming an important issue not only in terms of preservation ethics and the finality of extinction, but because the number of endangered species is increasing and therefore impacting human communities more and more. This will inevitably bring endangered species protection into conflict with other human interests as population growth accelerates and human developments spread. Moreover, the United States exerts considerable influence on international environmental norms and laws, which have disparate impacts throughout the developed and developing world. As Robert Garner (2004) writes:

It is significant to note that the only place where the economic interests of humans have been seriously damaged by the protection of animals is in the developing world where native people, whose livelihoods are threatened by the attempt to save endangered species, are often powerless in the face of Western conservationists and their own governments eager to rake in the income from tourism (p. 265).

Endangered species protection seen in this way is clearly not an issue solely related to environmental ethics, but one that can also impact human security. The influence of the United States in particular on endangered species laws and norms around the world makes the research here additionally significant given the impact of endangered species conservation efforts on poorer human communities. Focusing on the emergence of animal categories in the United States in particular is therefore especially significant not only due to the dearth of genealogical analysis on human-animal relations in the West in general, but due to this country's considerable international influence.

Given the widespread relevance of human-animal relations to both ethical concerns and human interests, it is important to understand how certain species have been divided into categories that entail dramatically different standards of concern. The two categories examined here currently present significant large-scale implications for human beings in terms of potential ethical implications and human interests defined in financial terms. As chapter two demonstrates, animal protection issues are most commonly engaged as projects of persuasion and focus on the moral status of animals, with relatively little emphasis on explaining current human-animal relations. Understanding how certain species have become "livestock" or "endangered species" thus proves significant for future evaluation by explaining some human-animal relations in the United States, and by presenting a theoretical account that explains how some animal categories have come into existence and entail different standards of That is, while existing arguments that focus on an anthropocentric treatment. explanation that could illuminate patterns of animal usage to serve human interests, this research offers genealogical and cultural accounts that explain how these interests were shaped and how specific human-animal relationships became entrenched in the United States. While the results are confined to the United States, this theoretical account can offer an outline for developing similar explanations in different contexts.

Moreover, this research employs theoretical frameworks that political theorists commonly use, but seldom deploy toward animal welfare issues. As political theorist Robert Garner writes (2005):

Given the obvious political saliency of the animals issue it is surprising then that the human/animal relationship has been virtually ignored by the political studies community. In particular, the absence of a comprehensive account of the potential implications for political theory of granting to animals an elevated moral status is an important blind spot in the discipline (p. 7).

Garner's argument appears valid given that few figures prominent in political theory have thoroughly engaged animal welfare issues, the few notable exceptions being Aristotle, Jeremy Bentham, Jacques Derrida, and Garner himself. The research presented here therefore helps fill in this "blind spot" in political theory by employing two prominent perspectives commonly used by political theorists. In so doing, the research presented here contributes new information and a new analytical point of view to animal welfare issues, while simultaneously helping draw political theory further into the animal welfare debate.

This dissertation also offers methodological contributions to the field of political theory and the social sciences more broadly. Employing a Foucaultian perspective to animal categories in the United States illustrates the continuing relevance of Michel Foucault in contemporary analysis. While interpretative research on human-animal relations that examine systems of meaning already exists, none of those perspectives have been contrasted with a genealogy/power-based perspective. Employing Foucaultbased and Geertz-based perspectives reveals the strengths and limitations of each perspective, and this dissertation ultimately demonstrates how these perspectives can complement one another, an illustration that may inform other research as well. Moreover, the following analysis demonstrates the viability of the Foucaultian notion of bracketing normative questions, here specifically, the moral worth of animals, by analyzing the history of human-animal relations without presupposing a particular valuation of livestock and endangered species.

For these reasons, research on human-animal relations is significant, ranging from potential ethical implications regarding animal suffering and/or extinction to human interests as now defined in terms of disease and impacts on human communities. The research presented here is significant in a different way as well, for it takes on Foucault's resistance ethos by demonstrating the historical production of current human-animal relations in the United States and the contingency of two categories in particular. While this dissertation remains normatively neutral toward animal protection issues specifically and whether or not (or how much) moral consideration is appropriate, it tries to reveal the conditions of possibility so that understanding the reasons for current human-animal relations makes it possible for a person to choose what relationship with animals he or she thinks is appropriate, rather than viewing current relations as naturally appropriate and unavoidable.

1.4. Dissertation Outline

Chapter two reviews the existing literature on human-animal relations. This chapter functions as a standard doctoral dissertation literature review by providing an

overview of relevant existing research. It also explains how the doctoral research project presented here contributes new information to and addresses gaps in the existing literature on human-animal relations. Four themed sections comprise the literature review: scientific assessments of animal cognitive capacities; historical accounts of animals in the United States; interpretations of human-animal relationships; and ethical arguments for animal welfare. These four sections clarify how the findings from this dissertation broadly contribute to animal protection debates and to existing theoretical conceptualizations of "animality." The theoretical conceptualizations of animality and symbolic interpretations of human-animal relationships provide a conceptual foundation that explains the human-animal boundary, upon which this dissertation expands by demonstrating that in practice the animal categories livestock and endangered species supervene on the singular conception of animality with regard to the species relevant to each category.

Chapter three explains the methodology employed in this dissertation. This chapter examines various definitions of "case study" and situates this research within what Stake calls "interpretative" case study, and what Yin terms an embedded single case since it is draws on one case with subunits—animal categorization in the United States, and two different categories in particular. Chapter three clarifies why this research focuses on the United States and two animal categories in particular, and explains why the Foucaultian and Geertzian theoretical perspectives were selected. The chapter also outlines the Foucaultian theoretical perspective employed in this research,

specifically explicating several features: genealogy, normative bracketing, and specific Foucaultian concepts like governmentality, bio-political power, anatomo-political power, and scientific knowledge. Chapter three also outlines the Geertzian perspective by explaining thick description and the role of meaning, and highlights Taylor's influence, which calls for looking at processes not as simple facts, but as results of a group's self-understanding.

Chapter four presents a Foucaultian interpretation of livestock in the United States. This chapter first outlines the contemporary situation in the United States, including the standard definition of livestock, the current status of those animals labeled livestock in relation to other animals that have been objects of protection efforts, and the legal standing of animals that comprise the livestock category. Chapter four then explains the processes that normalized meat consumption in the United States and reveals that despite the prevalence of consuming meat throughout recorded history as a luxury and/or dietary supplement, the late-nineteenth century and the twentieth century witnessed meat consumption change to a standard dietary staple. This chapter also explains how the meat industry has increased efficiency by establishing positive economies in the animal bodies and by reducing the visibility of meat production processes, which removed potential sites of contestation and made meat production more efficient by transforming the killing of animals into an industrial process that produces a commodity efficiently. Chapter four concludes by providing a Foucaultian interpretation that links these developments with the modern therapeutic state in which

there is what is termed in this dissertation an ablation of violence, and explains the role meat in the circulation of power.

Chapter five employs a Foucaultian framework to examine the endangered animal species category and to demonstrate how this category emerged in the United States. This chapter first outlines basic background information for this analysis by offering a contemporary definition of endangered species according to the Endangered Species Act and by examining the difference between attitudes toward wildlife in general and wildlife categorized as endangered. This chapter then traces the American concern with species protection, from the near extinction of bison at the end of the nineteenth century to the Endangered Species Act of 1973 that protects every animal species (plants are not examined in this dissertation) facing the threat of extinction, which reveals that the endangered species animal category emerged from circumstances that were attached to human interests. Chapter five then examines changing scientific notions of the human role in the natural environment, and the emergence of ecology. This also entails looking at the current American strategies for wildlife conservation and the role of scientific expertise therein, and how these maintain a particular truth: nature should remain static and human beings are collectively an entity removed from nature. Finally, the chapter synthesizes analyses from chapter four and chapter five and explains that Americans have been produced as meat consumers and as beings who are separate from the natural environment, which are historical developments that in turn maintain what Foucault describes as the "wheels of power."

Chapter six analyzes both animal categories by using what Geertz calls thick description. This chapter first outlines how thick description relates to the previous interpretative framework: Geertzian analysis yields insight based on everyday common understanding that Foucault presupposes but does not analyze. This chapter presents research on what are here termed anomalous livestock cases, which involve animals that are ordinarily considered livestock, yet are treated differently in certain circumstances. These examples are then analyzed in relation to typical livestock experiences, which yields the following conclusion: when animals are removed from their typical conditions they lose their status as livestock that exist purely for consumption. This supports the previous Foucaultian interpretation that emphasizes how removing animal production from public visibility has made the meat production processes possible, which from a methodological standpoint demonstrates how these two lines of analysis can complement one another. This chapter also examines the different uses for different livestock species in particular, and answers a central question that the Foucault-based interpretation has not answered: why are only some species produced as livestock? Chapter six then applies this line of analysis to endangered species, which also suggests that different species occupy different symbolic locations in the United States, thus resulting in different levels of concern that are independent from the ecological roles of different species.

Finally, chapter seven serves as the conclusion for this dissertation. This chapter explains both the methodological implications from this research and the implications for research about human-animal relations and animal protection.

CHAPTER TWO:

REVIEW OF THE LITERATURE

2.1: Outline

As the literature review's primary role is to cover existing research in the relevant subject area (Hart, 1998, p. 13), this review analyzes various strands of the human-animal relations literature by pointing to the relevant literature and offering some brief critical commentary on the selected works. Though the literature on humananimal relations is vast, this chapter narrows it down into four themed sections that relate to this dissertation. Section 2.2 examines the literature that focuses on animal cognitive capacities. While the research presented here does not engage issues of animal sentience directly, such an overview directly relates to this research by at least clarifying that animals are not indisputably devoid of cognitive and emotional capabilities. As such, human-animal relations based on various understandings of animal cognitive and emotional capabilities are conceivable, further begging the question as to why some human-animal relations exist as they do today in the United States. Section 2.3 then offers a brief overview of historical literature on human-animal relations in the United States, which helps illuminate how this dissertation contributes to the context-specific literature.

Section 2.4 examines works that focus on the meaning of human-animal relationships. Theoretical conceptions of animality and symbolic interpretations of

human-animal relationships provide a conceptual foundation that explains the humananimal boundary as it is commonly defined, upon which this dissertation most directly expands by demonstrating that in practice different animal categories supervene on the singular conception of animality. Section 2.5 then analyzes the literature that focuses on ethics-based arguments for animal protection. This dissertation abstains from making moral declarations, but the literature on the ethical obligations that human beings have toward animals merits a brief overview since it represents the most prominent strand of literature on human-animal relations and highlights how understanding the development of some human-animal relations can offer a new point of reference in animal protection debates. Specifically, though the anthropocentric explanations that this literature draw on can explain how humans justify using animals, such explanations do not reveal the historical and cultural forces that animate human interests for which various animals are used to serve. The four themed sections thus clarify how the findings from this dissertation contribute to the broader animal protection arguments and also to existing theoretical conceptions of animality.

2.2: Assessing Animal Cognitive Capabilities

"Examining the mental complexity of humans (let alone non-human animals) is extraordinarily difficult," Garner (2004) writes, "although this has not prevented a sizeable literature on this subject emerging in recent years" (p. 22). The simple reality that humans cannot communicate with animals by means of standard verbal communications presents great challenges for humans seeking to understand animals. René Descartes' claim that animals cannot feel pain, which he believed true because animals could not use language, influenced attitudes toward animals for centuries in the realm of scientific inquiry. A sizeable body of literature today, however, suggests that many animals have emotional and cognitive capacities. Such research indicates that some animals have emotional reactions to their living conditions, with some animals even demonstrating obviously powerful emotional bonds with other members of their species as extended family members. Moreover, some animals may have the ability to reason despite the apparent lack of discernable linguistic abilities. This literature tends to broadly take two forms: it is observational, or it is grounded in evolutionary theory and biological studies.

Donald Broom (2004) provides one instance of observational evidence revealing animals' cognitive complexity by demonstrating that cows experience complex emotions such as happiness. Classical conditioning experiments appear to demonstrate that animal learning is simply reward/punishment-based conditioning—behavior is in this way constructed in response to positive and negative reinforcement, such as being rewarded with food for performing a particular action or being punished with an electric shock for performing a different action. Broom's experiment challenges this position by revealing that cows experience physical responses that indicate happiness (p. 88). Broom's experiment found that upon discovering the release mechanism for a food dispenser, cows experienced physical responses similar to human physical
responses when experiencing happy emotions. While such an argument may seem trivial at first glance, this kind of scientific evidence helps problematize the popular assumption of animals being incapable of reason and emotion that may sustain the standards of treatment for certain animal categories. Most livestock animals according to Broom are presumed to lack higher cognitive capacities such as those found in wellknown "higher order" species, but Broom's research reveals that this perspective is at least debatable.

George Page's Inside the Animal Mind offers a wealth of observational evidence regarding animal mental faculties that very much supports Broom's claim. Page's (2001) own explorations as host and creator of the televised program *Nature* allowed him to witness and film complex animal behavior, such as problem-solving abilities exhibited by high-sentience animals like primates and even low-sentience insects like ants. From these documentations, Page suggests that animals can learn and reason, and if that is the case, it begs the question: can animals experience emotion? As the ability to feel emotion would make it possible for animals to experience distress and suffering, demonstrating that animals may be able to experience emotion suggests that animals may suffer in emotional ways, rather than simply physical pangs in response to neurological reactions from external stimulus. As section 2.5 demonstrates, the belief that animals cannot reason has underpinned many justifications for exhibiting little Also drawing on observational evidence, Jeffrey concern for animal welfare. Moussaieff Masson (2003) declares in The Pig Who Sang to the Moon: The Emotional World

of Farm Animals that while "humans are simply not equipped to understand animal emotions [it] does not mean they are not there" (p. 135). Masson's accounts reinforce many of the arguments outlined in this section by offering additional observation-based examples of seemingly emotional responses and also by presenting several controlled experiments. This represents key evidence for any investigation seeking to understand differing patterns of concern toward various animal species by focusing on animals like those labeled livestock, given that much of the literature examining animal cognitive capacities focus on species with demonstrably exceptional cognitive skills, such as dolphins, primates, and elephants.

Masson's and Susan McCarthy's (1995) When Elephants Weep: The Emotional Lives of Animals exhibits the more typical pattern of species focus. Focusing on exceptional cases does not preclude relevance to the question at hand, for Masson & McCarthy in this case provide a strategic account of animal emotions by standing at the crux between the observation-based literature and hard-science-based literature. They do this by carefully challenging the scientific techniques by which animals have been discounted as unemotional and cognitively simple entities. One weakness, however, in this work is the blunt declaration that all the evidence presented is in an effort to promote a vegan lifestyle. Though such passion is likely the source and strength of this work, such a proclamation may reduce the reader's confidence in the subject matter's objectivity. This presents a potential conflict of interest because Masson focuses on presenting empirical evidence that is subject to interpretation. As such, some readers may believe that viewing meat consumption as morally wrong could influence the way that animal behavior is interpreted. Moreover, this declaration strategically weakens the impact of such work, as readers who are skeptical will further harden themselves against the evidence presented. Such accounts could prove more effective by conveying a credible account of animal emotions, and later allowing the evidence to speak for itself rather than driving some readers away at the outset with declarative ethical statements.

Lesley Rogers (1997) takes up a scientific challenge of animal cognition in Minds of Their Own: Thinking and Awareness in Animals by comparing physiological developments in human/animal brains and asking two key questions: "How much of animal behavior is automatic? When and how does information processing in the brain become conscious?" (p. 2). Rogers suggests that the Darwinian model of evolution should show gradual increases in both physical and cognitive capabilities for various species (p. 6). Yet science has failed to reveal non-human animal cognitive capacities, Rogers suggests, because the scientific model focuses on stimulus-response explanations and frowns upon seemingly irrelevant questions like those relating to animal emotional and cognitive capacities-hence why Broom's experiments are especially useful and unique when discussing animal issues. As Rogers states bluntly, "anthropomorphism" carries a deep stigma in the scientific community (p. 6). In similar fashion, Marc Bekoff's The Emotional Lives of Animals: A Leading Scientist Explores Animal Joy, Sorrow, and Empathy - and Why They Matter draws first and foremost on what Jane Goodall terms "intuition and common sense," but also looks to give a scientific

account that draws on biology to demonstrate animal cognitive capacities. Bekoff (2007), as both a scholar of animal rights issues and an evolutionary biologist, argues that emotion and the related social networks are evolutionary tools from which humans and many other animal species alike have benefited. Though heavily relying on field observations, Bekoff goes beyond visual and interpretive evidence of animal cognition by drawing on his expertise to demonstrate that neurological evidence indicates complex animal emotions and cognitive powers. Such scientifically grounded arguments regarding animal cognition offer a solid and complementary line of reason to strengthen arguments that defend animals as worthy of moral concern. However, this does not address the reasons why human and animals have the relationship that they do now, as opposed to one that better reflects the animal properties that Bekoff identifies.

Given that scientific arguments like those offered by Descartes in the past or Bekoff recently have been typically unavailable to society in general (farmers, consumers, and hunters alike), it is likely the case that other reasons have contributed to the (non)moral standing of animals. However, much of this research, such as that by Masson and Gates, engages in cognitive analysis with the aim of proving the moral worth of animals, and thus does not focus on understanding the reasons why humans have developed different forms of treatment and concern for different kinds of animals. As such, the dissertation presented here can contribute a new perspective that addresses a feature of animal issues that is not the primary focus of these other

investigations. These investigations are valuable for the research pursued here insofar as they offer evidence relevant to determining the reasons for differing patterns of animal treatment: they provide evidence that seriously challenges the rational accounts that posit animals as devoid of cognitive abilities. That is, this kind of empirical evidence indicates that animal capacities could be interpreted differently than the dominant view of animals, which thus affirms that alternative human-animal relations are possible. This begs the question: why have human beings developed the current relationships with animals as opposed to relationships more in line with Masson's or Page's interpretation of animal abilities?

2.3: Human-Animal Relations in Western Contexts

As this dissertation focuses on the United States, it is also important to look at literature that considers the history of human-animal relations in the United States in particular. Moreover, as most of the research on the influence of culture on humananimal relations primarily focuses on non-Western contexts, as Arnold Arluke and Clinton Sanders (1996) argue, this section also examines the sparse existing literature on culture and human-animal relations in the West more broadly. The literature about animals in the United States and Europe is vast because much of the literature that focuses on animal protection arguments (examined in section 2.5) also includes American and European documentary and historical summaries. This section, however, looks at works in particular that present different analyses of human-animal relations that concentrate on historical and cultural influence on human-animal relations in the United States and the West more broadly.

Henry Bergh created the first American animal welfare organization in 1866, the American Society for the Prevention of Cruelty to Animals, which helped start to situate animal welfare as a serious issue in the United States (Garner, 2004, p. 44). However, animal protection did not take the form of rights instead of concern as an issue of compassion until the 1970s when theorists like Peter Singer helped shift the "discourse of compassion" to a discourse of genuine rights and obligations that are not based on individual sentiments toward animal welfare (Silverstein, 1996, p. 28). Alex Hershaft's campaigns and organized conferences also helped push forward this shift from animal welfare as compassion to animal welfare as an issue of rights, which ultimately culminated in the formation of strong activist groups like the People for the Ethical Treatment of Animals (PETA) and Trans-Species Unlimited (Garner, p. 45). These groups of activists have at times been effective in reducing physically arduous conditions for some animals over the last twenty-five years. Moreover, laws protecting animals normally kept as pets and an abundance of shelters that re-settle stray animals, along with legal requirements for quick slaughtering practices, have all contributed to conditions that are considerably less arduous for many animals.

James Turner's *Reckoning with the Beast: Animals, Pain, and Humanity in the Victorian Mind* examines the relationship between humans and animals in late-Medieval- to Victorian-era England and the United States, and seeks to demonstrate

how this more benign treatment of animals came about (in terms of animal cruelty laws) by the twentieth century. According to Turner, by 1800 the Cartesian view of animals was instead displaced by the view that animals were capable of emotion and thought, as scientific experimentation revealed physiological similarities between humans and animals. As Turner (1980) writes, however:

Scientific evidence of the similarity of men and animals did not necessarily guarantee the latter a place in the affections of Englishmen. For one thing, even a thoughtful horse was only a soulless brute, created to serve the master's needs. A much more immediate obstacle blocking concern for animals was the continued dearth of compassion for people and beasts alike. It did animals little good to be recognized as distant cousins if man would not lift a hand to help closer relatives (p. 4).

In short, Turner suggests that the concern for animals in the United States and England, and the West more broadly, grew out of humanity's increasing empathy for its own members, citing the abolitionist movement in the United States as one of the most prevalent examples. Overall, however, this increase in concern for animal welfare that Turner discusses represents relatively minor changes. The "publish or perish" demands in academia, for example, continue to foster animal testing practices by yielding numerous articles published in biomedical journals that in many instances involve tests on animals for countless different purposes. "There seems to be no study too fragmented, no hypothesis too trivial," the deputy editor of the Journal of the

American Medical Association states, "no design too warped … no methodology too bungled … no conclusions too trifling … for a paper to end up in print" (Munro, 2000, p. 172). Furthermore, stunning animals before slaughter does not offset the conditions that animals experience prior to slaughter, such as confinement and physical alterations like chickens being de-beaked, and slaughtering rules are legally overridden for cultural and religious reasons.

In *The Dreaded Comparison: Human and Animal Slavery*, Marjorie Spiegel traces the ideational and economic forces that influenced animal treatment in the United States back to the pre-industrial era, which proves useful as a supplement to formal animal welfare history. While carefully respecting the memories of slavery victims in the United States by emphasizing that they are not being compared with animals, Spiegel (1997) defends Singer's comparison of speciesism and racism. Spiegel demonstrates how the relationship between humans and animals and that between white Americans and African slaves during the colonial era is similar. As Spiegel notes:

The slave who had thus capitulated to his master personified the beliefs about nature and the denizens of the natural world held by the Christian conquerors, who maintained that they were serving God by whipping nature, animals, and black people into submission. And how convenient that they could obtain a slave workforce while performing their sanctimonious acts. After all, there could exist no moral obligation towards any of those in league with the forces of chaos, darkness, or the devil (p. 17).

Spiegel demonstrates how the violent processes that were imposed on slaves are similar to those imposed on animals, such as whipping, branding, separation from family, and in making this comparison, highlights the relationship between these processes and the economic forces spurred on by such captivity and forced labor/slaughter. Also looking at the relationship between animals and humans in the United States, Cary Wolfe (2003) formulates a similar argument by demonstrating the way animality has been constructed through the interplay between race and the colonial experience of David Nibert's (2002) Animal Rights/Human Rights: Entanglements of wilderness. *Oppression and Liberation,* also focuses on the United States by examining how corporate capitalism has reduced animals to pure profit calculations. Nibert posits corporate control as the source of oppression, in the form of a top-down power relationship whereby power is held by some and used to repress others as "powerful corporations exert extraordinary control over beliefs and values" (p. 196).

With regard to literature on conservation efforts, Robert Leo Smith (1976) examines the origins of wildlife conservation ideas and provides a detailed historical overview. Wildlife conservation ideas began to emerge in the United States in the late 1800s, according to Smith, when the looming bison extinction sparked a conservation ethic, spearheaded by people like the New York Zoological Society's director, William Hornaday (p. 38). As concerns over extinction arose in response to Hornaday's efforts, a number of states soon thereafter began enacting laws that set bag limits on big game hunting as numerous other species experienced drastic drops in population (p. 36). As Smith writes, these laws were thus not primarily seeking to protect wildlife, but rather, were looking "to ensure hunters a more or less equitable distribution of what was left" (Smith, p. 36). In fact, many advocacy groups for wildlife preservation were derivative of or backed by hunting enthusiasts and ammunition manufacturers. For example, conservationists and major ammunition and sporting arms manufacturers founded the American Game Association. This organization was later renamed the American Wildlife Institute, and then later became known as the Wildlife Management Institute.

There also exists literature that examines American popular attitudes toward wildlife. Gregg Mitman (1999) demonstrates in *Reel Nature: America's Romance with Wildlife on Film* how nature films produced during the twentieth century reveal American attitudes toward the natural world. Stephen Kellert (1993) also examines American attitudes toward wildlife by means of large-N quantitative analysis. Kellert's general population survey provides various attitude scales about different animal issues in the United States (p. 55). In conjunction with other research that examines American attitudes toward animals (Fielding, 1962; Spirn, 1996; Merchant, 1996; Price, 1996), this literature provides substantial data on attitudes toward wildlife and endangered species issues in the United States, which is employed in the research presented here.

Some have written about the relationship between certain species and human beings. Glen Elder, Jennifer Wolch, and Jody Emel (1998) in *Le Pratique Sauvage: Race, Place, and the Human-Animal Divide* write that the moral evaluation of animal treatment in the United States reflects power relations among different racial groups. Elder,

Wolch, and Emel argue that "in the present instance, animal bodies have become one site of political struggle over the construction of cultural difference and maintenance of American white supremacy" (p. 80). These authors argue that laws pertaining to animal treatment discriminate against some groups more so than others. The fact that laws against importing rhinoceros horns primarily impacts Asian Americans and Asian immigrants is valid, given that the predominant use of rhinoceros horn is in East Asian aphrodisiacs. It is not clear, however, how "such practices contravene dominant Western environmental values as well as acceptable reasons for animal harm and may be used to devalue and dehumanize Asian Americans or Asian immigrants" (p. 85). Such a claim is difficult to maintain when considering the Convention on International Trade in Endangered Species (CITES) and the numerous species it protects that were formerly valued commodities for wealthy white Americans, such as ivory and exotic animal skins. The use of rhinoceros horn as an aphrodisiac may be interpreted by mainstream America as a reflection of a primitive practice, but similar stigmatization has occurred with practices that were widespread in white American culture as well, such as ivory piano keys and fur coats.

Similarly, Elder, Wolch, and Emel link laws against eating animals that are categorized as pets in California with dominant white American values because they protect cats and dogs, which are eaten by some members of East Asian communities, but do not protect "pet turtles, rabbits, and pigeons, which are commonly eaten by Anglos." (p. 78). This view that posits moral interpretations of animal treatment as

signifiers of racial attitudes is difficult to accept, however, since it seems to target white America as uniquely culturally obtuse. Pet ownership and the strong feelings for species construed as pets are quite universal and in general do not reflect unique white American values. E. K. Rynearson (1980) states that it is widely accepted that "the human/pet relationship ... [is] biologically derived and universal" (pp. 263-268). Marc Shell (1986) further points out that the very essence of human-pet relationships depend on the "pet owner having a different relationship to his animal than he has to other animals ... pethood generally militates against the idea of general interspecies kinship and may even exclude it" (p. 121-153). It is thus little surprise that white Americans would take a strong defensive posture for animals that are *for them* members of this pet category, but not the animals outside of this category. Given that the bond between Americans and dogs, for instance, dates back many centuries, American reactions against consuming dogs do not necessarily reflect deliberately racist attitudes given that anyone regardless of race would be chastised and would face legal ramifications for eating a dog. The authors raise an important issue, however, by examining the meaning of American attitudes toward certain animals and how different these attitudes can be with different species.

In his influential *Anthropological Aspects of Language: Animal Categories and Verbal Abuse,* Edmund Leach (1964) also examines the meaning behind treating certain animals one way and treating other animals differently. Leach postulates a conceptual structure by which to understand different animal categories in a Western context. Leach identifies various animal categories based on linguistic divisions between taboo and sacred in the English language. "Why should expressions like," Leach asks, "'you son of a bitch' or 'you swine' carry the connotations that they do, when 'you son of a kangaroo' or 'you polar bear' have no meaning whatever?" (p. 27). Leach argues that such animal categories with verbal potency are therefore significant as either taboo or sacred. This taboo-sacred linguistic significance reflects various animal categories that verbally relate to sexual relations between human beings as follows (p. 36):

TABLE 1

LEACH'S ANIMAL CATEGORIES

Sexual Relation	Animal Category
Incest Prohibition (Siblings)	Inedible Animals (Pets)
Marriage Prohibition (Cousins)	Edible if Castrated (Tame Animals)
Marriage Alliance (Friends, Neighbors)	Edible if Sexually Intact (Wild Game)
No Sexual Relations (Remote Strangers)	Inedible Wild Animals (Exotic Species)

Leach thus argues that the linguistic treatment of animal categories does not reflect randomly assigned names, but instead reflects taboo or ritual values as a "complex pattern of identifications subtly discriminated not only in kind but in psychological tone" (p. 40). Leach's essay proposes an intriguing framework for understanding human-animal relations, but it has been attacked on several fronts. As John Halverson (1976) notes, the etymological support for the particular species addressed is not philologically conclusive (p. 506). Every animal can certainly fit within Leach's proposed scheme, Halverson argues, but the concept of social distance correlating with different species is wholly inconsistent given that exotic species are today often much more familiar to the average urbanite, since such animals reside in accessible zoos, than farm animals that are typically difficult for urbanites to visit in person (p. 515).

In Our Friends in Nature: Class and Animal Symbolism, Orvar Löfgren (1985) presents another Western example by focusing on Sweden while analyzing how human values are projected onto the animal world. While Löfgren confines his examples to Sweden, his insights form a broader theory about Western culture and the symbolic meaning of animals by identifying patterns of animal symbolism common in other Western countries. Nineteenth-century publications for children used animal symbols to contrast desirable and undesirable values, such as the moral examples found in "the industrious life of bees and ants, or the endurance of camels" (p. 102), which still occurs today in Western countries in children's stories and cartoons. Kathleen Kete (1994) presents a similar study that focuses on the symbolism of dogs and class dynamics in nineteenth-century France (p. 40). Likewise, Chris Philo (1995) argues that certain animals symbolize different facets of society in London: "some animals (cats and dogs) have been turned into pets valued as an element of the urban world whereas other animals (cows, sheep, and pigs) have become matter that should be expelled to the rural world" (p. 668). Such works are useful as insofar as they demonstrate the way that animals can symbolize different values in Western contexts.

2.4: Defining "Animal" and Animal Categories

The "ontological difference between human and animal," Carv Wolfe (2003) writes, is a "difference expressed in the philosophical tradition by the capacity for language" (p. 47). What has developed as a result is a dichotomy between human and animal that is especially pronounced in the philosophic tradition dating back to René Descartes. Descartes, according to Akira Mizuta Lippit (2000), is the thinker "who most deeply instilled in the philosophical tradition the idea that the capacity for reason and consciousness determines the ontological universe" (p. 33). Similarly, Jacques Derrida (2006) writes: "Car non seulement l'animal ... mais la description de son pouvoir sémiotique restait ... fixée dans le fixisme cartésien, dans la présupposition d'un code qui ne permet que des réactions à des stimuli et non réponses à des questions" (p. 168). Derrida thus also insists that the Cartesian framework that denied animal movements and behavior any semiotic relevance has shaped human-animal relations. Descartes' Discours de la methode does indeed argue that human actions are unique because they are deliberate. While machines and animals can imitate human actions, they cannot act deliberately. "Magpies and parrots can utter words as we do," Descartes (1637/1999) writes, "but they still cannot speak as we do, that is, by showing that they think what they say" (p. 41). If animals had the ability to reason, they should be able to communicate with us in some fashion just as deaf, mute, and other physically challenged human beings can communicate in spite of physical challenges that hinder their ability to use standard verbal communications. Descartes concludes that even in cases where animals demonstrate amazing skills, it is the result of nature's hand and not of their own intention (p. 42). This notion that animals lack self-awareness and the ability to feel emotions and pain was held as a commonplace scientific truth in the West perhaps well into the twentieth century, though some argue that this belief had been dispelled by the end of the eighteenth century (see previous discussion on Turner, 1980). "Tous les philosophes que nous interrogerons (d'Aristote à Lacan en passant par Descartes, Kant, Heidegger, Lévinas)," Derrida (2006) notes, "tous, ils dissent la même chose: l'animal est privé de langage" (p. 54). The idea that humans are the only morally relevant beings, as will be discussed in the following section, relies heavily on this assumption that language is the only firm evidence for reason and emotion.

Martin Heidegger's claim that animals "have no hand" maintains this dichotomy between human beings and animals, as it implies that animals "do not have access to gathering, and that means to the phenomenological 'as such'" (Lawlor, 2007, p. 45). A human being's hand, writes Heidegger, "is infinitely different from all grasping organs—paws, claws, fangs—different by an abyss of essence" (p. 16). The hand is therefore not simply a prehensile organ (Lawlor, p. 49), but represents a tool for a human being's capacities for thought. *Dasein* cannot apply to animals, then, for animals cannot question their own existence or conceptualize the possibility of death awareness of the possibility of death is necessary to conceptualize being according to Heidegger (Lawlor, p. 45). This lack of essence precludes language because they "do not have access to the 'as such' of beings" and thus cannot describe a thing with conceptual signifiers (Lawlor, p. 67).

Leonard Lawlor (2007) states that a key problem in trying to attack what Derrida calls the "anthropological limit" is that it either requires elevating animals or lowering human beings. "If one raises animals to the level of humans," writes Lawlor, "or if one lowers humans to the level of animals, one ignores the difference that requires living beings to be treated in a variety of ways" (p. 25). The question of animality is thus at core of our understanding of what it means to be human. Defining "animality," according to Derrida (2001/2004), "represents the limit upon which all the great questions are formed and determined, as well as the concepts that attempt to delimit what is 'proper to man,' the essence and the future of humanity, ethics, politics, law, 'human rights,' 'crimes against humanity,' 'genocide,' etc" (p. 63). "L'animal, quel mot!" Derrida (2006) adds in L'Animal que donc je suis, "c'est un mot, l'animal, c'est une appellation que des homes ont instituée, un nom qu'ils se sont donné le droit et l'autorité de donner à l'autre vivant" (p. 43). Using this word "animal," Derrida argues, as a broad term to refer to non-human animated living beings thus reaffirms the dichotomy between what is human and what is animal, maintaining animality as a central concept for understanding what it means to be human.

Derrida (2006) views humanity's relationship with animality not simply as a means for self-identification by juxtaposition. Humanity has waged war on animals over the last several centuries, but violence against animals is actually violence against a

part of humanity (p. 50). As Jeremy Bentham once remarked, the question is not "Can they reason? nor, Can they talk? but, Can they suffer?" (quoted in Garner, 2005, p. 17). If we ask *can they suffer*? it is clear for most that animals do indeed exhibit behavior that indicates pain and suffering, yet human beings have nonetheless engaged in large-scale projects that induce these signs of pain in many animals. This war against animals has therefore by extension also been against a part of humanity, for as Derrida (2002) writes, "C'est une guerre au sujet de la pitié" (p. 279). *It is a war on the subject of pity*. While Derrida analyzes how humans have developed this category of animal and challenges the conventional rationalizations for the human-animal boundary, Derrida does not examine the variations within the animal category and instead focuses primarily on the way that animal treatment reflects on humanity. A question remains: *how* has the human emotion of pity been neutralized in relation to animals?

2.5: Animals and Morality

This section examines prominent literature that focuses on animal ethics. Much of the literature on human-animal relations focuses on demonstrating why physically harming animals is morally wrong, and as Robert Garner (2005) writes, there is strong philosophical focus on the "moral status of animals" (p. 6). The works discussed here reflect well known authors that focus on animal protection and reflect different approaches to animal protection arguments in the form of rights or welfare. Moreover, these works are not regionally specific due to the universalist arguments advanced. That is, some authors may speak from American experience or British experience, but the applicability of their arguments is not restricted to the context from which they write. Such arguments typically posit animals as morally deserving of proper care and/or emphasize the human obligation to treat animals with certain levels of care for their welfare. It is possible, according to Garner (2004), to locate the views expounded in this body of literature on a spectrum based on the level of moral recognition demanded: (1) animals completely lack moral status; (2) animals are inferior to humans, but deserve some moral status; (3) animals have considerable moral status, and thus deserve rights, or their interests matter when considering the greater good (p. 10).

Much of Western philosophic thought throughout history has often posited animals in the first category on this moral recognition spectrum, where animals are not moral agents or beings of moral concern, but are instead moral indicators for human beings. Robert Wennberg (2003) and Paul Waldau (2006) note how Saint Augustine viewed animals as morally irrelevant, setting Christian thought on a path that treated animals like objects for centuries. "Since the death of Augustine of Hippo almost 1,600 years ago," Waldau writes, "the vast majority of scholarship in the Western intellectual tradition has been premised on the assumption that humans are the only animals with intellectual ability, emotions, social complexity, and personality development" (p. 111). This argument may over-emphasize Augustine's importance given that later Christian figures like Saint Francis of Assisi did demonstrate concern for animal welfare, but it does accurately convey that the dominant strands of Christian thought have not posited animals as morally relevant in and of themselves. Saint Thomas Aquinas, for instance, later argued: "There is no sin in using a thing for the purpose for which it is ... plants which merely have life are all alike for animals, and all animals are for man" (Spencer, 1996, p. 176). Aquinas held that animals are not objects of moral concern in and of themselves, but serve instead as measures of human morality. The brutality exercised against animals is therefore not immoral; the concern, rather, is that such behavior demonstrates a certain violent disposition and reflects a capacity to inflict such violence on fellow human beings. It is this possibility that is of moral concern—an interpretation that influenced the way later philosophers like Emmanuel Kant viewed moral obligations toward animals (Rollin, 2006, p. 32; Wennberg, p. 121). Robert Garner (2005) points out that Hobbes, Locke, and Descartes also considered animal protection as a matter of ethics insofar as hurting animals could indirectly hurt human beings, but they did not consider animal interests as important concerns (p. 13).

Charles Patterson's (2002) Eternal Treblinka: Our Treatment of Animals and the Holocaust provides a contemporary argument similar to that by Aquinas and Kant, whereby human-centered considerations motivate a concern for animal welfare. This argument picks up on Jacques Derrida's (2001/2004) comparison, where certain species are being destroyed by means of organized "exploitation of an artificial, infernal, virtually interminable survival, in conditions that previous generations would have found monstrous, outside of every supposed norm of a life proper to animals that are thus exterminated by means of their continued existence or even their overpopulation" (p. 73). Patterson maintains the 'animals as indicators of morality' perspective by claiming that enslaving animals "injected a higher level of domination and coercion into human history by creating oppressive hierarchical societies and unleashing large-scale warfare never seen before" (p. 11). Patterson thus tacitly suggests that the violent and gruesome treatment of animals may have been a step along the path to atrocities like the Holocaust. This view provides a useful foundation for linking broader moral values with the treatment of animals, though Patterson's account in a way implies a causal relationship whereby the treatment of animals is the causal mechanism. This is primarily a descriptive account of human-animal relations and focuses on demonstrating how animal treatment may have contributed to human-human relations—it does not, however, fully explain how human-animal relations developed in ways that generated the entrenched systems of treatment of certain species that may contribute to atrocities against human life.

Much of the recent literature on animal protection, in the form of animal welfare or animal rights, lies in the latter two categories of the moral recognition spectrum. Authors focusing on animal welfare fall in the second category, as they do not suggest that animals hold the same moral status as humans, but they nonetheless suggest that animals should not suffer unnecessarily. This view tends to draw on anthropocentric explanations based on the reasoning outlined in section 2.4. Thus, numerous philosophers throughout history have highlighted that animals are unable to speak, and this inability to speak has allowed various groups to justify the apparent suffering that animals have exhibited because the inability to speak has been interpreted in animals as an inability to think or feel (Rollin, 2006, p. 33). Hence, according to Bernard Rollin, rationality, language, and morality are tied together as follows:

- 1. Only humans are rational.
- 2. Only humans possess language.
- 3. Only humans are objects of moral concern. (p. 33)

This formulation is problematic since it implies a logical link between the three statements, and as Rollin notes, it is far from clear why one should categorically declare that only humans are objects of moral concern. It may be true, as Harry Frankfurt (1982) argues, "that we do not suppose that animals enjoy freedom of the will, although we recognize that an animal may be free to run in whatever direction it wants" (p. 90). However, this lack of self-conscious and/or rational will does not preclude an animal being an object of moral concern given that, as Peter Singer and Daniel Dombrowski argue, infants and mentally challenged humans are considered objects of moral concern despite not necessarily being agents capable of rational thought or standard forms of self-awareness (Rollin, p. 34).

Animal welfare activists thus argue that animals have some moral status and they should therefore not suffer unnecessarily. Matthew Scully (2002), who as George W. Bush's former speechwriter has drawn attention as a recent animal welfare author, does not place animals and human beings in the same moral category and does not rely on rights-based logic. He instead argues based on biblical revelation and rational

arguments that animals are clearly below human beings in terms of reason and intelligence and are thus in a different moral category. The problem for Scully is primarily the conflicting moralities professed toward animal issues, such as the relatively arduous living conditions for animals used as consumables, but the firm moralist anti-fur support and endangered species protection. Animals are thus subject to whimsical human perspectives on their existence and value. It is for this very reason, however, that Scully insists "we are called to treat them with kindness, not because they have rights or power or some claim to equality, but in a sense because they don't; because they all stand unequal and powerless before us" (xii). While this work primarily serves as persuasion for treating animals well, it offers a valuable theoretical launching point for trying to understand the reasons for current human-animal relationships in the United States. Suggesting that human attitudes toward different types of animals result from whimsical human preferences is worth investigating, and as this dissertation demonstrates, this claim of whimsical preferences does not accurately portray the reasons for human-animal relationships in the United States. In addition, Scully's research serves well as an exposé of some of the arduous conditions to which animals are today exposed, without focusing on (and in fact rejecting) calls to grant animals legal rights similar to those of human beings. The moral dichotomy that Scully highlights is a central issue that this dissertation aims to explain: the conflicting moralities that pertain to commonly consumed animals and non-consumed animals, which is resolvable by explaining how different animal categories developed over time.

Animal rights authors, on the other hand, fall in the third category of the moral recognition spectrum by suggesting that animals have intrinsic value and rights. Animal rights thinker Tom Regan (2004) suggests that any animal's life is just like that of a human being's insofar as both are "subjects-of-a-life," and if one ascribes value to each and every human being in spite of differing degrees of rationality, consistency demands also ascribing such value to animals. Dombrowski (1997) builds on this position in *Babies and Beasts: The Argument from Marginal Cases* by demonstrating that there is no moral distinction between one marginal case and another, such as human infants, mentally challenged humans, and animals (who according to Dombrowski should be included in this "marginal case" category). As Dombrowski writes:

If one refuses to attribute pain states to anything lacking a language, the consequences are rather severe. Human infants and young children, as well as most animals, would have to be denied the ability to experience pain. It is true that most parents understand the responses of their young children better than they do those of other animals, but this does not imply any linguistic phenomena; rather, it seems to be due to our greater contact with young children and hence our greater knowledge of them (p. 9).

When considering whether language is prerequisite for complex thought and emotion, as Descartes argued, Dombrowski rejects the notion of linguistic necessity and to make his case draws on Peter Singer.

Though Singer's arguments are primarily utilitarian, whereby the focus is on equally considering human and animal interests in ways that do not necessitate absolutely protecting any individual animal, Singer's own use of the term "rights" and his support for "animal rights" as a political slogan has closely linked him with this line of argument (Garner, 2004, p. 28). According to Singer (2001), affording rights to certain marginal cases and denying them to others is discriminatory. In Animal Liberation, Singer presents a well known argument for animal protection: granting moral status to marginal cases such as brain-damaged human beings incapable of any conscious thought, but refusing animals similar moral status is "speciesism" (p. 4). "Chimpanzees, dogs, pigs," Singer writes, "and members of other species surpass the brain-damaged infant with respect to ... self-awareness" (p. 18). As a result, according to Singer, the traditional view of reason as a justification for elevating human beings does not hold up, and what instead remains is a purely speciesist standard for determining moral worth.

Dombrowski, commenting on the strength of Peter Singer's position, states that "what distinguishes this infant from the animal is only that the former is a member of the species Homo Sapiens, and it is exactly this kind of arbitrary difference that racists, sexists, or speciesists use in attempting to justify their respective sorts of discrimination" (p. 10). Singer suggests that even if we find genuine genetic differences among different races or between sexes that generate different levels of ability, we should accept those scientific findings without conceding that some deserve better

treatment than others—genetic capabilities have nothing to do with the treatment a person deserves. "The principle of the equality of human beings is not a description of an alleged actual equality among humans," Singer emphasizes, "it is a prescription of how we should treat human beings" (p. 5). Singer draws on this equality principle to suggest that all beings should have their well being taken into consideration. Singer thus states that:

... concern for the well-being of children growing up in America would require that we teach them to read; concern for the well-being of pigs may require no more than that we leave them with other pigs in a place where there is adequate food and room to run freely ... the basic element—the taking into account of the interests of the being, whatever those interests may be—must, according to the principle of equality, be extended to all beings, black or white, masculine or feminine, human or nonhuman" (p. 5).

Linking the women's suffrage movement and African Americans' struggle for equality, however, along with the argument that literacy is part of a child's well-being and for a pig food and space to roam are part of their well-being, Singer's argument leads to conceptual complications. As David DeGrazia (1996) states, the emphasis on well-being often relies on utilitarian logic that conflicts with Singer's adamant stance on the principle of equality (p. 3). Moreover, when thinking practically about animals naturally using violence as hunters against other animals, there arise irreconcilable demands for well-being. That is, the struggle for equality among the races and sexes

does not face the challenge of meeting the incompatible interests of both rabbits and wolves alike. Ensuring the welfare of all animals would necessitate sacrificing some for others, as some carnivorous species need meat for their well being. Indeed this arrangement could benefit all species by regulating animal populations, but this would violate the principle of equality for animals as individuals. In short, for animals it can indeed be a zero-sum game.

As this section demonstrates, the animal welfare and animal rights literature often calls on moral and logical arguments to persuade readers to treat animals with kindness and/or protect their interests. By focusing on moral obligations and logical reasons for treating animals ethically, this literature does not primarily seek to explain human-animal relations. However, drawing on an anthropocentric understanding of the human-animal division, as outlined in section 2.4, can to some extent explain the reasons for different patterns of treatment for different animals. The long-held belief that animals are incapable of reason because they cannot speak has been used to justify using animals as beings that do not warrant moral concern. From this point of view, humans do not consider animals morally relevant and therefore use different animals for different purposes. As some animals are useful for food, others for labor, and others for recreation, humans have considered using animals for these purposes justified since they are not morally relevant creatures. Garner (2005), for instance, explains that human-animal relations in the context of the liberal tradition have been determined by human-centered individual rights, and behavior toward animals is treated as a matter

of personal choice. Similarly, animal welfare reasoning can explain why there are some efforts to minimize animal suffering: animals are morally below human beings and are thus justifiably used for various purposes, but they need not be used in ways that unnecessarily increases suffering.

The literature examined here does not, however, completely explain how current relations between humans and animals emerged. Indeed, the focus of such literature is not explanation, and because it makes largely universal claims about the moral status of animals, it is not equipped to fully explain the emergence of human-animal relations in specific contexts. The research presented here therefore adds to the existing literature a historical and cultural explanation for current human-animal relations in the American context. Employing Foucaultian genealogy makes it possible to focus on the specificities of American human-animal relations, and to unearth the historical factors that have shaped human-animal relations in the United States. While an anthropocentric perspective can explain that some animals are useful as food and others are useful as wildlife, a Foucaultian account shows how meat consumption was normalized and how endangered animal species have become indispensable to the American environment. Arnold Arluke and Clinton R. Sanders (1996) argue that knowing the situation of many animals used for human interests "may prompt direct and, we maintain, appropriate-intervention" (p. 41). Yet, knowledge of animal suffering may not always lead to intervention. The extensive dissemination of animal welfare literature and the increase in awareness-raising campaigns have proven

relatively ineffective in changing large-scale meat consumption patterns in the United States. A Foucaultian account can explain this by examining the various historical forces that coincided beginning in the nineteenth century in ways that contributed to large-scale regular meat consumption, and the changing patterns of visibility that fully detached from the American public the animals being used for food. Geertzian analysis, furthermore, allows for a detailed context-specific analysis of human-animal relations, and thus explains variations in human-animal relations according to species in the United States. While an anthropocentric account can explain broadly that animals satisfy human preferences because they are not considered morally relevant, a Geertzian account can explain these preferences themselves in a given context.

2.6: Research Location within the Literature

As this literature review reveals, a genealogical analysis of animal categories can shed new light on human-animal relations by showing how in the American context certain species have become entrenched within particular categories that entail different standards of care, while a Geertzian perspective can explain the preferences that animate human actions toward specific species within these categories. Most of the existing theoretical literature that looks at the symbolic role of animals focuses on the broad concept of animal as juxtaposed with human. Moreover, there exists considerable literature on ethics and animal protection in Western contexts, and interpretative studies on human-animal relations in non-Western contexts, such as work by Geertz, Tambiah, and Lévi-Strauss representing some of the most prevalent examples. However, there is very little analysis on the development of human-animal relations in advanced industrialized societies. "Despite anthropologists' interest in animals," Arluke and Sanders (1996) write, "their work is limited because it addresses mainly traditional societies" (p. 3).

Most moral arguments offer explanations as to why people value animals as morally irrelevant, but they typically rely on the view that humans see animals as part of a singular category that is defined by the inability to speak and use reason, and thus different animals can be justifiably used for various purposes. The emphasis on demonstrating through moral reasoning that such a position is untenable means that if the singular animal category is in fact more complex, then focusing on the historically and culturally specific reasons that influenced a particular society to adopt certain positions toward different kinds of animals is in itself a significant and necessary element for moral arguments regarding animal protection. Moral arguments can thus benefit from an analysis that problematizes "animal" as a singular category and identifies the potential historical and cultural forces that have induced humans to treat different types of animals differently, which together reflect a gap that the research presented here tries to fill. There is a need, Molly Mullin (1999) points out, to avoid "the extreme intellectualism of Lévi-Strauss and other structuralists, who sometimes gave the impression of playing clever mind games, using ethnographic information far removed from any individual actors and any particular cultural or historical context"

(p. 209). To that end, this dissertation looks at historical data and actual examples, and problematizes the category animal by looking at the development of the categories livestock and endangered animal species in the United States specifically. Though many of the features found in the United States can apply to other countries as well, this dissertation only examines the American context. That is, the research presented here does not assert relevance to other countries and cultures, but it does not preclude the possibility that the findings may apply elsewhere. Explaining how different animal categories have developed in the United States may thus provide a new theoretical framework for understanding human-animal relations, and the approaches employed could be duplicated for other contexts.

CHAPTER THREE:

RESEARCH FRAMEWORK AND METHODOLOGY

3.1: Outline

The following chapter explains the methodology employed in this dissertation. Section 3.2 articulates the various definitions of case study and situates this research within what Stake calls interpretative case study, and what Yin terms an embedded single case since it is draws on one case with subunits-animals in the United States, and two different categories contained therein. Section 3.3 clarifies why this research focuses on the United States and two animal categories in particular: endangered species and livestock. Section 3.4 examines the competing views on whether theoretical perspectives are best selected before or after empirical data is collected. This section explains why the theoretical perspectives employed in this dissertation were selected by drawing on Tully's definition of political theory as a critical activity. Section 3.5 outlines genealogy as it is employed in this research, and specifically explicates key Foucaultian concepts that connect with this dissertation: governmentality, bio-political power, anatomo-political power, scientific knowledge, and normative bracketing. Finally, section 3.6 outlines the Geertzian perspective by explaining thick description and the role of meaning. This section also explains Taylor's influence, which calls for looking at processes as not simple facts, but as results of a group's self-understanding.

3.2: Case Study Research

It is common in the social sciences, Robert Stake (2005) argues, to dismiss qualitative case studies as unimportant when compared with "generalizationproducing studies" (p. 448). Robert Yin (2003) summarizes what he believes is a common attitude toward case study research:

The case study has long been (and continues to be) stereotyped as a weak sibling among social science methods. Investigators who do case studies are regarded as having downgraded their academic disciplines. Case studies have similarly been denigrated as having insufficient precision (i.e., quantification), objectivity, or rigor (p.xiii).

In actuality, however, both types of studies have their own strengths. When evaluated in terms of generalizability, qualitative case studies typically come up short since the relation between the original data and the larger population measures generalizability, and generalizing from only one or a few samples is considered weak in evidence. Some qualitative researchers attempt to follow notions of generalizability, validity, and reliability that quantitative researchers usually employ. Some argue, however, that research methods and fundamental concepts of positivistic/scientific studies do not necessarily apply to qualitative studies. As such, the way of dealing with generalizability varies significantly depending on researchers' perspectives on social reality and research paradigms. Whether or not generalization is important varies from project to project and according to research objectives, and as such, the inability to

generalize is not a weakness unless the research project implicitly or explicitly attempts to offer generalizations that apply to other cases. As long as qualitative research presents clear objectives and does not try to generalize when it clearly cannot, such research can prove equally important as defined by its own objectives. As Stake argues, "damage occurs" when researchers commit to generalizing even when it is not possible or appropriate, and in so doing they also they fail to focus on the features that make it possible to understand the case on which they are focusing (p. 448).

Qualitative case study research in actuality has strengths that research emphasizing generalization lacks: it examines the object of study in a way that generates unparalleled detail and makes explanation quite feasible. Case studies also have the most potential for reaching a wider audience and influencing actual events in the future, for even though large-N studies can have an impact as well, non-academic readers can more easily grasp case study results (Adelman, Jenkins, and Kemmis, 1984; Nisbet & Watt, 1984). It is therefore important to employ case study in a way that works with the advantages it offers: case study research is valuable when trying to explain and understand the object of study in its relevant context and should not aim to generalize. As this research is an interpretivist form of qualitative research, it does not aim to produce generalization: though the features found in the American example examined here may apply to other countries as well, this project focuses analysis and explanation on the American context only.

While the case study approach is commonly used in political science and the social sciences in general, the term itself is often disputed (Ragin, 1992). Case study research examines the object of study holistically and in a broader context, rather than conducting controlled experiments or relying primarily on quantitative surveys (Yin, 2003). According to Stake and Yin, one can define case study as both a type of process and as a type of result: a process that examines a subject holistically (Geertz's "thick description," for example) and examines a result that focuses on a particular subject of inquiry. A case study is particularly strong when conducting research that seeks to explain a cause and/or tries to understand how the object of study has developed and changed over time (Yin, 2003).

There are numerous opinions about the best way to differentiate the types of case studies. Yin argues that there are four case study models that differ according to the unit of analysis and the number of cases. The single case holistic and the single case embedded rely on one case, but the former examines the universal qualities of a single case while the latter examines the subunits within the object of observation. Similarly, there is also the multiple-case holistic and multiple-case embedded models, which offer the same options but rely on multiple cases. Yin argues that it is appropriate to use the single-case model when a case corresponds to, among other things, at least one of the following: it tests an existing theory; it is a unique object of study; and/or, it typifies other cases. Stake (2000) presents an interpretive case study model, which offers three options: an intrinsic case study that seeks to understand the object of study on account

of its distinctiveness or its similarity to other cases; an instrumental case study, which helps to illuminate a broader issue by examining the object of study; and a collective case study, which fosters understanding of something by comparing multiple instrumental cases.

The case study style employed here does not fit precisely into any of these set categories. This research follows what Stake describes as an interpretative case study, which primarily interprets and makes theory about the object of study, in contrast to the descriptive format that focuses on providing detailed information (which is only applicable with a project that generates new information by engaging in field research) or the evaluative format that entails normative judgment and/or policy suggestions. The interpretive format employed in this research is described in detail in sections 3.3 to 3.6. The research presented here is in the format that Yin refers to as single-case embedded, for it focuses on one case (categorization of animals in the United States) and examines subunits contained therein (livestock and endangered animal species), which is appropriate since it is a unique object of study and the format is highly compatible with theoretical analysis. Stake's interpretative case study is also an appropriate identifier, for this research examines the case intrinsically and does not strive for universal understanding of human-animal relationships.
3.2.1: Case Selection

It is possible to delimit the object of study by defining clear borders that apply to time, place, and/or objects of study (Creswell, 1998). This project relies on one case, the categorization of animals in the United States over the course of the nineteenth century to the present, and will look at two subunits, endangered species and livestock. This limited case selection with an interpretive focus makes it possible to carefully consider the two animal categories in relation to one another and in great detail. More specifically, this study represents the mainstream relationship between humans and animals labeled livestock and endangered species in the United States. This requires focusing on the general population as revealed through meat consumption patterns in the United States and federal protection of endangered species, and therefore omits scrutiny of internal variations regarding choices made by smaller groups, such as hunters or vegetarians.

The animals labeled livestock that are examined in this dissertation focus primarily on horses, cows, pigs, and chickens. With regard to endangered species, this research draws on examples that may not necessarily apply to the entire country because wildlife is not uniform throughout the many different geographic settings in the United States, but the legal focus remains primarily at the federal level. Moreover, as the number of endangered animal species is far greater than livestock, it is necessary to choose a small number of species in order to make detailed analysis possible. This analysis relies on incidents and examples relating to particular endangered species, which primarily include bald eagles, gray wolves, and bison, and these particular species are situated within the relevant endangered species principles being discussed.

In addition to being a very large country in which there are many animals labeled livestock or endangered species, the United States is also significant as a case because it has significant power and influence internationally, which has at times influenced policies in other countries. As a strong proponent of international environmental norms that include endangered species issues, understanding how different animal categories have developed in the United States may prove useful for understanding why certain international norms propounded by the United States relating to animals are (un)successful (see Brown Weiss, E., & Jacobson, H.K., 1999; Epstein, 2006). As these two animal categories are unlike one another in terms of welfare standards for the animals contained therein, understanding how each category came into existence may help shed light on American human-animal relations more broadly and explain the historical contingencies of both categories. Drawing on two categories and comparing them is analytically productive by revealing the contingencies that gave rise to each category.

These two subunits are especially significant not only because they refer to the most consumed or the rarest species in the United States and represent animal categories with significant large-scale economic and/or potential ethical considerations, but also because humans appear to treat these two subunits very differently in the United States. The economic issues surrounding these two animal categories are considerable, and in some ways greater than the economic forces surrounding other types of animals: the meat industry is one of the largest industries in the United States, and endangered species laws can impact development projects and resource extraction. Despite the high-profile ethical debates regarding animal testing, for instance, the potential ethical issues surrounding animals categorized as livestock are greater in terms of volume. Livestock and endangered species therefore represent significant animal categories in terms of scale.

It should be noted that it is at times necessary to use terms like "human interests" or "human activities" during this analysis. These terms do not imply universal claims, but are meant solely to characterize prevailing historical notions of animality in the United States that different between human and animal. Likewise, this dissertation also uses the term "animals" to refer to all fauna in juxtaposition to human beings. This is not a value judgment about the standing of humans or animals, or a claim about whether or not humans are also animals. Rather, the term is employed for simplicity to accord with the historical data analyzed.

3.2.2: Theoretical Perspective Selection

There is debate regarding the role of theory in research. Should researchers choose a theoretical model before commencing research or after gathering data? Some argue that researchers cannot know what theory is most appropriate until some data is accumulated (Gillham, 2000), while others instead argue that the theoretical model should precede research because it situates the actual research in the relevant field of inquiry and it clearly articulates the unit(s) of analysis (Yin, 2003). This project takes up the latter position for several reasons in addition to Yin's emphasis on situating the research. As a political theory project, the chosen theoretical frameworks not only yield insight about the object of study, but also yield methodological insight into the theoretical perspectives employed. Moreover, political theory as a critical activity requires some theoretical commitment from the outset.

A practical, critical, and historical approach has four defining characteristics according to James Tully (2002). The first defining characteristic is giving primacy to practices of governance that are experienced as oppressive. This dissertation carefully qualifies Tully's first defining characteristic, however, because this research attempts to employ Foucaultian bracketing. As will be discussed in section 3.5, Foucault employs certain terms that indicate an interpretation of systems of power as oppressive, but tries to suspend or "bracket" normative judgments. For Foucault, however, suspending normative judgments about the objects of study is in an effort to generate understanding of the systems of power so that they remain within reach (Thiele, 1990). That is, Foucault does not explicitly state whether certain features of modern society are beneficial or not, but his call for resistance is motivated by the concern that people cannot change these systems of power. As is also explained in section 3.5, this does not contradict Tully's first characteristic. Though this research does not engage normative claims regarding appropriate standards of treatment for animals by declaring the

human-animal relationship in the United States as either right or wrong, the research presented here recognizes the possibility that current human-animal relations are oppressive to both the animals that are used by human beings, and to the human beings who may also suffer from the way animals are situated in the United States today. It is this possibility that therefore motivates the research presented here.

In this way, the research presented here follows Tully's second characteristic: a practical, critical, and historical approach does not serve as theoretical description for its own sake, but also redefines conditions of possibility so that the oppressed may recognize the contingent conditions of reality. It also requires conducting critical surveys of language, to see how conduct and thought serve as constitutive features, which in this case focuses on two animal categories and their roles in the United States. Finally, critical, practical, historical theory seeks to illuminate immediate practices of governance to challenge the taken-for-granted nature of the prevailing social order (p. 547). Political philosophy as a critical activity is thereby "oriented toward freedom" before justice" (p. 551). That is, its permanent task is to make sure that the prevailing practices of governance do not solidify as "closed structures of domination under settled forms of justice," but always remain open to renegotiation in the name of freedom by those subject to those practices (p. 552).

Other theoretical frameworks have already been developed and employed by political theorists with the aims that Tully describes. It is as such, in addition to the benefits that Yin outlines, appropriate to commit to existing theoretical models before engaging research. Section 3.5 demonstrates that the Foucaultian model is ideal for critically engaging animal categories in the United States. As Tully (2002) notes, however, one single theory cannot reveal "the whole truth, yet each provides an aspect of the complex picture" (p. 545). Different perspectives offer a broader spectrum of explanations. To that end, this research deploys a second theoretical model to reveal how systems of meaning influence animal categories in the United States, drawing on Clifford Geertz and Charles Taylor, as section 3.6 clarifies.

3.3: Foucaultian Genealogy

A Foucault-based theoretical perspective is ideal for understanding how the categories livestock and endangered animal species developed historically in the United States and for explaining the differing level of concern for the animals situated in each category. The subject is thus not simply the animal, but American social history and the relationship between humans and animals therein. This research takes the human being as the historical subject that has through historical practices constituted animality and animal categories. A Foucaultian interpretation of historical data reveals how relations of power can explain the scientific and rational features underpinning the construction and constitution of livestock and endangered animal species in the United States beginning in the nineteenth century.

Foucault states that the "historian's history" is one that is based on the "certainty of absolutes" as it looks back to discover historical truth and its origins (NG, p. 87).

Foucault's method, on the other hand, is that of genealogy, which engages history in a manner that does not presume truths and their origins. Genealogy destabilizes the idea of fixed truths by examining the vicissitudes of history and the happenstance nature of every beginning (NG, p. 80). As Foucault writes:

Genealogy does not resemble the evolution of a species and does not map the destiny of a people. On the contrary, to follow the complex course of descent is to maintain passing events in their proper dispersion; it is to identify the accidents, the minute deviations—or conversely, the complete reversals—the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us; it is to discover that truth or being does not lie at the root of what we know and what we are, but the exteriority of accidents" (NG, p. 81).

Genealogy therefore does not simply explain how things are today as an inevitable progression of unchangeable cause and effect patterns. Genealogy instead looks at the details throughout history and reveals the inconsistencies and the at times haphazard developments—"it disturbs what was previously considered immobile" (p. 82).

This dissertation employs Foucaultian genealogy to reveal how relations in the United States between humans and the animals now labeled livestock and endangered species have changed over time. This dissertation departs from the way Foucault deployed his own genealogical method, however, insofar as it does not try to yield a new understanding of the processes and mechanisms that transformed the human body into a subject as Foucault did in his studies on penality, sanity, and medicine, for example. Instead, the research presented here narrowly focuses on two particular subunits of the animal category and explains their development by using concepts already developed in Foucault's own genealogical studies. This does not entail identifying how the human being has been constituted over time, or even animality more broadly—this dissertation shows how those processes that Foucault has already identified have impacted specific human-animal relations. Foucault's genealogical method offers a way to look at history without searching for origins or an essential state of animality or relations with animality. As Foucault explains in Discipline and Punish when addressing his reasons for studying prisons and the body: "Why? Simply because I am interested in the past? No, if one means by that writing a history of the past in terms of the present. Yes, if one means writing the history of the present" (DP, p. 31). Similarly, the research here does not simply expound the differences between now and the past, but instead seeks to explain why certain animal categories exist as they do now and seeks to reveal that such categories were not necessarily inevitable results of a taxonomic reality.

With regard to animals that comprise the category termed livestock, the research here explains why human beings in the United States have come to consume meat so regularly and why meat has been framed as a dietary staple. Similarly, for animals categorized as endangered species, this research finds the reasons why the extinction of a species is now in the United States typically not accepted as an evolutionary development that results from human actions or other reasons. As Foucault argues:

One has to dispense with the constituent subject, to get rid of the subject itself, that's to say, to arrive at an analysis which can account for the constitution of the subject within a historical framework. And this is what I would call genealogy, that is, a form of history which can account for the constitution of knowledges, discourses, domains of objects etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness throughout the course of history" (TP, p. 117).

To this end, this analysis does not privilege meat consumption by assuming that it is natural, nor does this analysis privilege the existence of any animal species as intrinsically necessary.

3.4: Key Foucaultian Concepts

3.4.1: Foucaultian Conception of Power

Foucault suggests that the point of reference for genealogy is war, not language and meaning as with the Geertzian focus: "The history which bears and determines us has the form of war rather than that of language: relations of power, not relations of meaning" (TP, p. 114). One difficulty that arises when employing Foucaultian genealogy, however, is the lack of a set definition for this central concept of power (Flynn, 2005, p. 35). Indeed, Foucault's definition of power is marked out more by what it is not. In *The History of Sexuality*, Foucault articulates several features of power based on the way he employs this concept:

- Power is not something that is acquired, seized, or shared...
- No power ... is exercised without a series of aims and objectives...
- Power comes from below ... there is no binary and all-encompassing opposition between rulers and ruled at the root of power relations...
- Relations of power are not in a position of exteriority with respect to other types of relationships
- Where there is power, there is resistance ... this resistance is never in a position of exteriority in relation to power (HS, p. 95).

Foucault does not employ a theory of power, but instead "an analytics of power" that explicates a "specific domain formed by power" (HS, p. 82). Employing the concept of power in the Foucaultian sense does not entail conceptualizing power as held by one person or group, as with juridico-political expressions of power wherein a sovereign can use power against his subjects or they can injure his power. Foucault's conception of power also moves away from power as a repressive force, and instead views power as being productive. Certainly expressions of power as repressive are visible in humananimal interaction in the United States. This form of power defined as human beings forcing animals to serve human interests has been thoroughly articulated by animal rights activists and scholars, as noted in section 2.2. However, the research presented here sets aside such views of power as repression. Power is instead analyzed as it operates in constructing animal categories, where competing interests and scientific views have shaped human beings in the United States to view some animals in one way, and other animals in a different way.

3.4.2: Governmentality and Bio-political Power

According to Foucault (GV), the emergence of capitalism and the concept of population offset the sovereignty model of power by cultivating governmentality as a system of large-scale, plural management. Sovereign power is over death and therefore allows people to live, while bio-power on the other hand is oriented toward ordering how people live. A Foucaultian notion of governmentality helps reveal that enhanced efficiencies in meat production that have been instrumental in the management of human populations—human health and developing stronger bodies—and helps illuminate wildlife management as one means for managing the growing and spreading human population and general management of the state. As Foucault states:

In contrast to sovereignty, government has as its purpose not the act of government itself, but the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, etc.; and the means that the government uses to attain these ends are themselves all in some sense immanent to the population; it is the population itself on which government will act either directly through large-scale campaigns, or indirectly through techniques that will make possible, without the full awareness of the people, the

stimulation of birth rates the directing of the flow of population into certain regions or activities, etc (GV, p. 100).

Governmentality thus includes the principle of economy, whereby governing a state entails careful management of people and resources, and the relations between people and various "things" (GV, p. 92). Population itself being a resource makes its health and reproductive capacity instrumental, and by extension the environmental factors influencing the population is a valid topic for the state and scientific discourse. In this way, not only is the human population a valid target of management, but animal populations as well.

Moreover, it is not necessarily the case that the state dominates society, but rather the state is being governmentalized as a result of scientific discourse rising to the level of the state as experts make determinations that effect legislation (Miller & Rose, 2008; Curtis, 2002). With regard to livestock and endangered species, scientific expertise relating to both animal categories inform state decisions, which are critical in the mass production of meat supplies and conservation of wildlife stocks. In effect, then, alongside human populations, animal populations equally fall under the modern organizational impulse of governmentality.

New techniques of power needed to "grapple with the problem of population" and as Foucault elaborates, "the economic system that promotes the accumulation of capital and the system of power that ordains the accumulation of men are, from the seventeenth century on, correlated and inseparable phenomena" (TP, p. 125). For these reasons, various branches of authority emerge, each focusing either on issues like public health, hygiene, longevity, or fertility. All of these issues are clearly intertwined with the natural environment, given that the environment impacts human health, the human economy, and the spacialization of human beings. Foucault identifies "bio-political techniques" that focus on the collective social body. In Foucault's *Il faut défendre la société* (March 17, 1976, lecture), he describes the emergence of bio-politics, bio-power:

dans cette biopolitique, dans ce bio-pouvoir … il s'agit d'un ensemble de processus comme la proportion des naissances et des décès, le taux de reproduction, la fécondité d'une population, etc. Ce sont ces processus-là de natalité, de mortalité, de longévité … en liason avec tout un tas de problèmes économiques et politiques … ont constitué … les premières cibles de contrôle de cette biopolitique (DS, p. 216).³

Bio-political power focuses on efficiencies directed toward human population management, and this kind of power that Foucault sees emerging in the nineteenth century has population management as its domain. Bio-political power according to Foucault refers to "what brought life and its mechanisms into the realm of explicit calculations and made knowledge-power an agent of transformation of human life ... a society's 'threshold of modernity' has been reached when the life of the species is

³ "this bio-political, this bio-power … it is a set of processes like the proportion of births and deaths, the rate of reproduction, the fertility of a population, etc. It is these processes of births, deaths, longevity … in connection with many economic and political problems … have constituted … the first targets of this biopolitical control" (quote translated by François de Soete).

wagered on its own political strategies" (HS, p. 143). Seen in this way, livestock and endangered species are matters highly relevant to the human population, the former as food supply that impacts health and productivity, and the latter as part of the environment in which the human population exists. Moreover, bio-political power is exercised explicitly in relation to the animal populations that are organized under the rubrics of livestock and endangered species—it is thus not only centered on humans, but animals as well.

3.4.3: The Micro-physics of Power and Anatomo-political Power

Foucault's studies on the Western transition into modern forms of power have identified what he calls a new 'micro-physics' of power (DP, p. 139, p. 29). As Foucault writes:

What might be called the political technology of the body ... cannot be localized in a particular type of institutions or state apparatus. For they have recourse to it; they use, select or impose certain of its methods. But, in its mechanisms and its effects, it is situated at a quite different level. What the apparatuses and institutions operate is, in a sense, a micro-physics of power (DP, p. 26).

This micro-physics of power is not something possessed by some and used against those "who do not have it," but is rather a set of relations that permeate all levels of society (DP p. 27). The practices developed in prisons, for instance, are applicable to other segments of society as well, most obviously classrooms and factories, which increases safety, efficiency, and coordination. The historical transition from ostentatious displays of royal power to imprisonment not only enhanced social efficiency, for instance, but also removed sites of social contestation by relocating punishment into confines away from public perception.

As Linda Martín Alcott (2005) summarizes, Foucault's analysis reveals: "a new regime for the circulation of power and of knowledge, involving a division and proliferation of forms of expertise, new types of epistemic relations, new institutionally constituted objects of knowledge, and new instrumentalities to direct operational determinations" (p. 221). The human-animal relationship in the United States today is inextricably tied to this new truth regime, as expertise and management techniques have situated humans in specific relationships with animals that affirm the categories of livestock and endangered species. Foucaultian concepts of spatialization, selfdiscipline, normalization, and visibility may be deployed to illuminate the management of animals in the United States beginning in the nineteenth century. That is, the microphysics of power found in modern Western societies that shape human subjectivity have constituted animal categories in the United States. The way that Foucault deploys these concepts to explain human society is not entirely analogous with the way that they relate to animals, but the factory settings in which many animals labeled livestock pass through and the open settings in which many animals labeled endangered species exist are susceptible to these Foucaultian concepts, as chapters five and six demonstrate.

In addition to bio-political techniques of power, Foucault also identifies anatomo-political techniques as the second pole of power, which focuses on making the individual self-regulating and efficient. Anatomo-political power is according to Foucault (HS):

centered on the body as a machine: it is disciplining, the optimization of its capabilities, the extortion of its forces, the parallel increase of its usefulness and its docility, its integration into systems of efficient and economic controls ... (p. 139).

Focusing on the body as a machine does not involve identical processes for human beings and animals, but the elementary features are similar. Disciplining the human body requires scientific strategies to manage time and space so that individuals manage themselves, while operating at optimal efficiency. With animals, similarly, scientific strategies have been deployed to generate internal efficiencies in livestock animal bodies, whereby the animal bodies themselves are made more efficient at producing meat; with endangered species, such scientific strategies applied to some animal bodies have produced self-regulated wildlife that do not engage in predation on livestock or leave given territorial boundaries.

3.4.4: Truth and Scientific Knowledge

Scientific knowledge is used to organize thinking about human dietary standards, and is thus central to the livestock category. It is also used to organize

thinking about nature, and is thus central to understanding the endangered animal species category. Foucault argues that it is a mistake to draw distinctions between discourses that might be categorized as "scientificity or truth" and other forms of knowledge, but rather what is important is to see how the effects of truth have been produced historically "within discourses which in themselves are neither true nor false" (TP, p. 118). Foucault further states in the first of his *Two Lectures* that we must look through the order imposed by functionalist or systematizing thought that is designed to mask "subjugated knowledges" (TL, p. 81). These subjugated knowledges are forms of knowledge that have over the course of history become formalized as part of systematized thinking or forms of knowledge that have been disqualified by formally established knowledge. In order to unveil the operation of power/knowledge in the production of livestock and endangered species, this dissertation reveals certain subjugated knowledges situated in the late nineteenth century that relate to the perceived effects of meat consumption and the role of wildlife for human beings.

Foucault emphasizes that truth is not outside of power relations (TP, p. 131). He lists five key traits that characterize truth in the West:

- (1) power centers on scientific discourse, from which truth emerges;
- (2) politics and economics subject truth to constant demand;
- (3) truth is immensely diffused and consumed;
- (4) it is produced and transmitted under the control of few greatpolitical/economic apparatuses like universities and armies; and

(5) it is the issue of a whole political debate and social confrontation.

Scientific knowledge always develops, according to Foucault, because it is guided by a "body of anonymous, historical rules, always determined in the time and space that have defined a given period, and for a given social, economic, geographical, or linguistic area" (DL, p. 115). The research presented here draws out some of the truths operating in human-animal relations in the United States and situates these in their historical location to the effect of destabilizing them, focusing on apparatuses that produce some of the prevalent truths about animals that are categorized as livestock or endangered species.

3.4.5 Bracketing Normative Issues

Since Foucault argues that power is a relation between everyone at every level of society and is thus not state-centered, "the classical liberal normative contrast between legitimate and illegitimate power is inadequate to the nature of modern power" and as such has to be suspended (Fraser, 1989, p. 26). Some elements in Foucault's work indicate that Foucault himself does not fully suspend, or bracket, normative judgments. Nancy Fraser argues that Foucault does not successfully suspend liberal norms of legitimacy and illegitimacy (p. 19). Fraser points out that Foucault often uses terms like 'domination,' 'subjugation,' and 'subjection,' which are clearly politically programmatic. Meanwhile, however, Foucault also works to supplant prevailing political norms with the perspective of a military engagement to serve as right, this

military conflict focusing on struggle and submission (p. 28). This approach, however, may prove problematic. Interpreting Foucault's perspective of war is problematic due to his outright call for resistance (p. 29), which as Fraser, along with other critics like Charles Taylor and Jürgen Habermas contend, implies normative criteria that indicate why one should "resist."

The research here also attempts to suspend normative issues without falling prey to these criticisms of Foucault. Fraser argues that Foucault appears to presuppose Western liberal normative standards in his own work, and thus fails to truly bracket In the research presented here, bracketing entails not normative judgments. presupposing any particular normative claims, such as what standards of animal welfare are appropriate and what obligations humans have to animals. Instead, this research recognizes the many concerns that may apply to the human-animal relationship: the value of living beings may be considered relative to cognitive capacities; all forms of life may be considered inherently equal; economic rights may be of concern with animals constituted as property; a particular species may be valued according to the quantity of its population; meat quality may correlate with the disparate wealth of consumers; human population growth may be hindered by wildlife habitat preservation, or it may threaten entire species; wildlife management may disproportionately burden impoverished human communities; meat may be seen as essential to human health based on certain expectations for the human physique and

productive abilities, or it may prove detrimental to human health by increasing the risk of serious diseases.

Large-scale industrial meat practices are debatably unethical to the animals involved insofar as they induce high levels of physical duress (and potentially emotional duress as well), but without such practices meat consumption would prove cost-prohibitive for low-income consumers, which according to some views on human physiology could disadvantage low-income humans in terms of physical strength. Protecting endangered species from the finality of extinction appears morally obligatory, but conservation efforts can strain human welfare and discriminate against rural populations (and from a global perspective, such efforts place an onerous financial burden on developing countries). This research could easily identify practices used to control animals as "oppressive" and as forms of "domination," which are indeed valueladen terms, but recognizing the complex and opposing ethical perspectives allows this research to focus on identifying the reasons for the conditions that are labeled in various ways by different groups. In short, "domination" and "unethical treatment" relate to specific perspectives, which could include the welfare of low-income humans or the welfare of animals for example, but this research does not align with any particular perspective that makes defining such terms possible. Despite Foucault's use of terms like "domination," he illustrates that prevailing norms have resulted from strategic victories between systems of knowledge, not linear progress toward right and truth. In this way, the Foucaultian perspective is here employed with the aim of keeping open

the different options for human-animal relationships, rather than assuming that the current relationships are natural and unchangeable.

3.5: Geertzian Analysis

Tully argues that different political theories need not represent "rival comprehensive and exclusive theories of the contested concepts," but they can instead offer "complementary accounts of the complex uses (senses) of the concepts in question and the corresponding aspects of the problematic practice" (p. 545). Supplementing the Foucaultian analysis presented here with an analysis based on Geertz could prove useful by offering a complementary explanation that yields additional insight. As Hubert Dreyfus and Paul Rabinow (1983) put it, "Foucault is interested only in what we will call serious speech acts: what experts say when they are speaking as experts" (p. xxiv). However, telling dimensions of human-animal relations in the United States exceed the serious speech acts of experts. More specifically, scientific management, normalization of meat consumption, ecological truths, and factory practices away from public visibility cannot entirely explain animal categories in the United States given that within each category there are stark differences in terms of treatment. "To understand a speech act," Dreyfus and Rabinow argue, "the hearer must hear it in a local context and against a shared background of practices which are not merely other statements" (p. 46). Dreyfus and Rabinow argue that Foucault presupposes, but does not concern himself with this "everyday straightforward sort of understanding" (p. 47). А

perspective based on Clifford Geertz's work can help supplement this Foucaultian analysis by concentrating on the relations of meaning that escape Foucault's focus. While the Foucaultian perspective is undeniably useful in explaining the reasons for some animal categories in the United States, it is incomplete since there are exceptions where some animals within each category experience treatment/conditions that are atypical.

The Foucaultian perspective can demonstrate how endangered species contribute to the ecological balance and how they contribute to the conservationist ethos that subjects nature to particular modes of truth and knowledge, but this perspective cannot explain why a bald eagle, for example, is especially more protected than some even rarer species. Similarly, a Foucaultian view may explain the development of livestock as efficient commodities, but cannot explain why horsemeat has been rarely consumed in the United States. In relation to matters of peculiar cultural symbolism and local meaning, Geertz's (1973) thick description proves indispensable in supplementing the Foucaultian perspective by allowing a closer examination of the symbolic meaning Americans embed in individual species.

Geertz uses the example of a wink to illustrate the necessity of thick description to understand meaning. Interpreting a wink requires knowledge of social conventions and intent, for thin description focusing on how the eyelids physically close can offer no insight as to what a wink might mean (p. 12). "Culture is public because meaning is," Geertz writes, adding: "culture consists of socially established structures of meaning"

(p. 12). From this premise, Geertz employs thick description to understand, for example, what Balinese cockfights indicate about Balinese culture (p. 448). Likewise, thin description of an animal's death, such as the method used to kill the animal and how the animal's dead body is used, cannot entirely explain why the animal was killed. It is instead necessary to understand who the people are that killed the animal, what values they hold dear, what species that animal belongs to, and how this species relates to the society's values.

Lisa Wedeen's (2002) model of cultural interpretation as an anthropological conceptualization of semiotic practices suggests that symbols and language lead to effects, which thus means "culture can be used as a causal or explanatory variable" (p. 714). Wedeen focuses on culture as relations between individuals that entail meaning production, as revealed through gendered norms, work habits, patterns for leisure activities, and "self-policing strategies" (p. 714). As Wedeen writes:

... a conceptualization of culture and of meaning requires thinking pragmatically, discovering what we know ... and what we need to know ... even

when we have only a minimal familiarity with context and language (p. 721).

The very fact that particular symbols or practices exist in a given society suggests that there are reasons behind them that are not necessarily transparent that lead to given sets of behavior. Taking this into consideration, then, may also help reveal features in society that shape attitudes toward animals. This also allows for an interpretation that takes into account Charles Taylor's warnings about the use of theory as straightforward social scientific explanations of social reality. As Taylor (1985) warns:

For even though theory may be serving us, the social scientists, simply as an instrument of explanation, the agents whose behaviour we are trying to explain will be using (the same or another) theory, or proto-theory, to define themselves. So that whether we are trying to validate a theory as self-definition, or establish it as an explanation, we have to be alive to the way that understanding shapes practice, disrupts or facilitates it (p. 116).

Thus, according to Taylor, social theory must not only explain the actual practices and processes as facts, but it must also explain these phenomena as consequences of the studied group's self-understanding. Taylor goes on to argue, however, that we should not aim to understand the studied group on its terms, but instead a social science theoretical account must make clearer a group's actions than a member of that group's own understanding of the group's actions—and this may involve, Taylor writes, "challenging what he sees/saw as the normal language of self-description" (p. 118). Identifying cultural values that can relate to attitudes toward different kinds of animals can reveal the sources of some "taken-for-granted" statuses that different kinds of animals hold in the United States.

By following Geertz's and Taylor's line of reasoning it is possible to identify the meaning that bald eagles, for example, have for many Americans. Looking at prominent themes in American history and its role as the most powerful country in

North America and later, the world, can link the special place of an animal like the bald eagle (which was protected by the Endangered Species Act until 2007) in the American psyche and the correlating legal protections and funding devoted to its preservation, while other endangered species receive comparatively little attention. Similarly, there are cases when animals falling under the category of livestock receive significant attention and protection that runs contrary to the social tolerance for animal treatment in the meat industry. For instance, a recent example of random cow shootings in Northern California provoking outrage and ransoms indicates that it is not only *what* species is involved that determines standards of concern. This also reveals something about Americans themselves, not illuminated by the Foucaultian interpretation: standards of civility and self-understanding of what it means to be a developed society influences standards of treatment for different animals in particular contexts, as the discussion on cockfighting and cow shootings will show. This analysis also indicates that the species involved matters, and that Americans would only tolerate the industrial meat production housing conditions for a few species, like cattle, pigs, and chickens.

CHAPTER FOUR:

FOUCAULTIAN ANALYSIS OF LIVESTOCK

4.1: Outline

Applying a Foucaultian interpretive framework to the animal category "livestock" reveals several things. Foucault argues that the microphysics of power found in his analyses of prisons, for example, percolate into other areas of society, and this chapter demonstrates that this also applies to animals categorized as livestock in the United States. Slaughterhouses and the microphysics of power operating therein have been instrumental to meat production by generating new efficiencies that made a large-scale meat-consuming population possible and by removing the processes almost entirely away from public view. This transition to slaughterhouses and massive housing structures diminished all ostentatious displays of power that previously came with meat (from butcher shops that featured pièce de résistance whole animals, to primarily packaged meats and identity-less meat cuts. The isolated slaughterhouse thus detached consumers from the production processes that could have served as sites of contestation and thus allowed technical efficiencies to emerge that made animals as material commodities highly efficient.

Additionally, taking a Foucaultian view of scientific knowledge highlights the emergence of meat in the United States as a dietary staple necessary for good health. The rise of bio-political power has made human health a central issue to be managed, to which the stipulation of dietary habits is essential. This fostered the transition from meat as a culinary feature exclusive to those who could afford it/obtain it, to meat as part of a recommended diet for the population in general. According to this Foucaultian interpretation, meat consumption and public health required extensive meat supplies, which in the existing economic framework required highly efficient production methods—scientific developments and transferring manufacturing processes away from public visibility made these increases in supply and consumption possible.

To articulate these points, this chapter first outlines the contemporary situation in the United States, including the standard definition of livestock, the current status of those animals labeled livestock in relation to other animals that have been objects of welfare concern, and the legal standing of animals that comprise the livestock category. This section also examines the history of animal welfare in the United States and explains how animal rights campaigns have impacted animal testing and animal fur in fashion, which is juxtaposed with the lack of corresponding impact on meat Section 4.3 analyses how meat consumption was normalized in the consumption. United States, and despite the prevalence of consuming meat throughout recorded history, how the late-nineteenth and the twentieth century witnessed meat consumption change from a choice and luxury to a required staple for a healthy human diet. Section 4.4 explains how the meat industry has increased efficiency and reduced the visibility of the meat production processes. Decreasing visibility removed potential

sites of contestation, and away from public view meat production became more efficient by transforming the killing of animals into an industrial process that produces a material good efficiently. Section 4.5 provides a concluding Foucaultian interpretation that links these developments with the modern therapeutic state in which there is what is termed in this dissertation an ablation of violence and explains the role of meat in the circulation of power.

4.2: Background

The term "livestock" first appeared in print in 1783, in William Robertson's History of America, Volume III (OED, p. 1057). Today, the standard definition for livestock is: "domestic animals generally; animals of any kind kept or dealt in for use or profit" (OED, p. 1057). This can clearly include numerous different species, but in the United States the term livestock most commonly refers to pigs, cattle, chickens, horses, and sheep. The history of the United States offered a unique setting in which to expand the populations of these animals. As Europeans settled in North America and eventually expanded throughout the entire continent while using coercive measures to relocate native populations to reservations, as will be discussed in greater detail in chapter five, the vast plains of the continent presented a spacious location for raising livestock. In addition to displacing the native populations, American economic interests contributed to sharp declines in wildlife, which further made the American

territory suitable for raising livestock, which is also discussed in greater detail in chapter five.

The animals that comprise the animal category "livestock" in the United States are legally a form of property: "humans are entitled under the law to convey or sell their animals, consume or kill them, use them as collateral, obtain the offspring and natural dividends from animals, and exclude others from interfering in the owner's dominion and control" (Francione, 1996, p. 47). As law scholar and animal rights thinker Gary Francione (1996) notes: "property rights have an explicit constitutional basis, and are considered 'natural rights' reflecting the moral ontology of John Locke whose views helped to shape both our views of the human right of property and the status of animals as property" (p. 46). Indeed there is considerable evidence demonstrating that animals are and long have been considered primarily as property and/or resources in Euro-American history, especially when it comes to animals that are considered livestock. For instance, the Cowles Commission for Research in Economics, in co-operation with the Bureau of Agricultural Economics, the United States Department of Agriculture, and the Agricultural Economics Research Group at the University of Chicago released a detailed statistical study of livestock in 1955, in which the financial value of livestock is carefully analyzed with dense statistical equations to determine costs, profits, and relevant ratios. The study states plainly the financial value of livestock:

One other important aspect of livestock production [is that] a given animal at a given time may be viewed as (a) a finished good, (b) a good in process or (c) a piece of fixed capital. This is perhaps most dramatically apparent for a young heifer, say 16 to 20 months old, of a beef or dual-purpose breed. If the animal has been well fed, she may be immediately marketable as medium or possibly good beef. Alternatively she might profitably be fed intensively for a short period with a consequent increase in weight and grade. A third alternative would be to retain her in the breeding herd to produce calves (or calves and milk if she were a dual-purpose heifer) (Hildreth & Jarrett, p. 21).

In short, cattle as property are financially valuable in multiple ways, ranging from sources of milk, their reproductive capacities, resalable property, and meat. Seen in this way, livestock animals have remained exclusively in the service of human interests as legal property (Francione, p. 47).

Despite the prevailing legal view of animals as property in the United States, there is a history of concern for animal rights and protection from cruelty. Though concern for protecting animals from cruelty in the United States can be found as early as 1641, with a Massachusetts Bay Colony anti-cruelty statute, the first American animal welfare organization emerged in 1866 when Henry Bergh created the American Society for the Prevention of Cruelty to Animals (Garner, 2004, p. 44). Animal welfare organizations had limited influence initially, but by the latter half of the twentieth century animal protection efforts became more influential. In 1958 the United States passed the only federal law that protects the welfare of livestock, the Animal Slaughter Act of 1958 (which is later discussed in this chapter), which mandates that pigs, cows, sheep, and horses must be made unconscious before being killed. By the late 1960s some animal welfare groups began calling for rights instead of kindness. This contributed to stronger anti-cruelty legislation in the form of the Animal Welfare Act of 1966 that demands minimizing pain and suffering as much as possible while pursuing research objectives, as well as protective legislation for many animals at the state level that varies in scope and strength.

Activists like Alex Hershaft and theorists like Peter Singer helped shift the "discourse of compassion" to a discourse of genuine rights and obligations that are not based on individual sentiments toward animal welfare (Silverstein, 1996, p. 28). Campaigns and organized conferences have pushed forward the shift from animal welfare as compassion to animal rights, and this ultimately resulted in activist groups like the People for the Ethical Treatment of Animals (PETA), the Farm Animal Reform Movement (FARM), and Trans-Species Unlimited (Garner, p. 45). These activists have experienced significant success in reducing what they consider cruelty against animals over the last twenty-five years. Activist groups like PETA were in the 1980s and 1990s, for example, especially successful in reducing the use of fur for fashion purposes in the United States. Aggressive campaigning against fur, according to PETA, led to a drastic drop in the fur industry's revenues, which plummeted to \$1-billion in 1990 from \$1.9billion the previous year. In one PETA hotspot for its campaigns against fur, all twentyfour of New York's Upper Broadway stores that were in business at the start of the 1980s had closed by 1990 (Guither, 1998, p. 106). PETA has also been able to extend this campaign to persuade retailers against carrying products that use real animal fur, and indeed fur is at this time relatively scarce as a fashion item today in the United States. Similarly, a PETA campaign uncovered that the pet food manufacturing giant IAMS was using cruel animal testing techniques and exposing animals to intense confinement in its quest for increasing the nutritional content of its pet food (PETA), which eventually prompted a consumer backlash and subsequent changes by IAMS. Similarly, activist groups exposed that the Humane Slaughter Act was often not enforced and that some animals were not fully stunned or experienced lengthy deaths, resulting in a resolution calling for strict adherence to the Humane Slaughter Act (this resolution was included as part of the 2002 Farm Bill).

These protective efforts and measures, however, do not necessarily impede the animal-as-commodity view. The Animal Welfare Act of 1966 protects laboratory animals, but only demands minimizing pain and suffering as much as possible while pursuing research objectives, and mice, birds, and rats are excluded from this protective legislation. Furthermore, as Carl Cohen (1986) notes, experimentation involving other animals protected by such legislation may not be thoroughly monitored due to the limited number of enforcement officials (p. 869). Academia's "publish or perish" structure also continues to foster animal testing practices, with at times more than one million articles published annually in 8,000 biomedical journals, which in many instances involves animal testing (Wiebers, Leaning, & White, 1994). This therefore suggests that animal testing reforms have taken on the form of concessions by testing groups, with responses that are based on interests and the strength of advocacy groups, testing institutions, and consumer interests. That is, it has been possible to reduce paininducing animal testing practices used in research relating to peripheral interests, but this does not tread on central human interests like cancer research. Similarly, that a company like IAMS, which depends on a positive image with regard to animal treatment, would pursue such practices indicates that animal testing at the corporate level is likely still widely practiced, especially by industries where the link between consumer interest in animal welfare and the product being sold is not as obvious as is the case with pet owners. Companies may therefore only reform their policies when their practices are exposed and a potential consumer backlash threatens profits.

Efforts to protect livestock have been even less influential than other previously mentioned protective measures. The Humane Slaughter Act, despite increased enforcement provisions in 2002, still represents a minor protective provision for the animals concerned, given that being unconscious when killed does not impact the conditions in which these animals live prior to being killed (and this law does not include chickens, which are the most consumed animals in the United States today). According to Francione, such protective measures instead ensure that humans do not "in Locke's words, 'waste' or 'spoil' animal resources 'for no purpose'" (p. 49). The very limited nature of these protective provisions certainly supports Francione's assessment, and it is understandable why animal rights activists do not regard current standards of animal protection in the United States as sufficient and instead view the current relationship between Americans and animals as mostly exploitative and unjust.

These shifts in animal treatment and use have produced disparate effects. Animal welfare campaigns have succeeded in attacking the fur industry and have moderately impacted animal testing and research, but they have not genuinely treaded on research involving dominant interests like medical research that can enhance human health. Even more noticeably, meat consumption rates have not been significantly impacted by animals rights campaigns, and in fact per capita consumption has been steadily increasing. In the 1990s, 63 percent of literature concerning animal rights was devoted to confronting laboratory experimentation on animals, though the number of animals experimented on represents only 0.003 percent of animals consumed as meat (Conn & Parker, 1998, p. 1417). "Meat is murder" activist campaigns have been taking place, but have not greatly impacted the legal arena, or the meat-eating public: awareness-raising efforts have surely influenced some to pursue a more vegetarian diet, but the numbers indicate that meat consumption continues to grow. This suggests that abolishing peripheral interests like fur and animal testing with no obvious benefits can garner significant public support, but these efforts have had relatively little effect on livestock given that at the start of the twenty-first century over 10,000 animals considered livestock have been killed every minute for food (Regan, 2001, p 41). A

Foucaultian analysis can explain how livestock have remained largely untouched by such animal welfare campaigns.

4.3: Scientific Knowledge, Bio-political Power, and Normalizing Meat

People have of course eaten meat throughout recorded history, but dietary habits have been strongly correlated with class distinctions according to Carol Adams (1990). For much of European history, for example, the "aristocracy of Europe consumed large courses filled with every kind of meat while the laborer consumed the complex carbohydrates" (p. 36). Looking back to the early nineteenth century in this way raises a question relevant for understanding meat consumption in the United States today: why did meat consumption become nearly universal for Americans as a dietary staple beginning in the nineteenth century? The human diet varies from individual to individual, time period to time period, and region to region. At the start of the twentieth century, Americans on average consumed just over fifty kilograms of poultry and/or red meat per year (USDA, 2000). At the start of the early twenty-first century, on the other hand, meat consumption has become nearly universal with Americans consuming on average just over one hundred kilograms of poultry and/or red meat per person per year, meaning that per capita consumption has doubled in the span of one century (USDA, 2009). These consumption patterns today make the United States the world's biggest consumer of meat per capita, and the world's second largest meat consumer by volume after China (Dauvergne, 2008, p. 140).

There are multiple perspectives on meat consumption. For much of the twentieth century the daily recommended values put forth by the United States Department of Agriculture (USDA), and ideal height-to-weight ratios by medical organizations, made meat a normal and essential dietary staple. Claims by animal rights activists and some medical groups in the United States are increasingly challenging this view that meat is an instrumental part of a healthy diet for human beings. Instead, they argue that human beings are either naturally vegetarian, capable of living an equally healthy (or healthier) life without consuming meat, or that meat is actually detrimental to human health. These perspectives, however, in some ways may represent truth claims about something that is not essentially provable. There is an implicit assumption that it is either natural or unnatural for humans to consume meat.

The level of consumption in the United States today suggests that consuming meat is largely seen as a natural activity. Moreover, many medical associations and the USDA have long viewed meat as a necessary part of a healthy diet, as evidenced by the Daily Recommended Value tables periodically released during the twentieth century, and the CDC growth charts and recommended height-to-weight ratios suggested a human size attainable only with high protein intake. The USDA had long emphasized the role of meat as part of a balanced and healthy diet, while animal rights activists have also indicated that high-quality health is realizable without consuming meat. Some medical associations today are now emphasizing that high rates of meat consumption increase health problems. The American Heart Association stresses that
high levels of red meat consumption increases the risk of heart disease, which is according to the Centers for Disease Control and Prevention (CDC) the leading cause of death in the United States (Center for Disease Control and Prevention, 2009). The American Cancer Society emphasizes clinical research linking meat consumption with colon cancer, which is the second leading cause of cancer deaths in the United States (Chao et al., 2005; Center for Disease Control and Prevention, 2009).

A Foucaultian view of meat consumption, however, reveals that the human being as a carnivorous mammal is not necessarily natural as some organizations have implicitly argued in the past, nor is it assuredly unnatural as some animal rights groups insist today. As Foucault notes, it is important to understand how the sciences are themselves not necessarily agents of unquestionable truth. "It is always possible one could speak the truth in a void" Foucault notes, but "one would only be in the true, however, if one obeyed the rules of some discursive 'policy' which would have to be reactivated every time one spoke" (DL, p. 224). From this vantage point, it is difficult to rely on purely scientific analyses that determine whether or not human beings should or should not eat meat.

Different perspectives at different points in American history highlight the role of scientific claims in understanding the human being's dietary nature. Nineteenthand early-twentieth-century health manuals, for instance, recommended that adolescent boys consume diets low in meat as a way to combat desires to masturbate (Jones, 2005). Likewise, health manuals from this time period operated on gendered scientific notions that prescribed "delicate" and "light" feminine foods that were ideal for a nurturing role, which meant that women should not consume much red meat, and instead consume more fruits, vegetables, and fish—which according to the prevailing thought at the time did not contribute to "red-bloodedness" appropriate for manly life (Twigg, 1983; Jones, 2005). A man, on the other hand, required: "a diet heavy in flesh because of his expenditure of energy in hard work and creative thinking, which also used up blood that must be replenished" (Frese 1992, p. 209; Jones, 2005, p. 141). These claims were discredited by the early twentieth century, supplanted by a more universalist view of meat consumption as being crucial for every American's health as evidenced by the USDA recommended dietary guidelines that emerged in 1916, as will be discussed shortly.

In the United States, the idea that meat was not simply a luxury, but instead a normal dietary staple, emerged in the late nineteenth century. According to nineteenthcentury medical doctor George Beard:

In proportion as man grows sensitive through civilization or through disease, he should diminish the quantity of cereals and fruits, which are far below him on the scale of evolution, and increase the quantity of animal food, which is nearly related to him in the scale of evolution, and therefore more easily assimilated (Beard, 1898; in Adams, 1990, p. 40).

Adams argues that Beard's belief was widespread, and was influenced by Darwinian theory. The evolutionary hierarchy implicit in Charles Darwin's theory of natural

selection can imply a law of nature where the strongest survive, and superior beings naturally thrive at the expense of inferior beings—though Darwin himself never alleged claims of superiority or inferiority, but instead that certain traits are more conducive to survival in a given environment than other traits. One can thus interpret Darwinian logic in a way that makes consuming animals by human beings entirely natural, given that human beings have evolved in ways that present them with skills and traits that are in relation to other animals better for survival.

Whether it is USDA recommendations, CDC growth charts and ideal height-toweight ratios, or the perspective of some animals rights groups who posit humans as naturally vegetarian, each perspective presupposes that there is a scientifically correct diet for human beings, and in some cases, a scientifically measurable height-to-weight ratio appropriate for human beings. This relies on discourses that Foucault would argue "in themselves are neither true nor false." This is not to belittle largely uncontested medical assessments, such as the links between obesity and its numerous threats to human health, but there are positions that rely on the perspective that there is a true diet and a true size ratio appropriate for human beings that must be discovered, much as Foucault argues that regardless of the different perspectives on human sexuality, there is a belief that there is a sexuality in each individual that can be uncovered (HS, p. 58). Even this largely uncontested truth that links obesity and a myriad of problems initially resulted from previous recommendations that exceeded many of today's recommended dietary standards by health organizations. Dietary

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standards from previous decades "have often been based on out-of-date science and influenced by people with business interests in their messages" (Harvard School of Public Health: The Nutrition Source), which highlights the need to question how meat was for a long time considered a critical staple for a healthy diet.

As Foucault argues, there are key traits that characterize truth: truth emerges from scientific discourse; it is in constant demand; it is immensely diffused and consumed; it is produced and transmitted through great apparatuses; and it is the issue of intense political and social debate (TP, p. 131). Scientific truth claims emerged more concretely in the early twentieth century when meat producers conducted dietary experiments and promoted meat officially as part of the human diet. Giant meat companies like Swift and Company had chemical departments, which created byproducts and conducted research related to meat production. Swift and Company in particular used as many as 1,200 white rats per week for dietary experiments, all of which were weighed regularly and monitored, which produced various statistics related to comparative dietary values (Clemen, p. 373). The United States Department of Agriculture (USDA) released its food guide/dietary recommendations in 1916, which further reinforced the importance of meat for a healthy human diet.

The USDA, however, is a government agency that from its very beginning in 1865 has had close connections with agricultural producers. For instance, the Secretary of Agriculture shortly before the USDA guidelines were first released, James (Jim) Wilson, was himself a farmer with livestock and he had also worked as the director of the experiment station at Iowa Agricultural College (USDA, 2009). Many other Secretaries of Agriculture and other experts in the USDA have historically come from within the meat industry, where the scientific truths operating were produced by the meat manufacturers as in the Swift and Company example. The USDA states its mission statement and its "Strategic Plan Framework" that it is concerned with:

expanding markets for agricultural products and support international economic development, further developing alternative markets for agricultural products and activities, providing financing needed to help expand job opportunities and improve housing, utilities and infrastructure in rural America, enhancing food safety by taking steps to reduce the prevalence of foodborne hazards from farm to table, improving nutrition and health by providing food assistance and nutrition education and promotion, and managing and protecting America's public and private lands working cooperatively with other levels of government and the private sector (About USDA, 2009).

Some animal rights activists take issue with the USDA's interest-oriented imperatives, which has even gone as far as conducting experiments with a one-celled microbe for the purpose of killing crop-destroying Mormon crickets (Jasper, 1996, p. 129).

The recommended food guidelines were thus based on experts writing for the USDA that established that meat is not simply natural, but it is a necessary component for human health. This does not necessarily mean that a small group of meat producers with vested interests in meat consumption patterns subversively manipulated the

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But what is more certain, in line with Foucault's notion of American public. governmentality, is that the system of knowledge operating within in the meat industry could be deployed widely throughout the state as a function of government regulations effected by the USDA. The guidelines divided foods into five food groups, the first being milk and meat, along with (2) cereals, (3) vegetables and fruits, (4) fats and fatty foods, and (5) sugars and sugary foods (Davis & Saltos, 1999; Hunt, 1916). Meat remained one of the major food groups throughout the Great Depression and World War II, though the recommended quantities were lowered slightly to reflect the economic hardship that many families faced at the time. The food groups were again revised in 1956 to what is known as the "Basic Four," which consists of (1) milk, (2) meat, (3) fruits and vegetables, and (4) grain products (Davis & Saltos, 1999; Page & Phipard, 1956). The "meat group" permanently grew to include beans in 1979, but meat remained the emphasis in the meat category, and recommended serving size fluctuated marginally from one set of guidelines to the next.

TABLE 2

Time Period	Food Type	Recommended Quantity
1916	Meats/Protein-Rich Foods	6 to 9 Ounces Per Day
1000		
1930s	Lean Meat/Poultry/Fish	9 to 10 Servings Per Week
1940s	Meat/Poultry/Fish/Eggs	4 to 6 Ounces Per Dav
	Beans/Peas/Nuts	

USDA DIETARY GUIDELINES

TABLE 2 (CONTINUED)

USDA DIETARY GUIDELINES

Time Period	Food Type	Recommended Quantity
1956-1970	Meat Group	2 Or More 2- to 3-Ounce Servings Per Day
1979	Meat/Poultry/Fish/Beans Group	4 to 6 Ounces Per Day
1984	Meat/Poultry/Fish/Eggs/ Dry Beans/Nuts	5 to 7 Ounces Per Day
1992	Milk/Yogurt/Cheese/Poultry Meat/Fish/Dry Beans/Eggs/Nuts	2 to 3 Servings Per Day
2005	Meat and Bean Group	5.5-Ounce Equivalents Per Day

As is the case with other products, meat producers have spent considerable sums of money on advertising in recent years. With beef in particular, health claims that beef had adverse effects on human health made advertising highly essential to maintaining profits and sales. Consumption from 1977 to 1985 dropped from 60 kilograms per year to 57 kilograms per year per person, and from 1985 to 1990 consumption dropped from 57 kilograms to 51 kilograms per year per person (Mathios & Ippolito, 1999; Putnam & Allshouse, 1997). In 1987 beef producers initiated an advertising program to resist a downward trend in consumption that resulted from increased costs (discussed in greater detail in section 4.4) and new scientific claims that red meat had detrimental effects on human health (Blisard, 1999; Ward, 1994). The National Cattlemen's Beef Association relied on the slogan "Beef: It's What's For Dinner" as a public awareness campaign, which clearly emphasizes the normalcy of eating beef.

Though the USDA has been successful in keeping health claims off of meat labels (Mathios & Ippolito, 1999), there have been many external health claims from organizations like the American Cancer Society that have challenged the USDA's dietary recommendations. Certainly it is quite possible that people do not "need to eat dead animals to stay healthy" (Adams, 1998), and there is now strong evidence indicating that lower meat consumption reduces the risk of six major diseases that debilitate and/or kill Americans every year (Jones, 2005). There is research that indicates that American men on meat-based diets have a 50 percent greater risk of dying from a heart attack than men who are on vegan diets. Similarly, colon cancer has been increasingly demonstrated to correlate with high meat consumption due to the increased length of time required to digest meat, which takes approximately 76 to 83 hours, but only 42 hours for vegetarian foodstuffs-meaning that stool remains in a person's bowels for nearly twice as long (Jones, 2005; Singer, 1990).

The USDA's 2005 changes in dietary recommendations that decreased the recommended quantity of protein and began to emphasize that beans can serve as protein likely results from the fact that recommendations are now being made in conjunction with the Department of Health and Human Services (DHHS), which does not have the USDA's objective of maximizing agribusiness (DeGrazia, 2008). Certainly these exchanges in health claims may reflect what Foucault calls the rise of bio-political

power, which concentrates on the human population as an object of management. As Foucault writes, "a society's 'threshold of modernity' has been reached when the life of the species is wagered on its own political strategies" (HS, p. 143). Meat may well have been seen as instrumental for the human population's health and strength based on scientific truths operating at the time. New scientific truths that link meat and health problems are now changing this, as truths produced in American medical institutions have grown to operate more prominently.

These health claims not only come from health agencies like the American Cancer Society, but other meat producers as well, especially chicken. The National Chicken Council's advertising campaigns that have emphasized the health benefits of white meat likely helped shift demand away from beef toward chicken. In an effort to combat advertising by the beef industry, the National Chicken Council also relies on an advertising campaign that makes chicken consumption a normal dietary staple: September is *National Chicken Month: Taste the Possibilities*. As pork was also experiencing market share losses to chicken producers, the National Pork Board released an advertising campaign associating itself with the potentially healthier atmosphere of chicken consumption: *Pork. The Other White Meat.* By 1997, the meat, poultry, fish producers accounted for 3% of all food advertising, and dairy products accounted for 7.1% of all food advertising (Gallo, 1999, p. 178).

Research indicates that campaigns by the meat industry resulted in an average of \$5.40 in income for each dollar spent on its campaigns (Blisard, 1999, p. 184).

Advertising in the face of increased health claims about meat has apparently helped maintain meat as a normal dietary staple. The consumption rates for specific meats have changed, however, especially in favor of chicken. "A consumer who chooses to eat more chicken will likely consume less beef and pork," Noel Blisard writes, and "it has been hypothesized that generic advertising campaigns may offset each other" (p. 188). In short, the cumulative advertising efforts and promotions by meat industries have helped sustain meat consumption, but health claims have changed the distribution of consumption among the different types of meat.

The history of dietary recommendations in the United States throughout the twentieth century and public awareness campaigns at the end of the century helped normalize meat consumption. Research can likely determine ideal diets for prolonging human life, statistically reducing the risk of cancer, increasing or decreasing weight, and so forth. These results are verifiable and challengeable. Ideal height-to-weight ratios and the human being's true nature as either carnivorous or herbivorous, however, is not something that can be established scientifically. Different groups interpret human hematology and taxonomy in different ways. While some animal rights groups claim that human beings are *naturally* vegetarian and other medical associations claim that human beings are *naturally* omnivorous, there is no clear cut boundary as that found in some species: certain carnivorous species have metabolic needs for a diet high in meat. Human beings, based on the prevalence of varying diets

are seemingly capable of sustaining themselves on either diet, which seriously undermines any claims about the human being's *natural* dietary standards.

Scientific knowledge always develops, according to Foucault, because it is guided by a "body of anonymous, historical rules, always determined in the time and space that have defined a given period, and for a given social, economic, geographical, or linguistic area" (DL, p. 115). The role of sciences and medicine in society necessitate the existence of some truth: meat must either be good or bad for humans; it must either be normal or abnormal; there must be a correct quantity to consume. In the United States, this production of truth has been bound up in capitalist interests and their reflection in the state, the history of which has been closely connected with the expansion of European Americans and large-scale agricultural practices across the The great apparatuses of meat production facilities and the respective continent. councils/organizations affiliated with them normalized meat consumption, which is today being debated more intensely by other great apparatuses of medical science. This does not mean that animal rights groups advocating vegetarianism are "right," but it explains why vegetarianism has not been normalized to the extent that eating meat has been. Animal rights advocates have no such parallel and extensive apparatuses to produce truth claims, though medical associations like the American Heart Society, the CDC, and the American Heart Association have contributed and produced knowledge that challenges the truths that operated in the late-nineteenth century and throughout the twentieth century. Based on consumption patterns, however, most Americans in

the twenty-first century appear to still operate on the truths that make meat central to the human diet. Consequently, meat consumption has become a standard part of most dietary habits: "We have become so obsessed with animal-derived protein," Robert Garner (1993) writes, "that it has been estimated that up to a million poor Americans include pet foods in their diet rather than buy cheaper, equally nutritious non-animalderived foods such as nuts" (p. 93).

4.4: Anatomo-political Power, Visibility, and Meat Supply

The presence of livestock and slaughterhouses were common in American cities up until the end of the nineteenth century. There are many reasons why stockyards (open-air holding facilities for animals that are to be used in the meat production process) and slaughterhouses have moved away from major cities. Chris Philo (1995) points out that by the mid-nineteenth century most major American cities hosted meat production facilities (p. 667), but during the second half of the nineteenth century the meat industry centralized in cities like Cincinnati, Louisville, and most prominently, Chicago—and the latter city actually became a major metropolis as a result of its meat production (Scaggs, 1986, p. 44). Keeping and processing livestock into meat inside the city, however, proved problematic. It was inconvenient for meat producers, who had to "drive their animals through crowded streets ... undergoing the greatest inconvenience" (Scaggs, 1986, p. 45). Having livestock inside the city proved inconvenient for regular citizens as well. For example, in the autumn of 1863:

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an impatient drover ignored the warning bell and took his cattle on to the Rush Street bridge when it was about to open ... cattle stampeded to one end ... fifty cattle and a dozen people went into the Chicago River, and taxpayers were set back \$10,000 (Wade, 1987, p. 47).

Livestock and daily urban living clearly clashed in terms of simple lifestyle logistics: it was troublesome for citizens and meat producers alike, and proved commercially inefficient for the latter in particular. In large cities like Chicago, concerns over odors from manure and putrefying remains, air pollution, river pollution, and potential health hazards like cholera outbreaks resulted in more stringent regulations. Ultimately, these stringent regulations pushed meat production facilities outside of the city limits: in Chicago, for example, the "new stink ordinance" of 1877 made it so difficult for meat production facilities to meet the city's standards that most facilities had to relocate (Philo, p. 679).

Refrigeration was a critical innovation that made meat distribution across long distances possible. Before refrigeration, the only commercially available meats not freshly cut were salted, smoked, or brine-pickled—and slaughtering was largely restricted to winter months to reduce the "enormous" spoilage that occurred with meat production (Clemen, p. 355). Shortly after the American Civil War in the 1860s, refrigeration began by means of large-scale proliferation of ice boxes for local distribution of fresh meats. In 1876, however, Joseph Nicholson designed the first "large refrigerated meat warehouse in the world" (p. 355). This innovation, in

conjunction with the spreading railway system across the United States during the nineteenth century, made meat products accessible to all parts of the country. These technological innovations during the nineteenth century facilitated the health and sanitation ethos that necessitated relocating slaughterhouses and related facilities away from urban metropolises, for it allowed meat to remain just as accessible in urban centers as when facilities were in or near major cities.

These isolated conditions made it possible to produce meat products and other animal byproducts at highly efficient rates. Increased efficiency was certainly necessary for the exercise of bio-political power, for waging the life of the species "on its own political strategies" (p. 143) necessitated a large supply of meat due to the prevailing truth by the end of the nineteenth century that meat was a necessary dietary staple. Moreover, as will be discussed later, the increased meat supply was instrumental to America's labor power. Isolated conditions made it possible to produce meat products so efficiently because what Foucault terms the "micro-physics of power" could operate. This efficiency not only entailed faster slaughter and greater volume in terms of animals processed into meat, but also dramatic increases in meat per animal.

It is possible to draw parallels between Foucault's analysis of prisons and the production of docile bodies and the slaughterhouses and the production of meat. According to Foucault, disciplinary practices helped transform the body into a target of power, and eventually circulated in schools, factories, hospitals, and prisons. It is in these disciplinary institutions that the micro-physics of power could develop, and according to Foucault, "discipline is a political anatomy of detail" (DP, p. 139). Foucault suggests that in these disciplinary institutions like prisons, there is concern with distributions, which entails enclosure and partitioning. These features have clearly been introduced to meat-production processes as well, with the relocation of meat processing into great production facilities away from urban areas. Efficiency in slaughterhouses increased not only due to logistic simplification, such as simplified transportation, but also due to scientific advancements and tighter animal control in terms of movement and eating patterns.

In line with Foucault's observations of exhaustive use, which "arranges a positive economy" to extract every single useful fragment from bodies (DP, p. 154), large companies like Swift and Company used their chemical departments to maximize production laboratories in the meat production facilities themselves. Specifically, the chemists employed at large meat companies had the following roles:

1. Waste prevention.

- 2. Improvement of methods and processes of operation.
- 3. Utilization or recovery of products in a more reliable form.
- 4. Initiation of new processes.
- 5. Direction of industrial research and application of the researches until placed on a commercial basis.
- 6. Investigation and putting on a commercial basis new industries and lines of activity allied and associated with the packing industry

(Clemen, 1923, p. 374).

The chemical division therefore enhanced quality and safety, which in conjunction with new canning and refrigeration techniques made mass meat distribution as a finished product possible. Additionally, its research created profitable animal by-products from animal parts not fit for human consumption, including: from glands and membranes researchers developed pharmaceuticals like pepsin, pancreatin, and suprarenals (p. 370); phosphoric acid from bones (p. 367); commercial fertilizers from tankage (p. 366); lard, oleomargarine, and glycerin from animal fat; and meat scraps were used for feed, such as blood meal for poultry feed and meat meal for stock feed (p. 378).

Increasing animal confinement also helped increase production efficiency, for strict confinement reduces caloric expenditure, meaning that animals transform more consumed material into meat. "Generally, systems that allow the animal more behavioral freedom," Joy Mench (1998) writes, "are also associated with higher production costs and therefore with increased food prices" (p. 171). Animals for slaughter are thus often confined so that they only eat and do not move from their eating location, ensuring that as many calories consumed as possible are processed into weight gain. This focus on restricting movement and controlling caloric expenditure clearly exhibit patterns that parallel the disciplinary principle of controlling activity with timetables and by correct use of the body (DP, p. 152). The body of the animal is controlled in terms of motion and its productive capacity is maximized, which is of course not measured in terms of time or labor, but meat. Scientific developments have also facilitated these procedures. Antibiotics have made such confinement protocols possible, for crowded conditions would otherwise result in large-scale illnesses, and the common injuries experienced by livestock—such as chicken de-beaking—would lead to rampant infections. In addition, the use of hormone injections have allowed animals to grow at accelerated rates, reducing the amount of time necessary to reach optimal weight for processing and by extension reducing the costs of feeding and storing livestock, while animal parts not fit for human consumption such as brain matter, bones, and tendons can be used as sources of protein in animal feed and thereby also accelerate animal growth rates.

Such production methods have allowed dramatic increases in supply along with decreases in price, with correlating consumption rates over the past several decades. Higher grain yields increased quantities of meat for consumption during the twentieth century (Smil, 2002, p. 609). While beef consumption has declined from 50 percent to 35 percent of meats consumed from 1910 to 2000, chicken consumption has grown significantly from 10 percent of meat consumed in 1900 to 37 percent in 2000 (p. 612). These statistics highly correlate with production costs, where the usable meat returned from a given amount of grain fed to a particular animal has significantly increased with chicken. As Vaclav Smil writes, "no commercial meat is produced with higher feeding efficiency and at a faster rate than that of chicken" (p. 615). It took approximately 72 days for a chicken to reach full size in 1960, with an average weight of 1.8 kilograms, while as of 1995 it takes only 48 days for chickens to reach full size, at an average weight of 2.2 kilograms—and the feed-to-gain rate has dropped by 15 percent (Rinehart, 1996). That is, over the 35-year time span when new production strategies were employed for chicken meat production, chicken growth rates to adulthood accelerated by 33 percent, and made them 22 percent larger than they used to be—and to do so requires 15 percent less food.

Cattle, by contrast, exhibit higher metabolic rates than expected for animals with similar body mass levels (Smil, p. 617). Cattle are not only less efficient than chicken in terms of usable meat generated from feeding costs, but they are less efficient with respect to pigs as well. Breeding females, for example, require in excess of 50 percent more energy than the energy that pigs require (p. 617). A pig's metabolism is also approximately 40 percent lower than expected based on its body mass, and when compared with beef production, a pig converts nearly 65 percent of its metabolized energy into increased mass while a 300-kilogram steer can convert approximately only 45 percent of its energy into mass (Miller et al., 1991). The costs for pork also correlate, historically, with consumption.

To clarify, then, a pig requires twice as much feed to get the same quantity of edible meat as chicken, and a cow requires five times more grain to achieve the same amount of edible meat as chicken. Chickens convert plant-to-animal protein the most efficiently, while beef cows do so the least efficiently (Smil, p. 617). Furthermore, the cost of meat production has declined steadily over time while consumption has risen steadily over the same period. These costs tightly correlate with consumption, demonstrating that financial considerations could also dictate the types of meat people eat and in what quantity, but claims of differential health benefits may also serve as strong contributors to these trends. The fact that chicken consumption has grown significantly is especially important here, as practices used to raise chickens are among the most efficient in the farming industry in terms of the calorie-consumption-to-weight ratio, and chicken meat now also stakes a strong claim to being a healthier meat option.

There has also been extensive research throughout the twentieth century on increasing "calf crops" (Allen & Doisy, 1923; Christian & Casida, 1948; Hansel & Beal, 1979; Sirois & Fortune, 1990; Revah & Butler, 1996) and such research has recently generated highly technical fertility enhancement strategies. One of the most common strategies is a treatment that combines estradiol and short-term prostegin administration, because the "estradiol acts as a luteolysin for cattle treated beginning early in the estrous cycle, and it also acts to initiate growth of a new preovulatory follicle in all treated animals" (Beal, 2002, p. 37). In short, this makes it possible to control when cattle are ready for pregnancy and increases the fertility rate, rather than being subject to seasonal scheduling and cattle's natural fertility rates. In vitro fertilization (Rutledge, 2002), embryo transfer (Beal, 2002), and ultrasound technology (Lamb, 2002) have also enhanced the calf crop industry. In 1999, embryo transfer produced 7.1 percent of the 270,000 registered Angus cattle (Beal, 2002, p. 132).

Applying technical terms to the animals used in meat production further objectifies the species involved by disconnecting the animal as a recognizable species from its bodily features that pertain to its nutritional and financial value. For instance, in common terminology a pig is a pig, but various technical terms create a classification scheme based on age, sex, and modifications: a female pig is a "sow," while a male pig is a "boar;" an infant pig is a "piglet," while a young male is a "hogget" and a young female is a "gilt;" a castrated male is either a "hog" or a "porker;" and in its final form the animal becomes "pork," "bacon," and "ham" (Leach, 1964, p. 37). Similarly, an ox (cow) becomes a "cow" as a female or a "bull" as a male; an infant is a "calf," while a young female is a "heifer" and a castrated male is a "steer;" and in its final form it becomes "beef" or "veal" (p. 37). It is possible to further sub-divide an animal into particular parts as the diagram below illustrates (based on Clemen, 1923, p. 261), further disconnecting the animal as a living being from its body as a product.

FIGURE 1

TYPES OF MEAT PRODUCTS FROM A BEEF STEER



Beef Steer

Employing technical terminology facilitates meat production by further distancing the animal from, or even turning it into, its derivative products. Consumers ultimately do not eat pig flesh, cow flesh, of the flesh of calves, they instead consume pork, beef, or veal. In addition to using scientific fertility strategies to increase the number of animals for meat production, along with hormones and strict confinement strategies to achieve efficient caloric ratios, genetics is now further increasing efficiency Throughout history humans have unwittingly used genetic in meat production. experimentation to improve the quality of animals through selective breeding strategies, but today it is possible to use genetic planning to not only increase the strength and size of animals, but also produce animals with higher fertility rates, greater resistance to disease, demonstrably lower stress, faster growth, increased heat tolerance, and improved meat quality (Collier, 2002, p. 4). Cloning is now on the horizon for the calf crop industry, which will produce the most ideal cows for different purposes. "Only those cells that have the genetic modification will be selected for cloning," Karen Moore (2002) writes, "so that 100% of the cloned calves will have the desired genetic improvement" (p. 222). Cloning will also make it possible to produce uniform calf crops, which is advantageous because "a uniform group of identical steers can be more effectively managed and marketed ... the nutrition, reproduction, and health of these animals should be easier to manage because of animal uniformity" (p. 222).

While the rise in bio-political power focused on the health of the population necessitated moving meat production facilities away from cities due to the risks of spreading illness and polluting inhabited spaces with animal feces, blood, and entrails (and also prompted by aesthetics and convenience), this transition also contributed to increased meat supply by creating settings where efficiencies could be increased. Moving slaughterhouses and livestock storage units from cities to more remote locations outside of cities also meant removing meat production from public visibility, which also helped expand meat production to modern industrial proportions. The dramatic growth in meat production in the twentieth century would have obviously made meat production logistically impossible in urban areas, but it would have likely been impossible to expand meat consumption to the current levels in the United States if current practices were more visible to the public. It is possible to draw parallels between Foucault's analysis of prisons along with the techniques developed therein, and the meat production process. Foucault argues that imprisonment removes penality from public view, and thus removes previous ostentatious displays of the monarch's sovereign power as potential sites of contestation. As Foucault argues:

But above all—and this was why these disadvantages became a political danger—the people never felt closer to those who paid the penalty than in those rituals intended to show the horror of the crime and the invincibility of power (DP, p. 63).

The sight of someone suffering immensely and/or the feelings that this suffering is unjust could at times compel a crowd to engage in civil disobedience, going as far as liberating the prisoner, attacking the executioner, and in general creating conditions of

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disorder. Such displays of power could trigger behavior that neutralized its effects. Like the public execution, witnessing extreme animal duress and the extreme transformation from animal to product could risk empathetic reactions toward the products being developed. In colonial New York, for example, cattle were slaughtered in the city near Wall Street and near the Brooklyn shore. In 1676, however, a public slaughterhouse was built because the slaughtering of animals "became so objectionable" and it eliminated the wrangling of the value of cattle (Clemen, 1923, p. 29). It is no surprise that removing animal slaughter from the public environment to the enclosures of a slaughterhouse allowed a dramatic increase in the number of cattle slaughtered, from approximately 400 per year before 1676 to approximately 4,000 annually eighteen years later in 1694 (p. 29).

Many who have been raised on a small farm likely found the first slaughter traumatic and emotionally distressing. However, he or she is also likely taught that 'we have given them a good life, and now it is their turn to give us a good life.' It is a basic cycle-of-life understanding that fits with the reality of small farms: free-range chickens running about and eating grain at feeding time; cattle grazing in open fields peacefully; pigs rummaging freely through the pen. As Ruth Harrison (1964) argues, however, this is what much of the general population in an urban setting believes is true: "farm produce is still associated with mental pictures of animals browsing in the fields." The production methods have changed considerably over the last century so that in reality most animals involved in the meat production process no longer graze open fields. Instead, confinement in factory conditions have become standard for producing milk, eggs, beef, pork, chicken meat, and horse meat.

The intensification of meat production during the nineteenth and twentieth century has entailed production practices that not only kill animals for food, but also objectify certain species as pure commodities, the realities of which could adversely impact the meat industry in terms of public consumption. The methods used to kill animals, for instance, could prove difficult for consumers to ignore emotionally. One example of the physical duress that animals experience during the slaughtering process relates directly to the methods that have been used to kill animals:

We stood by while one animal was dispatched, which happened to be a fractious steer, with no notion of being killed any faster than he could help it. He utterly refused to hold his head still for the axe, being apparently possessed of the idea that the iron might be too hard for his skull. Consequently the axeman, though apparently skilled in his business, failed to strike correctly and it was several minutes before the poor beast could be got down, filing the room in the meantime with his roars of terror and pain (Prairie Farmer, 1848, p. 337; in Clemen p. 125).

Indeed the killing process was often not instant, either as the animal was hung upsidedown while bleeding, or killing tools like axes were unreliable instruments for providing instantaneous deaths to animals with thick necks like cows and pigs. While slaughterhouses removed meat production from public visibility, this does not mean

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that people entirely forget that animals are being killed for food. There was indeed some concern from consumers in the United States, which resulted in the Humane Slaughter Act of 1958. This required that meat producers—though this does not include chickens, which make up a vast majority of the animals consumed in the United States today-make animals unconscious before killing them. This concern with suffering is similar to what Foucault identifies as concern with potential suffering during capital punishment: "take away life, but prevent the patient from feeling it" (DP, p. 11). Just as prisons are more humane forms of punishment, while simultaneously allowing power to transform the body, the slaughterhouses in some ways are more humane in principle than previous slaughtering practices by small independent farmers. "Stunning" assures that animals do not feel pain when killed, while recently developed curved cattle corrals help minimize animal distress by preventing them from seeing other animals being killed, and these procedures also increase efficiency.

As Foucault might note, however, in a parallel with the prison: "It is ugly to be punishable, but there is no glory in punishing. Hence that double system of protection that justice has set up between itself and the punishment it imposes" (DP, p. 10). Just as punishment is necessary, but the unpleasantries of punishment require that the general population bears no responsibility for the exercise of punishment, meat is necessary, but the unpleasantries of meat production require that the general population bears no responsibility for its production. The isolation of slaughterhouses makes such a law highly effective in abating consumer concerns. Lawmakers and the public are

disconnected from the realities of the production process by demanding "humane slaughter," but allowing the meat producers to determine actual production methods and in practice there is according to many animal welfare activists relatively little assurance of compliance with the Humane Slaughter Act. Gail Eisnitz (1997) conducted research on American slaughterhouses and from interviews with workers she reveals the disparate ways in which meat producers sometimes violate the Act. According to one worker, "If you get a hog in a chute [that] ... refuses to move, you take a meat hook and hook it into his bunghole ... and a lot of times the meat hook rips out of the bunghole. I've seen thighs completely ripped open. I've also seen intestines come out" (p. 70). "You move so fast you don't have time to wait till a horse bleeds out," another worker recounts, "you skin him as he bleeds. Sometimes a horse's nose is down in the blood, blowing bubbles, and he suffocates" (p. 128). Though adherence to the Act varies from company to company, these examples highlight the gap between perception and actuality. Based on such observations by Eisnitz, and other observers, it appears that the Humane Slaughter Act may be routinely violated and rarely enforced by the USDA-it remains to be seen if the call for stricter enforcement in the 2002 Farm Bill will be effective.

The Act prescribes a painless death—which according to various animal rights observers in many cases does not actually happen—but it does not prescribe painless conditions prior to being killed. Livestock likely endure considerable pain well before the moment of death itself: maximizing efficiency in the calories expended to weight gained ratio requires highly efficient transportation, housing, and feeding practices. For example, factory-raised chickens (not covered by the Act) are often confined to cages that are as small as 21 centimeters by 21 centimeters, as moving about freely will increase grain consumption by up to 20 percent (Smil, p. 623). Furthermore, as these crowded conditions have led to pathological degeneration that leads to cannibalistic attacks among chickens, beaks and claws are sometimes partially cut as a disarmament strategy. Eisnitz also highlights how livestock can experience pain during transportation. For example, transporting pigs during wintertime conditions in cramped trucks causes those along the sides to freeze to truck walls: "They tie a chain around them and jerk them off the walls of the truck, leave a chunk of hide and flesh behind. They might have a little bit of life left in them, but workers just throw them on the piles of dead ones. They'll die sooner or later" (p. 88).

These production processes require and are made possible by a lack of public visibility. Linda McCartney, noted animal rights activist and late wife of the famous Beetles band member Paul McCartney, once said: "If slaughterhouses had glass walls, we'd all be vegetarians." Her argument is clear: the animals must now be hidden from the public if they are to be consumed. The increases in meat supply require production methods that the general public would likely not tolerate. "In Western Society," Molly Mullin (1999) writes, "people have become less inclined to think of animals as food even while consuming more meat than ever before: shrink-wrapped packages or precooked meals are conceptually connected with 'animals' only with imaginative effort" (p. 214).

The cycle of life argument that young children must learn on the farm is one that is likely acceptable, but the extremes of industrial meat production refute the harmonious naturalistic vision of eating meat. Instead, as Jim Mason and Mary Finelli (2005) argue, the species that fall under the term livestock are "cogs" in the large-scale production process that is "agribusiness" (p. 104). Witnessing the transformation of animals into "cogs" would make most lose their appetite, figuratively and literally—which would spell the death of meat industries and of larger, stronger workers raised on protein-rich diets.

Though much of this analysis suggests that agribusiness has internally produced efficiencies, truths, and systems of management that have facilitated meat production, even those concerned with animal welfare can contribute to the efficiency of animal slaughter and reproduction. Temple Grandin, professor of animal sciences, has influenced slaughterhouse designs in the late twentieth century. Grandin's concern with improving animal welfare and her expertise on animal behavior led her to design a curved corral system for livestock facilities that handle pigs, sheep, and cows. Grandin (2008) states that these animals have a natural tendency to follow, meaning that the single-file curved corral takes advantage of this natural behavior (p. 54). Moreover, because the animals cannot see the humans at the end of the line or what the humans are doing to the animals ahead of them, they are not frightened, as is the case with straight corrals that let animals see the slaughter that lies ahead.

As such, the animals are more docile, in Foucaultian terminology, and proceed at a much more efficient pace for slaughter, artificial insemination, or vaccination. Moreover, smaller details like proper lighting can facilitate animal movement, for bright lights in a building at night will entice the animals to move toward the building (p. 65), while eliminating shadows that can scare these animals and increase the risk of balking and jamming the corrals (p. 66). This efficient structural design has similarities to Foucault's discussion of the panopticon. Attending to details like lighting and corral shape can in effect lead animals to self-regulate their behavior in ways that are more conducive to meat production, just as the micro-physics of power and the architectural features of a prison can make prisoners monitor themselves. The situations are of course not analogous, given that the prospect of being visible lies at the heart of a prisoner's corrective training, while reducing the animal's visibility of its surroundings is the heart of this system that induces self-regulation in the animals.

Grandin's research could also have a double effect of not only managing the animals in the meat industry, but also increasing discipline (in the Foucaultian sense of *surveiller*) of humans who operate these facilities. Physically stressing the animals reduces efficiency, while physically striking, prodding, or shocking them increases damage to what is from the owner's perspective a valuable commodity. Grandin recommends systematic monitoring to ensure that workers comply with these procedures, though as she concedes, "my observation is that some people are simply not trainable" (p. 57). Scoring livestock on a series of variables will reveal how workers treat the animals and by extension how they contribute to the financial success of the particular business involved:

... percentage of animals running, percentage of animals falling, percentage of animals that hit fences, percentage injured, and percentage electrically prodded. The percentage of animals that vocalize (moo and squeal) should be measured when handling cattle and pigs (p. 58).

With such measures in place, this could indeed instill the kind of self-monitoring Foucault describes in his analysis of the modern prison system. It is easy for workers to control their actions when they know they are being monitored. If animal behavior serves as the basis of their evaluation, however, they must make sure that the animals act appropriately at all times since the animals will not suddenly exhibit calm behavior when an inspector arrives (Grandin suggests that it takes approximately thirty minutes for an animal like a cow or pig to regain its calm once it is panicked). Clearly the animals involved in meat production are often still subject to physical duress as revealed by undercover operations by animal rights groups like PETA. However, given that many meat producers have already recognized how the curved corral benefits their interests and implemented the Grandin structural design, such a monitoring system could become more prevalent in the near future as well.

4.5: Conclusion

Power is according to Foucault productive, not just repressive (TP, p.119). The slaughterhouses and meat production processes should likewise not simply be seen as repressive apparatuses that confine animals and end their lives. From the human perspective, these apparatuses produce animals as members of a certain category that serves a vital role: pigs, cows, and chickens become livestock, which are natural consumable products. As Foucault demonstrates with his analysis of prisons, great apparatuses helped develop an economy of power and the resulting procedures circulated continuously. The micro-physics of power employed therein developed more efficient procedures, which ultimately eliminated waste and reduced costs. Applying Foucaultian analysis to livestock reveals a micro-physics of power in slaughterhouses, which in conjunction with sciences focusing on disease management and reproduction, helped transform meat into a regularly available dietary staple. Over the course of two centuries, animals that comprise the livestock category have become commodities produced with the highest levels of efficiency. The rise of bio-political power has also contributed to these developments for concern with population made it necessary to mass-produce meat products as dietary staples, predicated on a truth that meat was necessary and healthy for human beings. The animals are themselves also made by the state, science, and capital into populations subject to bio-power.

The official government was not the sole impetus for developments in the livestock industry that transformed meat consumption in the United States, but the various elements involved had the collective effect of managing population, which contributed to shaping livestock in the ways described. Since it is not the case that the state is necessarily dominating society, but instead that the state is being governmentalized (Miller & Rose, 2008, p. 54), it becomes evident that the technocratic scientific elements working in meat production have influenced conceptions of human health. That is, scientific expertise was a critical component in the mass production of meat supplies by normalizing meat consumption as a necessary dietary staple, and the truths operating in the meat production facilities were incorporated into the state through the USDA, which has historically relied on expertise closely tied to the agricultural producers themselves and related industrial interests.

Meat consumption has of course existed for a long time, but it became no longer a luxury or choice, but an indispensable component of the human diet and a necessary commodity for all Americans, and increasingly so as affordable supplies increased and dietary recommendations made meat consumption a key part of human health. And while Foucault argues that normalization and great apparatuses have limited importance when considered only in economic terms, the direct economic element should not be dismissed. In the United States the meat industry annually uses "100 million mammals and five billion birds" to generate its meat output (DeGrazia, 2008); it is one of America's largest industries, which in the 1990s was worth approximately \$50 billion per year—second only to the automotive industry (Garner, 1993). The normalization of meat as a dietary staple and the industrialization of its production have had effects beyond this considerable economic significance. Nobel laureate Robert Fogel (1999) notes that America's meat consumption was key to America's power. Fogel writes:

As late as the end of the nineteenth century, the U.S. not only had higher caloric consumption per capita but a larger proportion of calories originating in meat and fish than any other country in the world. At the end of the nineteenth century, for example, the consumption of meat per capita in the U.S. was twice as high as in Germany, more than 3 times as high as in the Netherlands and Russia, 2.5 times as high as in France, 1.8 times as high as in England, and 8 times as high as in Italy (p. ii).

The meat consumption differential between France and the United States, for example, meant that the work energy per equivalent male in the United States was three times higher than in France. According to Fogel, increases in "thermodynamic efficiency" are largely responsible for technological and economic growth. This gave the United States a "technophysio" evolutionary advantage. This kind of evolution is according to Fogel not genetic, but instead results from technological and physiological enhancements that influence the growth process of human beings.

Slaughterhouses and advanced meat production processes are instrumental to what is in this dissertation termed the *ablation of violence*, whereby the efficient product that is developed away from public visibility no longer results from killing animals and eating them, but efficiently producing livestock as commodities for consumption. This process contributes to and reflects the modern therapeutic state, where general welfare of the population is paramount. The Humane Slaughter Act prescribes a painless death for livestock, and outside of the slaughterhouse walls, society is free from violence (in its real form as would be visible in the city, and its conceptual form) against livestock animals since they legally experience painless deaths. Even the practices inside of the animal production facilities contribute to the ablation of violence:

Egg laying [sic] hens may have their beaks trimmed ... to avoid injury to each other ... claws may be trimmed to avoid injury during mating ... [With pigs] tails may be docked or shortened to end a natural tendency toward tail biting ... Beef cattle, sheep and some dairy cattle may be dehorned when young to avoid injury to each other ... Permanently identifying animals by ear-marking, tattooing, branding and other means is necessary to maintain accurate health records to prevent the spread of disease to animals and man ... All of these practices are under regular review and new research is done to ensure their necessity and effectiveness, and to ensure the required results are achieved in the most humane, efficient manner (Animal Agriculture Alliance, 2008, p. 239).

In this way modern meat production replaces the ancient farming practices where animals are killed and butchered for their meat; now unconscious commodities are processed into consumable matter. Modern meat production thus helps feed the population, strengthen it for the most efficient output, and sustains the therapeutic principles that focus on health and the elimination of pain.

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CHAPTER FIVE:

FOUCAULTIAN ANALYSIS OF ENDANGERED ANIMAL SPECIES

5.1: Outline

Foucault argues that the principle of governmentality emerged in the West during the eighteenth century, which witnessed increasing concern with managing Government started to govern for the sake of the "welfare of the population. population, the improvement of its condition, the increase of its wealth, longevity, health" (GV, p. 100). Governmentality employs the principle of economy, meaning that governing a state no longer simply entails exercising sovereignty on territory, but entails careful management of people and resources, and the relations between people and various "things" (GV, p. 92). New techniques of power were needed to "grapple with the problem of population" and as Foucault elaborates, "the economic system that promotes the accumulation of capital and the system of power that ordains the accumulation of men are, from the seventeenth century on, correlated and inseparable phenomena" (TP, p. 125). For these reasons, various branches of authority have emerged, each focusing either on issues like public health, hygiene, longevity, or fertility.

The natural environment in the United States is one such domain of life that has grown increasingly regulated. The natural environment represents another domain that impacts Americans: the health and wealth of the human population depends on its

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environment. The environmental impact on America's wealth development is evident, given that it has been estimated that during the late twentieth century the United States still derived 10 percent of its GNP from wild resources (Prescott-Allen & Prescott-Allen, 1986). At the start of the twentieth-first century, wild resources are still a key part of the American economy, in the form of commercial fishing, forestry, tourism, and in some cases natural resources are interconnected with wildlife areas. As this chapter contends, the material interests relating to wildlife and the concern with population and the biopolitical techniques employed in its regulation have played a prominent role in shaping the endangered species animal category. The emergence of "governmentality" focused on managing the human population and its resources, which has increasingly grown to include ecological preservation, has made species with low populations a paramount concern. In relation to animals labeled livestock, this interpretation suggests that the apparent ethical contradiction in treatment exists because the animals that fall in each category serve different functions in the same system of managed human life, which necessitates radically different roles for different types of animals.

Chapter five employs a Foucault-based analytical framework to examine the animal category endangered species and to demonstrate how this category emerged and developed. Section 5.2 provides the necessary background information for this analysis by offering a contemporary definition of endangered species according to the Endangered Species Act and by examining the difference between attitudes toward wildlife in general and wildlife species that are categorized as endangered. Section 5.3
traces the American concern with species protection, from the near extinction of bison at the end of the nineteenth century to the Endangered Species Act of 1973 that protects every species of animal (and plant as well, though plants are not examined in this dissertation) facing the threat of extinction. As this section reveals, the emergence of the endangered species animal category is relatively new and it emerged from circumstances that were quite attached to human interests. Section 5.4 then examines changing scientific notions of the human role in the natural environment to reveal how the ecological standard currently adopted in the Endangered Species Act emerged. As this section demonstrates, the emergence of ecology increasingly recognized that species were members of an ecosystem that depends on its different parts.

Section 5.5 looks at current American strategies for wildlife conservation and the role of scientific expertise therein, and how these maintain a particular truth—nature should remain static and human beings are collectively an entity removed from nature. This section examines the wolf reintroduction in particular to illustrate how this ecological truth operates, and also explains how the micro-physics of power that Foucault describes can operate to shape some endangered species. Finally, the chapter concludes by synthesizing analyses from chapter four and chapter five in order to present a Foucaultian explanation of the differences between livestock and endangered species. As this section demonstrates, Foucault's notions of anatomo-political and bio-political power can explain how these two animal categories have developed in the United States and how their creation reflects the emergence of governmentality, as meat

consumption and species populations also became subjects of administration. Moreover, power is productive: protected habitats and slaughterhouses are not simply repressive apparatuses that force animals to behave in certain ways. Rather, these strategies produce Americans as meat consumers and as beings who are separate from the natural environment, historical developments which in turn maintain what Foucault describes as the "wheels of power."

5.2 Background

In the United States, the Endangered Species Act of 1973 defines "endangered species" as follows:

The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man (Sec. 3, p. 5).

In some ways it may appear that little explanation is necessary for this particular category, given that a mathematical reality can explain why some animals are categorized as such. After all, as Frank Bachmura states: "Individually wild animals constitute a renewable resource. Species are not renewable however. The species exists as a stock of one" (p. 674). If an animal is part of an endangered species, its death increases the risk that no other animal of its kind will remain, while the death of an

animal from a populous species does not represent much threat to the species as a whole. Quite simply, then, an animal labeled as a member of an endangered species is of much greater concern because the ramifications of its life or death go beyond its own individual life.

This category is more complex, however, than the numerical element might on the surface suggest. Endangered species awareness and conservation efforts in the United States are today often seen as ethical issues in large part due to the efforts of influential environmental groups like Greenpeace (though originally created in Canada, it has offices in San Francisco and Washington, D.C.) and the World Wildlife Fund. American laws and these environmental groups devote more concern to the animals that fall under this category than they do to non-endangered wildlife, as will be demonstrated later in this chapter. Stephen Kellert (1993) conducted detailed research on American attitudes toward wildlife, which reveals that a majority of Americans do not oppose hunting wildlife that are not endangered. Kellert undertook a large-scale study of American attitudes toward wildlife by conducting personal interviews with 3,107 American adults, which were sampled randomly and found to represent the American public when compared with national census data. Kellert's survey asked interviewees 183 questions and averaged 45 minutes in length (p. 55). From this research, Kellert concludes that over 80 percent of Americans are in favor of hunting for meat and over 60 percent of Americans are in favor of hunting for recreation purposes

(p. 63). Public and legal reactions, however, indicate that this high approval rating for hunting does not apply to animals that are labeled members of an endangered species.

When an endangered species is poached, the general public reaction is rarely: 'killing this animal has increased the risk of its extinction in the wild.' Rather, the common reaction is along the lines of: 'killing this animal is an inexplicable attack on a majestic creature.' It is not surprising, then, that when a five-year-old boy during a 2007 hunting trip fatally shot a black bear (which was not listed as an endangered species), the incident was covered by various local news stations, along with national news agencies like Fox News and ESPN (sporting news), only as a story about a boy accomplishing something special at such a young age and without any consideration for the dead bear. On the other hand, hunting bald eagles—this species was listed as threatened under the Endangered Species Act (ESA) until 2007-has provoked a drastically different tone from news agencies, even if the hunting takes place beyond US borders. Time magazine featured a story in 2005 about illegally hunted bald eagles in Canada, which clearly resonated with its American readers (Jones, 2005). The incident is reported very much in the 'inexplicable attack on a majestic creature' format:

... a woman walking her dog in the woods of North Vancouver stumbled upon a *grotesque* find: the *mutilated* carcasses of 26 bald eagles. The discovery set in motion a major investigation involving law enforcement and conservation officials in both Canada and the U.S. Now, TIME has learned, authorities have identified suspects in a poaching and smuggling ring that they say annually

slaughters more than 500 of the protected animals ... (Jones, 2005, emphasis added).

The endangered component is one of the major distinguishing features in these two cases, and despite the dissimilitude of species, bears are ordinarily also popular creatures. One may point to the bald eagle's iconic status in the United States as a distinguishing feature, but the bear is also an animal that is easily categorized as a "charismatic megafauna," thus reaffirming the uniquely strong reactions to killing endangered species. Research has demonstrated a strong affinity for such animals considered charismatic megafauna, such as bears in North America. These species generate considerable funds for the ecotourism industry, and if endangered, environmental groups can generate considerable funding by emphasizing the threats to those species in particular (Higham, 2007; Leader-Williams & Dublin, 2000). These two examples suggest that killing an animal considered charismatic megafauna like a bear is acceptable or even laudable in some circumstances, but killing an animal considered a charismatic megafauna is not tolerable if it is endangered (a bald eagle can be considered megafauna in relation to the aves class).

The contrast is even greater when looking at federal laws on illegally hunting non-endangered game without a license and hunting animals categorized as members of an endangered species. For instance, a man who shot a bald eagle in 2000 was sentenced to nine months in federal prison. The investigation was thorough and was

nearly as extensive as an investigation might be for a violent crime against another human being. The United States Fish and Wildlife (2001) report on the incident states:

The Florida Department of Law Enforcement (FDLE) Crime Scene Unit conducted an examination of the area where the eagle was found and recovered .22 magnum rifle cartridge, which later proved to have been the killing shot. After executing a Federal search warrant on [the suspect's] home, conducting numerous interviews, following difficult leads and acting on information provided by a concerned public, USFWS agents recovered the rifle used to kill the eagle Ballistic tests conducted by the U.S. Fish and Wildlife Service's National Forensics Laboratory, and the FDLE Crime Laboratory proved the cartridge recovered at the crime scene and bullet fragments recovered from the

eagle matched [the suspect's] rifle (United States Fish and Wildlife Service, 2001).

Clearly the current penalty for hunting endangered species in the United States is severe, and authorities make strong efforts to successfully prosecute those who kill animals that are members of an endangered species. The maximum penalty for intentionally killing an animal categorized as part of an endangered species is one year in jail and/or a fine of \$100,000. Moreover, there are in some cases additional speciesspecific protective laws that offer additional legal protection, as well as state laws that may prescribe protective measures for other species or additional protection for species that already receive federal protection. Unlawful hunting of non-protected species is of course also punishable: hunting without a license, violating hunting seasons, and/or

exceeding bag limits. Such legal offenses, however, are in the United States currently considered minor enough to usually punish with fines. This again indicates that killing an animal categorized as a member of an endangered species in the United States today is very different than killing (even illegally) an animal that is a member of a nonendangered species.

5.3: History of Endangered Animal Species

The concern with endangered species is a relatively recent phenomenon in European and American history, despite many centuries of human-induced extinctions. The dodo is the most famous early example (estimated to have gone extinct in the late 1600s) of human-induced extinctions, hence the expression "as dead as a dodo." Historians have confirmed, however, another human-induced extinction that occurred long before the dodo went extinct: the Moroccan elephant was also hunted to extinction approximately two thousand years ago during the Roman Imperial era. In North America the ecological balance changed rapidly once Europeans started to settle throughout the continent beginning in the 1500s and by the early 1600s several species had already gone extinct, largely due to European commercial hunting (Smith, 1976, p. 36). This "New World," as Europeans viewed it, offered abundance that drew considerable economic interests. Foremost among these were the skins, pelts, and skulls of North American animals that were financially valuable in Europe:

The business of the fur trade, as the name implies, was mainly a traffic in furs and peltries. There were the fine furs obtained from the beaver, otter, mink, fox, and other animals, and the coarser products such as buffalo robes, bear and deer skins, which were not used as furs so much as for lap robes, heavy coats, and the like. Besides the furs and peltries there were regularly brought to St. Louis cargoes of buffalo tongues, buffalo and bear's tallow, and limited quantities of other products (Chittenden, 1986, p. 4)

This new resource economy soon depleted many animal populations as hunting was not regulated and the large trading companies facilitated hunting and trading. Moreover, as settlements spread across the continent, and in the American case, especially after the Louisiana purchase from France in 1803 and the annexation of lands from Mexico in 1848 after the Mexican-American War, expansion resulted in habitat destruction and correlating declines in animal populations.

One species in particular warrants special attention, the bison (often called buffalo), for its presence on the American plains was quite prevalent and its nearextinction is credited with helping to start conservation efforts in the United States. Before Europeans arrived, and up until the nineteenth century, bison were numerous and were hunted by Native Americans in what would be today considered a sustainable way. There were some instances of mass killings of bison by Native Americans, as with the case of "buffalo jumps" (the most famous being Head-Smashed-In Buffalo Jump in what is today Alberta, Canada) that led to many bison dying at once when an entire herd would be chased over a cliff, but the consumption level overall did not lead to bison population declines. When Europeans arrived they brought with them guns and horses, which greatly influenced the way that Native Americans hunted. A new premium on mobility sometimes led to waste, which was previously disavowed by Native American tribes (Isenberg, 2001, p. 92). As one observer noted in the early nineteenth century:

"I here witnessed greater slaughter upon buffalo than I hade been accustom to see at the Missurie—I have been with the Shawyens a hunting, or surround the cattle, with[in] 20 acres of their camp, when they killed (without saying so much) 250 fat Cows which they left on the field as they fell; excepting the Tongues which they dried for a general feast" (Charles McKenzie, 1806, quoted in Isenberg, p. 85).

By the start of the eighteenth century, many Native Americans had shifted from their traditional pattern of diversified resource use to year-round bison hunting, which not only sustained their own consumption patterns, but also offered sellable commodities. The bison robe trade also accelerated at this time, and some Native Americans mounted on horses and armed with rifles could now hunt bison much more proficiently and fill the large market demand (Isenberg, 2001, p. 94).

By the middle of the nineteenth century, bison had grown more valuable commercially as American industrial production accelerated. As historian Andrew Isenberg writes, "leather belts were the sinews of nineteenth-century industrial production: mills relied on heavy leather belting to animate their machinery" (p. 130; see also Ellsworth, 1975). Tanning was the fifth largest industry in the United States in 1850, and it expanded considerably over the next thirty years (p. 130). Bison leather was an ideal source for these belts, thus further accelerating the destruction of bison populations, which resulted in European Americans also hunting bison extensively for profit. As a result, economic forces, along in part with what are typically termed "natural" factors like drought and bovine diseases, drove the bison to the brink of extinction.

In some ways, however, these economic forces were spurred, or at least were not checked, by political/military interests. By the late nineteenth century, the American government had become interested in other natural resources, namely ranchlands and goldmines, which sparked military conflicts with Native American tribes west of Missouri. In the middle of the nineteenth century, Americans were spreading deeper into the plains that are now part of the central and western United States and were also spreading to the North American west coast. This brought European Americans and Native Americans into conflict, which was partially resolved with the 1868 Treaty of Fort Laramie. The treaty protected Native American access to bison west of Missouri, but the exact language stipulated "so long as the buffalo may range thereon in such numbers as to justify the chase" (p. 125). Strategically, increased bison hunting lowered the bison population that could sustain Native Americans, thus forcing them onto reservations created by the American government away from valuable natural

resources (p. 160). Part of the bison destruction was instigated by the United States military, but this was not as extensive as is often described. For instance, General Sherman, who famously marched on Georgia and destroyed confederate resources during the American Civil War, did at times resort to killing bison with the aim of eliminating what was for the American government enemy resources (p. 128). But this still represented a minor decrease in bison population. Instead, the American government had a vested territorial interest in disregarding violations of the treaty by European American hunters, who hunted the bison extensively due to their valuable skins, and helped sustain industrial production with the strong bison leather that could prove useful in mills. The bison at this point in the late 1800s had thus become fully integrated into what is today called the American industrial revolution. Bison were also part of a military strategy: in essence, bison hunting spared the American military from fighting an "extensive Indian war" (p. 129) by pushing Native Americans onto reservations. This in turn further paved the way for European American expansion and accelerated industrial production-which further depleted animal stocks of other species.

While European settlers and the commercial hunting practices they employed greatly contributed to the extinction of various species in North America since 1600, the near-extinction of bison herds led to a conservation ethic sparked in large part by the New York Zoological Society's director, William Hornaday (Smith, 1976, p. 36). A number of states soon thereafter began enacting laws that set bag limits on big game hunting as numerous other species experienced drastic drops in population. As Robert Leo Smith writes, however, these laws were not primarily seeking to protect wildlife, but rather, were looking "to ensure hunters a more or less equitable distribution of what was left" (p. 36). In fact, many advocacy groups for wildlife preservation were derivative of or backed by hunting enthusiasts and ammunition manufacturers. For example, the American Game Association was originally founded by conservationists and major ammunition and sporting arms manufacturers. This organization was later renamed the American Wildlife Institute, and later became known as the Wildlife Management Institute (p. 36). Interest groups and those concerned with conservation set in motion various conservation laws, such as: the Lacey Act of 1900, which gave the federal government control over the trafficking of parts from illegally killed animals; the Weeks-McLean Act of 1913, which granted the federal government control over migratory birds; the Norbeck-Anderson Migratory Bird Conservation Act of 1929, which protected bird refuges from hunters; and the 1950 Dingell-Johnson Fish Restoration Act, which taxed fishing equipment to provide funding for conservation research and fish habitat restoration, as the earlier Pittman-Robertson Act did with hunting supplies (p. 40).

During the first half of the twentieth century as these protective laws were being passed, it is clear that there was little political concern for endangered species in general, but rather protecting some species that were considered valuable commercially or recreationally and furthering government control over American territory. The treatment of wolves illustrates this point, for at the start the twentieth century, the Department of Agriculture's Biological Survey's predator-control unit began exterminating wolves throughout the United States. This project was funded by Congress, state governments, and private associations with vested financial interests in the eradication of wolves, and the aim was to make it easier for livestock and crop growth and also increase the supply of wild game like deer (Coleman, 2006, p. 193). This new program replaced the previous system of random wolf killings by bounty hunters and ranchers. By 1950, wolves were extinct throughout the continental United States, with the exception of Minnesota—though the American government ultimately began reintroducing wolves in 1995, as will be discussed in section 5.5.

It was at this time that the United States passed the Agricultural Act of 1956, which affirmed broad concern with wildlife and environmental management, and some of its key statements share strong similarities with Foucault's own statements on governmentality and the shift in government concern to population welfare and the "things" that relate to the population. As the Act states:

It is in the interest of the general welfare that the soil and water resources of the nation be not wasted and depleted in the production of such burdensome surpluses and that interstate and foreign commerce in agricultural commodities be protected from excessive supplies. It is hereby declared to be the policy of the Congress and the purposes of this title to protect and increase farm income, to protect the national soil, water, and forest and wildlife resources from waste and depletion, to protect interstate and foreign commerce from the burden and obstructions which result from the utilization of farmland for the production of excessive supplies of agricultural commodities, and to provide for the conservation of such resources and an adequate, balanced, and orderly flow of such agricultural commodities in interstate and foreign commerce. To effectuate the policy of Congress and the purposes of this title programs are herein authorized to assist farmers to divert a portion of their cropland from the production of excessive supplies of agricultural commodities, and to carry out a program of soil, water, forest and wildlife conservation.

The Act thus recognized that environmental resources, wildlife, agriculture, and ultimately human welfare in general were intertwined. Undoubtedly the most significant law protecting wildlife, however, is the Endangered Species Act of 1973, which protects animals facing the threat of extinction in any region of the United States, irrespective of worldwide population levels for any given species (Smith, p. 36). Any animal placed on the endangered list comes to wield significant power over commercial interests, as development projects can be stopped and industrial operations interfered with on the grounds that such activities threaten an endangered species' habitat: "once a species is placed on the endangered species list, cost-benefit analysis is practically precluded" (Metrick & Weitzman, 1996, p. 1).

5.4: Scientific Knowledge and the Human Role in the Environment

"Anonymous, historical rules," according to Foucault, "always determined in the time and space that have defined a given period, and for a given social, economic, geographical, or linguistic area," are responsible for developing scientific knowledge (DL, p. 115). Foucault further elaborates this connection between science and power by describing truth as a product of scientific discourse, developed by political and economic apparatuses like universities and armies (TP, p. 131). Though biology and the life sciences may rely on more substantive empirical evidence for their conclusions, they are not necessarily immune from this assessment. Foucault states that biological sciences are also constructions subject to the same strategies that define other forms of knowledge. Donna Haraway's (1989) view of biology supports this Foucaultian perspective:

Scientific practice may be considered a kind of story-telling practice—a rulerating governed, constrained, historically changing craft of narrating the history of nature ... Biology is the fiction appropriate to objects called organisms; biology fashions the facts "discovered" from organic beings. Organisms perform for the biologist, who transform that performance into a truth attested by disciplined experience, i.e., into fact (p. 4).

Haraway's and Foucault's comments invite inquiries about the truths advanced in biology and the life sciences, which heavily influence endangered species conservation efforts and ecological management in general.

With animal studies, then, considerable research in the Cartesian tradition demonstrated that animals were universally devoid of linguistic abilities, which supported a privileged position for human beings. One of the most influential scientific truths of the nineteenth and twentieth century was undoubtedly Charles Darwin's theory of natural selection, which displaced Cartesian reasoning to some extent, but in some ways reinforced the notion that using animals was appropriate. According to Darwin, Jean Baptiste Lamarck was the first to suggest the theory of evolution (Darwin, 1859, p. 54), though Foucault points out that before Lamarck, "Bonnet, Maupertuis, Diderot, Robinet, and Benoît de Maillet all very clearly articulated the idea that living forms may pass from one into another, that the present species are no doubt the result of other transformations" (OT, p. 151). Lamarck's theory of evolution specifically suggested that an animal's surrounding environment prompted progressive evolutionary changes to its physiology. Darwin corrected Lamarck's causal mechanism by putting forth a theory of natural selection. In short, Darwin argues that certain traits are more conducive to survival in a given environment:

The struggle for existence inevitably follows from the high geometrical ratio of increase which is common to all organic beings More individuals are born than can possibly survive. A grain in the balance will determine which individual shall live and which shall die, — which variety or species shall increase in number, and which shall decrease, or finally become extinct (p. 442).

It is easy to recognize how this theory could hold great influence on human understanding of its relations with other species. "The Enlightenment legacy and its glorification of rational knowledge, science, and technology," Carl Boggs (2001) notes, "produced a conflicted dualism between human existence and the natural environment" (p. 202). Darwinian theory, by contrast, exposed the similitude between human beings and animals.

Darwin's theory of natural selection made untenable the view that humans were unique in nature, revealing that humans were instead part of an evolutionary selection process that favors traits more conducive to survival, which some interpreted as a way for justifying human expansion and consumption of other species. As Darwin (1879) surmises:

Thus we can understand how it has come to pass that man and all other vertebrate animals have been constructed on the same general model, why they pass through the same early stages of development, and why they retain certain rudiments in common. Consequently we ought frankly to admit their community of descent: to take any other view, is to admit that our own structure, and that of all the animals around us, is a mere snare laid to entrap out judgment ... it is only our natural prejudice, and that arrogance which made our forefathers declare that they were descended from demi-gods, which leads us to demur this conclusion (p. 43).

According to Darwin, then, his theory confirms that humans are no different than other animals in terms of origins and the processes that shape species development. Darwin also addresses the human intellect, which he acknowledges seems to set human beings apart from animals and the natural world. Darwin explains that evolution does not exclude human beings or the natural processes that shape life:

The high standard of our intellectual powers and moral disposition is the greatest difficulty which presents itself ... but everyone who admits the principle of evolution, must see that the mental powers of the higher animals, which are the same in kind with those of man, though so different in degree, are capable of advancement. Thus the interval between the mental powers of one of the higher apes and of a fish, or between those of an ant and scale-insect, is immense; yet their development does not offer any special difficulty; for with our domesticated animals, the mental difficulties are certainly variable, and the variations are inherited. No one doubts that they are of the utmost importance to animals in a state of nature. Therefore the conditions are favorable for their development through natural selection. The same conclusion may be extended to man; the intellect must have been all-important to him, even at a very remote period, enabling him to invent and use language, at a very remote period, as enabling him to invent and use language, to make weapons, tools, traps, &c., whereby with the aid of his social habits, he long ago became the most dominant of all living creatures (p. 679).

Darwin thus stresses that even human intellect, which seemingly puts human beings in an entirely different category than animals, is a product of the same evolutionary processes that produced more limited intellect in fish or apes, for example.

Darwin himself, it is worth noting, believed that his work could only explain how species, including the human species, developed to become what they are now. His own personal opinions about how humans should act did raise humans above this natural selection reality: he was against slavery, animal cruelty, and did not wish to see all wildlife become enslaved by humanity. Nevertheless, the implications of his research could be used to justify social inequalities and also humankind's dominance over the natural environment. And so human dominance over the natural world that was previously justified by the story of Genesis in the Old Testament that gave man all the animals of the world for his use, could now be justified by some as a natural process of evolution that had elevated human beings above other living beings. Darwin revealed that human beings were subject to the same natural processes as other animals, and as such Darwinian ideas for many "demonstrated the superiority of humans as creatures far more 'evolved' than other creatures and entitled to far more consideration" (Preece, 2003, p. 404).

Darwin's theory had a significant impact on the American scientific community (Loewenberg, 1933). Darwinian theory contributed to perceptions of human-animal relationships: if animals were not given to man to consume as he pleases as stated in Genesis, then man could now justify human expansion at the expense of other species

because he was an evolutionary winner according to the survival of the fittest theory. Such a view was not sustainable, however, given the realization that an animal species as a whole could disappear as a result of human activities. It became clear that despite human and animal similarity from a bio-evolutionary perspective, human beings could not be seen as just another evolutionary competitor. The significant changes in wildlife composition and to the natural landscape by the late nineteenth century were making such a view untenable, and the rapid decline in bison populations accentuated this point in the United States. That is, the rampant destruction of many species in such a short time period revealed that human beings were clearly not simply an evolutionarily gifted species, but rather, an entity capable of completely transforming ecosystems within very short timeframes. As a result, there arose a strong "view of nature that defines ecology as something quite apart from social structure and processes" (Boggs, p. 203).

It is possible to trace the roots of this ecological concern back to the seventeenth century when, according to Foucault, species identification started to draw on relations to other animals rather than their own features in and of themselves. As Foucault states:

From the seventeenth century, there can no longer be any signs except in the analysis of representations according to identities and differences An animal or a plant is not what is indicated—or betrayed—by the stigma that is to be

found imprinted upon it; it is what the others are not; it exists in itself only in so far as it is bounded by what is distinguishable from it (OT, p. 144).

The rise in natural sciences therefore meant an increasingly detailed taxonomic record of wildlife, where certain animal species that previously appeared to belong to the same species were now recognized as different species. As Foucault puts it, by the nineteenth century life itself and the various living things in the world became "one object of knowledge among others" (OT, p. 162). The near extinction of bison described in the previous section helped ecology emerge in the United States, which recognized human beings as distinct from the natural environment.

The term ecology (in German, *oecologie*) was coined in 1866 by the German Darwinian scholar, Ernst Haeckel, and comes from the Greek *oikos*, which refers to managing the family household (Worster, 1994, p. 192). Focus on ecology in the United States in some ways began with the Lewis and Clark expedition of 1804 that charted the boundaries of America's newly purchased Louisiana territory from France, as the expedition charted territory and made observations about plants and animals contained therein. By the end of the nineteenth century, however, ecology had become a concept used to distinguish professional naturalists from such explorers, and the term was adopted in English in 1893 at the International Botanical Congress (p. 192). In the United States, a government administration to catalogue the country's species emerged through the efforts of Hart Merriam in 1885. Initially interested in ornithology and discovering bird migration patterns in the United States, he approached the federal

government for funding. By persuading Congress that understanding the distribution of birds in America could benefit farmers, Congress created an office for Economic Ornithology within the Division of Entomology, which was part of the Department of Agriculture (Sterling, 1989, p. 180).

Merriam first traveled to Northern Arizona and developed his notion of life zones, where different climates and geographical features housed different fauna and flora. This became the dominant principle of ecology that would guide later ecologists in the United States: "that a piñon jay, for example, belongs in the forest of the upper austral zone, not in the land of the Douglas fir or of saguaro; that certain plants and animals keep each other company because, directly or indirectly, they are linked in common dependence on a common climate (Worster, p. 197). Later ecologists refined this to include much more defined zones and much more gradual transitions between these zones, but the overall principle remained. Moreover, the federal agency he helped create eventually developed into the Bureau of Biological Survey in 1905. In 1940 it combined with the Bureau of Fisheries and became the United States Fish and Wildlife Service, which is tasked with conserving wildlife and habitats (United States Fish and Wildlife Service). The United States Fish and Wildlife Service eventually ceded its research and management functions in 1996, when the research division became part of the United States Geological Survey.

5.5: Ecological Truths Operating in the United States Government

The ecological concern with the human impact on wildlife diversity and the resource-based concern that useful species could vanish reveal the competing scientific notions of the human location in the natural environment, and these competing ideas helped concern for endangered species in the United States emerge. Darwinian notions of evolution clearly could include human developments, but the dominant ecological view administered through the state now advocates a particular truth regarding biodiversity, one that suggests it must be constant and regulated by human intervention. Thus, while conservation efforts initially focused on easily recognizable species like bison, later efforts expanded this level of concern to include many different species that consist of largely unknown animals, and eventually to include all species facing the threat of extinction. Such a view has lead to environmental management, which has led to reintroducing wolves, for example, or controlling animal populations by means of carefully calculated hunting license allotments. This suggests that the United States Fish and Wildlife Services (FWS) throughout the second half of the twentieth century as a research and management agency, for instance, operated on a truth that would have a wild environment remain constant and unchanging in confined parameters, with species remaining within defined ecological parameters. In some cases this has even entailed recreating a previous ecological balance by reintroducing regionally extinct species.

The scientific community is instrumental in maintaining this perspective by providing the logistics necessary for achieving its objectives. Sylvia Noble Tesh (2000) suggests that the role of the scientific community is one form of grassroots support in American environmental protection and that it exerts great influence on environmental issues like endangered species conservation. Grassroots activism is very difficult to assess since activists and campaigns tend to vary considerably based on the issues involved and the contexts. Political scientists attempting to assess the impact of grassroots lobbying is according to Linda Fowler and Ronald Shaiko (1987) often similar to "a blind man searching for a black cat in a coal bin at midnight" (p. 487). The influence of scientific assessments on government decisions and public perceptions of wildlife issues escape this characterization because it is evident that scientific assessments do indeed anchor both. The scientific community is indispensable to wildlife conservation efforts by offering scientific information to "mainstream" activist groups like Greenpeace, the Sierra Club, and the World Wildlife Fund, and by providing the scientific justifications that government agencies use to make environmental decisions. Scientists with expertise in the life sciences exert significant influence on government policies, such as the key piece of endangered species legislation, the 1973 Endangered Species Act. The Act explicitly states that its enactment relies heavily on the scientific community under its "Basis for Determinations," Section 4, subsection (b), (1)(A), which states that the Secretary of the

Interior or the Secretary of Commerce make decisions on which species to list as endangered or threatened:

solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.

The Act further articulates the role of scientific expertise when making decisions on habitat designations, in Section 4, subsection (b), (B)(2), which states:

(B)(2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

The Endangered Species Act thus clearly relies heavily on scientific data, which relies on experts in the life sciences who focus on ecology and biology. The National Environmental Policy Act (NEPA) further entrenches the need for and influence of scientific knowledge in wildlife management by mandating environmental impact statements for all federal actions that may impact the environment, which can include federal environmental laws. NEPA specifically prescribes that any agency "consult with and obtain the comments of any federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved" (Bean, 1983, p. 196).

The scientific data that government agencies (particularly the United States Fish and Wildlife Service) responsible for wildlife management act on, prescribes not only mitigating the human impact on wildlife, but also the non-human impact. Section 4 (A)(1) prescribes protection for all endangered species threatened by any of the following:

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) disease or predation;
- (D) the inadequacy of existing regulatory mechanisms; or
- (E) other natural or manmade factors affecting its continued existence.

As the Act clearly states, all species facing the threat of extinction are covered by its protective provisions, even if the threats do not stem from human activities.

Endangered species are therefore protected by the Act even if a species is endangered as a result of disease, predation, or other "natural" factors, though the preponderant influence of human activities could certainly make it difficult to distinguish between natural factors and human activities. The Act also has no discriminatory provisions that prioritize one species over another, but instead it gives priority "to those endangered species or threatened species, without regard to taxonomic classification," that are most likely to benefit from protective efforts. In short, any species, whether popularly majestic or inconspicuous, is protected regardless of the reason for its endangerment.

The current ecological standard not only seeks to preserve the current environmental conditions as they currently exist, but also appears to aim for an ecological balance that used to exist. The ecological objective is to achieve a static wildlife balance based on environmental conditions that have previously existed. "As the number of endangered species grows," Richard Reading and Stephen Kellert (1993) write, "reintroduction as a conservation tool increases" (p. 570). Reintroductions require considerable preparation and scientific research. Feasibility studies entail location evaluation, environmental variation levels (Tatcher, Van Manen, and Clark, 2006), and genetic analysis for population growth possibilities (Russell, Thorne, Oakleaf, and Ballou, 1994). Moreover, once a species is reintroduced into the wild, officials monitor its population and the animals' activities. Predatory animals reintroduced into the wild need further post-release maintenance since they can threaten human financial interests, typically in the form of livestock (or potentially

human safety as well). With a species like the gray wolf, which was reintroduced to Arizona, Idaho, and Yellowstone National Park, the animals were radio-collared in order to keep track of their movements and to make it possible to control their activities and movements when necessary (Bangs, et al., 1998). As Bangs et al. write:

Control consisted of the minimum actions believe necessary to reduce further [livestock] depredations. The spectrum of control measures used included intensive monitoring of the wolves and livestock (including providing a telemetry receiver to the affected rancher), aversive conditioning (i.e., capturing, radiocollaring, and releasing wolves on site or harassing wolves with noisemakers such as cracker shells), relocating or killing wolves, or some combination of these approaches (p. 786).

When a reintroduced wolf attacks livestock, the decision on what control mechanism to employ depends on multiple factors. One factor is whether or not it is the first time that the wolf in question has attacked a livestock animal. If it is the first time, the wolf is typically relocated. If on the other hand a wolf has attacked livestock on more than one occasion, the wolf is typically terminated. Another factor is the wolf population level, for if the number of reintroduced wolves has increased sufficiently in a given area (more than six breeding pairs), then a wolf that has attacked a livestock animal can be terminated after just one incident (p. 786).

This kind of conditioning demonstrates that the anatomo-political power can also be deployed for endangered species management. Radio-collars allow wildlife

managers to maintain their gaze on the animals, to ensure that they remain within their prescribed boundaries and to keep track of the animals. Many endangered species are not radio-collared, but many are "tagged" and periodic capture helps track animal behavior and keep them in their proper locations. In the instance of wolves, FWS officers in effect make normalizing judgments, which entails relocating them if they engage in the *abnormal* act of attacking livestock instead of other wild prey as they have been trained. Moving animals is a form of corrective discipline, though this is quite limited since wolves can be killed after the first relocation and it is uncertain if the wolves understand why these judgments are made. Such forms of anatomo-power help delineate endangered species from ordinary wildlife, as protected habitats separate some wildlife from other wildlife, and tracking in various forms ensures that these animals remain where they are supposed to remain, and in some cases, do what they are supposed to do. These strategies include conditioning to make animals territorially consistent, and with reintroduced species, genetic screening ensures that ideal genetic matches produce strong members of a particular species that have the highest likelihood for population growth (Russell, Thorne, and Ballou, 1994).

Though the decision to reintroduce a species that is extinct in the wild back into the environment in which it once existed is not taken lightly, these reintroductions can threaten human interests and are ultimately government decisions, based on scientific evaluations. Human interests are typically economic, particularly for farmers and ranchers with livestock that are prey for predatory animals or can be fatally injured by holes made by reintroduced species that burrow. Also, new conservation areas represent public grazing land losses (Reading & Kellert, p. 578). The human interests can even include safety as well, given that species like wolves and panthers are certainly able to injure or kill human beings, and reintroducing them into the wild increases the risk—no matter how small—of fatal attacks on humans. For instance, over 3,000 humans were killed by wolves in France from 1580 to 1830 (Moriceau, 2007). Most recently, a college student was killed by a pack of wolves in Saskatchewan, Canada, in 2005 (CBC News, 2007). One expert suggested that the attack could have been by a bear instead, but eyewitness testimony indicated that no bears were spotted at the time, while a pack of wolves had been spotted in the area (aggressive wolves had been encountered in the area just days before the fatal attack). Ultimately the coroner's jury was fully convinced that this was a wolf attack due to the type of bite marks found on the corpse, and the lack of blunt trauma that is associated with bear attacks.

Though this is an attack in Canada, the fact that wolves from Canada have been reintroduced into the United States indicates the relevance of this statistically minor threat from wolves. As the Wolf Recovery Foundation states: "The wolf is a top predator, neither good nor evil" (Wolf Recovery Foundation). Whether or not wolves should inhabit a certain region is not being questioned here. Rather, the point is that wolf interests (or panther interests, along with other predators and in some cases even non-predatory animals) can conflict with human interests, which could include physical safety as well given that animals like wolves have the ability to kills humans. It is often the Fish and Wildlife Service and its experts that determine what level of risk is acceptable, though human interests clearly influence its decisions given that Fish and Wildlife Service officers destroy the animals that threaten human interests like livestock. It should be noted, however, that preserving wildlife can itself represent a human material interest. In the case of reintroduced wolves, it is estimated that the wolves alone generated \$4,924,482 in revenue at Yellowstone National Park in 2005, and a visitor survey estimates that an average of 14,285 visitors come every year specifically to see the reintroduced wolves (Farquhar, 2006).

The scientific community influences whether or not a reintroduction program is appropriate and influences government decisions involving reintroductions, such as species selection and implementation strategies. As Reading and Kellert (1993) write:

A generalized paradigm for the reintroduction of endangered species has been developed that includes socio-economic variables (Reading et al. 1991). The paradigm also involves the integration of science/technical, organizational, and political or power/authority variables.

Reading and Kellert add that it is necessary to garner public support for reintroductions, which necessitates research and analysis that contribute to effective public relations campaigns (p. 571). Conservation biology therefore not only entails work in the natural sciences that evaluates the natural environment, but also requires political and sociological studies that evaluate public opinion toward particular species and formulate effective strategies to influence public support.

For instance, researchers conducted a study on public attitudes toward wolves in Colorado as part of a potential reintroduction effort (Pate, Manfredo, Bright, and Tischbein, 1996). Their study revealed a generally positive reaction to wolves—nearly 71 percent approval—and they therefore concluded that the atmosphere was suitable for a wolf reintroduction plan in Colorado. This study therefore assisted the Fish and Wildlife Service by determining what was suitable, in terms of public acceptance, and by determining whether the negative impacts on those 29 percent who did not favor a wolf reintroduction were great enough to warrant foregoing the plan. In 2005, a workshop was held that featured wildlife biologists from the Banff (Canada) and Yellowstone (US) national parks, the Fish and Wildlife Service coordinator for the Wolf Restoration Project, a Yale social scientist, a United States Geological Survey researcher, along with other biology experts (Baker, 2009). The panel concluded that wolves could not be contained in the Rocky Mountain National Park, and thus reintroducing wolves would not be appropriate despite the ecological benefits of managing a growing elk population. The final decision also needed a biological feasibility study to determine the ecological suitability of introducing a large predator into the ecosystem (Pate, Manfredo, Bright, and Tischbein, p. 427).

This is not to say that the scientific community represents a monolithic block of unified knowledge—there is indeed much debate regarding scientific truth claims. As Charles Mann and Mark Plummer (2000) write, "scientists themselves disagree, often vocally, providing ample ammunition" for different environmental positions (p. 716). For instance, there was debate in 2007 when the bald eagle was removed from the Endangered Species Act's protective measures, particularly in the state of Arizona. Some argued that Arizona bald eagles, which are extremely rare, represented a unique sub-group because of their lifestyle adaptations to the harsh Sonora Desert conditions, leading some scientists to debate whether unique behavior constituted a distinct group meriting special protection. While the public plays a role in such debates, it is nonetheless largely detached from the scientific assessments. Experts espouse scientific truths that activists, politicians, and the general public consumes, but largely cannot engage critically since they can typically only assess the conclusions, and not the immense volume of data and analysis used to draw those conclusions.

Lyanda Haupt (1995) argues, however, that these latter groups are in fact impinging on the scientific community. "In a time when political handling of sensitive ecological affairs is an increasing inevitability," Haupt writes, "popular understanding will continue to impinge on a scientific comprehension whose academic purity is no longer viable..." (p. 692). Haupt's claim is debatable, however, given the evidence that environmental sciences are now increasingly including research on ways to gauge public opinion toward endangered species and ways to change public opinion—it does not appear that public pressures are threatening academic purity, but rather that there is an effort to find ways to make findings acceptable to the public. Evolutionary biology now even studies why human beings have the attitudes that they have toward their environment (Penn, 2003, p. 288). Ecological analyses are increasingly complex and distant from common understanding because of the technical nature of ecological studies, meaning that the general public must consume scientific findings without necessarily understanding the basis for conclusions. In what Robinson et al. (2001) call a "guiding document on conservation research for development agencies" (p. 877), the United States National Research Council also advocates greater ecological control in developing countries:

Additional research and technical development are needed to advance the utility of remotely sensed data for ecosystem monitoring in developing countries.' Since that time, technical expertise and availability of remote sensing and geographic information systems (GIS) as tools for monitoring and conserving biodiversity have spread widely throughout the world" (quoted from Robinson et al, 2001, p. 877).

The type of knowledge developed with such data and the detailed biological studies that determine taxonomical differences, along with species population projections and strategies for managing ecological balances, require considerable scientific expertise to produce. The government and people in general may consume this knowledge and apply it in different ways, but the data itself is produced and debated within the scientific community.

5.6: Conclusion

The endangered species animal category in the United States has emerged from competing interests and truths, and today operates on a particular ecological truth. This truth rejects the basic history of evolution, which as the Royal Tyrrell Museum of Paleontology reminds its visitors: "Species come, and species go. The only constant is change." Some may remember the old British nature shows filmed during the 1970s, in which the narrator laments an impending calamity for a particular animal on the screen, but reminds viewers that man must not intervene, for "that is nature's way." "Nature's way" is a natural existence that sees some animals die at the fangs of other animals, or a baby animal that strays from the herd and starves, or conversely, another baby animal that may fortuitously survive a predatory attack, or another animal that survives by chancing upon a weakened prey. "Nature's way" is in short the ecological balance achieved through random processes that sees some animals survive, others perish, and over time, some species survive and others perish-what are today considered "natural" events have driven countless species to extinction, sometimes suddenly.

Increasingly, however, the scientific community specializing in environmental studies and the government agencies in the United States with whom they have influence take the stance that man must intervene and preserve the natural environment around him as a static reality, for controlling nature's way is now man's way. Whether or not endangerment is due to human activities or natural events, endangered species in the United States are protected. In essence, Darwin's rejection of

Lamarckian evolution as a teleological process that would eventually yield better creatures has itself been tacitly rejected in the United States, with the Darwinian explanation for how things have come to be now remaining, but implicitly holding that man can and should control natural selection.

This assessment is not a value judgment-human evolution could justify expanding at the expense of other species, likely leading to harmful consequences for humans, or it could include ecological management that benefits human interests. The concern with population and its welfare has grown to include ecological management in the United States. It reveals the productive aspect of what Foucault calls bio-political power, which in this case has produced human beings who are responsible for preserving the environment. Without such concern, human activities that nearly drove bison to extinction would surely have eliminated numerous species and the ecosystem upon which so many human interests depend would be severely damaged. Competing material interests influenced the emergence of endangered species, and this animal category solidified in 1973 with the Endangered Species Act. Competing material interests continue to shape endangered species today, as revealed by the debate about and approach to reintroducing wolves in some parts of the United States.

Scientific truth claims also varied over time: while human beings could be seen as deserving evolutionary victors, it became clear in the United States that despite also developing through evolutionary processes, humans could preserve or destroy the environment. Ecology suggested that there was a proper place for different plants and
animals and in given contexts they all depended on one another, thus making animals who are part of an endangered species paramount in importance as invaluable members of an ecosystem. These systems of knowledge and the material interests intertwined with wildlife initially protected the material interests associated with the survival of some species, but over time these interests and systems of knowledge produced the category of endangered species as a protective designation for any species facing the threat of extinction. The anatomo-political strategies of power have also contributed to producing the endangered species animal category by creating animals that behave differently from other wildlife. Conditioning some endangered species, predatory animals in particular like wolves and panthers, entices self-management in terms of what prey they hunt and their roaming patterns.

With regard to animals categorized as livestock, bio-political power also shaped this animal category by producing an American population that almost universally consumes meat. During the late-nineteenth and early-twentieth century there emerged a view of meat as being a component of a healthy human diet, which eventually emerged from the American government through USDA food guidelines. The rise of bio-political power has also contributed to these developments for concern with population made it necessary to mass-produce meat products as dietary staples, predicated on a truth that meat was necessary and healthy for human beings. The micro-physics of power that circulated in meat production facilities developed more

efficient methods for producing meat and using every part of the animals used in the process, which ultimately eliminated waste and reduced costs.

Since power is according to Foucault not just repressive, but productive as well, slaughterhouses, meat production processes, protected habitats, and species reintroductions should not simply be seen as repressive apparatuses that constrain animals to exist as their category demands. These processes also entail producing human beings as regular consumers of meat and as protectors of the natural environment. Scientific assessments that increasingly interact with public opinion and determine which species belong where are essential for these animal categories to function as they do now, and for the animals who comprise these categories to be conceptualized as they are now. From a Foucaultian standpoint, categorizing animal species helps sustain an economy of power, whereby the procedures employed in these categorizations circulate continuously. These strategies of power that produce livestock and endangered species, in short, maintain what Foucault describes as the "wheels of power" (TP, p. 116).

Preserving members of endangered species without protecting members of abundant species labeled livestock, then, represents a functionalizing process for animals. It is not simply the case that the value of an animal increases as its level of rarity rises or vice versa. Rather, these animals are part of the same system in which the human population and its welfare are the focus of governmentality, and this has been associated with different functions from different animals. Human welfare has been associated with both the state of the natural environment and a particular kind of ready food supply accessible by an increasingly urbanized population. Taken together, then, Foucaultian interpretations of livestock and endangered species suggest that it is material interests and truths produced through scientific analyses that have guided what types of animals fill particular functions. This largely explains the reasons behind the apparent ethical contradiction to which Wennberg refers between endangered species conservation and the lack of concern for other animals like livestock.

CHAPTER SIX:

GEERTZIAN ANALYSIS OF LIVESTOCK AND ENDANGERED ANIMAL SPECIES

6.1: Outline

This chapter analyzes the animal categories "livestock" and "endangered species" by using what Geertz calls thick description. Section 6.2 outlines how analysis based on thick description relates to the previous interpretative framework: Geertzian analysis yields insight based on everyday common understanding that Foucault presupposes but does not analyze. Section 6.3 presents research on what are here termed anomalous livestock cases, which draws on examples of animals that are ordinarily considered livestock, yet are treated differently in certain circumstances. Section 6.4 engages these examples and compares them with typical livestock experiences, which yields the following conclusion: anomalous cases reveal that when animals are removed from their typical conditions they lose their status as livestock that exist purely for consumption. This supports the Foucaultian interpretation that emphasizes how removing animal production from public visibility has made modern meat production processes possible, which from a methodological standpoint demonstrates how these two lines of analysis can complement one another. Section 6.5 looks at the different uses for different livestock species, and answers a central question that the Foucault-based interpretation has not answered: why are only some species regularly consumed as food? Section 6.6 then applies this line of analysis to endangered

species, which also suggests that different species occupy different symbolic locations in the United States, thus resulting in different levels of concern that are independent from the power and governmentality-based factors.

6.2: Background

The Foucaultian perspective explains the apparent dichotomy between American attitudes toward livestock and endangered species. According to this interpretation, the animals that fall in each category serve different functions in the same system of managed human life. Meat consumption and public health required extensive meat supplies, which in the existing economic framework required highly efficient production methods—scientific developments and transferring manufacturing processes away from public visibility made possible these increases in supply and consumption. Likewise, the emergence of governmentality focused on managing the human population and its resources, which has increasingly grown to include ecological preservation, and species with low populations became a paramount concern.

Certain features of human-animal interaction in the United States suggest that this Foucaultian explanation is ultimately inadequate. Some examples contradict this analysis, where animals ordinarily labeled livestock or endangered species do not experience the conditions that typify their category. Not all pigs are widely viewed as part of industrial meat production, nor do all endangered species receive high levels of

protective efforts. Moreover, the Foucaultian perspective can explain how livestock and endangered species have developed as identifiers whose conditions are largely accepted uncritically, but this interpretation cannot explain why certain species in particular comprise the category livestock and why such disparate treatment exists between different species in the endangered category in particular. And so while Foucaultian analysis is undeniably useful for explaining the emergence of these categorical divisions in the United States, it is incomplete since the variable treatment of certain species or of certain animals within a particular category defies this model. As Foucault (1970) writes:

When one is faced with the task of writing an animal's history, it is useless and impossible to choose between the profession of naturalist and that of compiler: one has to collect together into one and the same form of knowledge all that has been seen and heard, all that has been recounted, either by nature or by men, by the language of the world, by tradition, or by the poets (OT, p. 40).

A symbolism perspective based on Clifford Geertz's work supplements this Foucaultian analysis by concentrating on the relations of meaning that escape Foucault's focus, and by focusing on the everyday common understanding that he presupposes but does not analyze (Dreyfus and Rabinow, 1983).

Geertzian (1973) thick description is indispensable in supplementing the Foucaultian perspective by making it possible to examine individual species and their symbolic/spiritual significance for Americans. Geertz uses the example of a wink to illustrate the necessity of thick description to understand meaning. Interpreting a wink requires knowledge of social conventions and intent, for thin empiricist description focusing on how the eyelids physically close can offer no insight as to what a wink might mean (p. 12). "Culture is public because meaning is," Geertz writes, adding that "culture consists of socially established structures of meaning" (p. 12). From this premise, Geertz employs thick description to understand, for example, what Balinese cockfights indicate about Balinese culture:

In the normal course of things, the Balinese are shy to the point of obsessiveness of open conflict. Oblique, cautious, subdued, controlled, masters of indirection and dissimulation—what they call *alus*, "polished smooth"—they rarely face what they can turn away from, rarely resist what they can evade ….. The slaughter in the cock ring is not a depiction of how things literally are among men, but, what is almost worse, of how, from a particular angle, they imaginatively are (p. 446).

Geertz suggests that the social relationships that originated from Polynesian titles and the Hindu caste system are on the surface smooth, and the existing social hierarchy is respected. The cockfight thus reveals many facets of Balinese culture, including not only the jealousy hidden beneath formal protocols that respect established hierarchies (p. 447), but it expresses and teaches the whole range of emotions upon which society is built just as watching or reading Macbeth does for Anglo-Americans (p. 450). Likewise, looking at an animal being killed for food or hunted entails multiple levels of analysis.

On the surface, there is the method for killing it, the animal's features, and how the animal's remains are used. This does not reveal much beyond the obvious, however, and thus to understand why *that* animal was killed and used for *that* purpose, it is necessary to understand something about the persons killing/consuming the animals, and the interplay they create between their own features and the animal's.

Geertz warns against simply analyzing cultural symbols in terms of "pure meaning," removed from their "psychobiological" and social contexts (p. 141). Thick description can guard against this, for this line of analysis requires that the researcher examine the real-world details and the context to understand how a particular society appropriates particular symbols. Geertz's approach is employed here to examine features of America's history that can explain its relationship to particular species. Four examples in particular indicate that the livestock and endangered animal species categories in the United States have not resulted solely from the processes identified through Foucaultian analysis. The first example comes from instances when animals considered livestock receive extensive concern for their welfare. The second example comes from livestock that are processed into meat that is not consumed by Americans. The third and fourth examples demonstrate the contrasting standards exhibited toward different kinds of endangered species. On the one hand are those charismatic megafauna that receive considerable attention and funds for their preservation despite being on the less threatened end of the endangered species spectrum, and on the other hand are endangered species that receive comparatively little attention and funding for

their preservation despite being on the extremely threatened end of the spectrum. Carefully examining these examples reveals an emotional/symbolic element that is not subdued entirely by the processes identified through Foucaultian analysis.

6.3: Anomalous Treatment of Livestock

This section outlines several examples relating to species considered livestock, focusing on pigs and cows receiving attention that contradicts their typical status as property for producing food. What are termed in this dissertation "anomalous cases" are instances where animals receive treatment or consideration that is aberrant in relation to its category. The following examples represent anomalous cases for two reasons: the animals involved were featured in the news, thus reflecting considerable attention being cast on animals that are individually not very valuable in financial terms, and/or the persons connected to these examples displayed strong emotional reactions to the events described. As Arnold Arluke (2006) argues with regard to his analysis of extreme animal cruelty cases covered in the media, the fact that a story is reported in the media means: "reaction to them becomes a collective experience involving thousands and even millions of people" (p. 188). The following section therefore includes multiple examples from 2007 to 2009 and provides details for each incident, which then serves as substance for analysis in the following section. Cow shootings have received media attention throughout different parts of the United States, and recent examples include cows shot with arrows in Utah, drive-by cow shootings in

Marin, California, and a cow shooting in New York. Additionally, stranded pigs shot to protect levees in Iowa are also examined. Focusing on each example in greater detail provides new insight into the livestock animal category.

In 2007 several cows were shot with arrows in Springville, Utah. Six cows were shot in the first incident and then another was shot a week later, but all seven survived their injuries. The incidents garnered media attention, both on ABC News and in the These incidents even led the Division of Wildlife Salt Lake Tribune newspaper. Resources and archery manufacturers to establish a \$6,000 reward fund for information that would assist police in arresting the perpetrators (ABC 4). The last incident received independent news coverage on September 6, 2007, under the headline "More Utah Cattle Shot with Arrows" (ABC 4, 2007). The wounded animal's value was approximately \$1,500 US dollars (Cutler, 2007), and thus as a property crime this reflects a relatively minor incident in comparison with car thefts that involve vehicles costing far more than this animal. Nevertheless, it was reported in the news and the persons involved with this incident displayed strong emotional reactions to the shootings. According to ABC 4 News, ranchers were not only angry, but they were also "appalled by this violence" (emphasis added). One member of the Utah Cattlemen's Association commented: "It's like me walking up to you and just slugging you in the arm or hitting you in the nose just because you're there ... I don't know if it's a random act of *violence* or if they have an issue with livestock up there" (emphasis added). A Sergeant from the Utah Division of Wildlife Resources was even more emphatic in

describing the shootings: "This is one of the most disturbing acts I've witnessed in my sixteen years of wildlife law enforcement" (Salt Lake Tribune, 2007). Similarly, nine cows and one calf were shot and killed in Tooele County the following year in 2008, and once again a similar reaction to the shootings emerged along with a series of private donations (led by the Utah Humane Society) that helped establish a \$10,000 reward fund (Salt Lake Tribune, 2008).

Cow shootings in Marin County, California, sparked similar reactions in 2007 after a drive-by shooter fatally shot five cows. The Marin County Humane Society launched an investigation and offered a \$15,000 reward for information that would lead to the perpetrator's arrest (Fimrite, 2007). The owner of a calf killed during this series of shootings also expressed emotional duress: "I had a hollow feeling in my gut, to see that dead calf laying there, with the mother cow bellowing nearby ... I thought, what the hell's going on in this place?" (Glionna, 2007). Also in 2007, someone blinded a cow with a gunshot wound and fatally shot another in Sarasota County, Florida. The cows' owner reacted strongly to the shootings, saying: "whoever shot the two cows ... is a sick person" (Gray, 2007).

In Chickasaw County, Iowa, a cow was shot with an arrow in a suspected attempt to butcher the animal for beef in October, 2007, and the incident made local news on the ABC affiliate KCRG News—even though when examined from a monetary value perspective, this was an attempt at stealing beef worth hundreds of dollars at most. In Elmore City, Oklahoma, five cows were shot and killed in November, 2008. The Humane Society of the United States offered a \$2,500 reward for information that would help police capture the perpetrators because, as the Society's Oklahoma director stated: "Americans have no tolerance for *violence* against the creatures who share our world, including wildlife and farm animals. Whoever is responsible for these shootings should be brought to justice and held accountable" (Humane Society, 2008, emphasis added). In Ellenburg, New York, state police investigated a series of shootings in August, 2009, that involved a cow and some sheep. WPTZ Channel 5 News displayed a map where the shootings took place under the headline: "Farm Animals Attacked." The cow was shot to death, receiving two bullets in the chest. According to WPTZ, this greatly upset the cow's owner: "Not only was this an emotional loss for her, it's a financial one. The dairy cow was worth about \$1,200, and she wants restitution paid by whoever is responsible" (WPTZ Channel 5 News, 2009). Police ultimately arrested the suspected perpetrators and charged them with cruelty to animals.

The most high-profile recent livestock shootings, however, involve a dozen pigs that had escaped the 2008 floodwaters in Iowa, which received considerable media coverage. The pigs found themselves on levees made of sandbags, which are delicate, making it impossible for people to reach them. Officials eventually shot the animals to protect the levees, since pigs' hoofs could puncture the sandbags and threaten the nearby city of Kingston. There was apparent dismay, however, when the pigs were shot in order to protect the levees, which made national news. NBC News reported this story with the headline "Pigs' Journey through Floodwaters Ends on Levee" (NBC News, 2008), while CBS News reported the story with the headline "Stranded Pigs Shot to Save Levees" (CBS News, 2008), and USA Today reported the story with the headline "Pigs Who Swam through Flood Waters Killed on Levee" (USA Today, 2008). The chairman of the emergency management commission in charge during this flooding episode had to defend the decision to have the pigs shot, stating: "It happens everyday. My gosh, that's what slaughterhouses do—that's how we get bacon and pork chops" (CBS News, 2008).

6.4: Anomalous Cases Analysis

Thickly describing these anomalous livestock cases in some ways reinforces the Foucault-based interpretation on the development of the livestock animal category in the United States. These incidents involving livestock in settings outside of routine slaughterhouse operations helps confirm a key feature in the Foucaultian interpretation: removing meat production from public visibility has indeed produced animals as commodities, rather than living beings of social concern. The latter example perfectly illustrates this point, given that much attention was devoted to the pigs' struggle for survival amid floodwaters and the subsequent sadness over their deaths when the pigs imperilled the levees. The emergency management commission's chairman succinctly articulates the logical conflict between public reactions to these particular pigs and other pigs—in essence, why get emotional over animals that routinely end up on dinner tables? When the pigs gained national attention and people saw them as animal victims

of the floodwaters, these pigs were no longer typical objects for the production of pork and bacon that is consumed by the majority of Americans on a regular basis. Similarly, the Oklahoma Humane Society's director stating that Americans have no tolerance for *violence* against farm animals is perplexing, insofar as this stance omits reference to the countless animal deaths necessary to produce meat products regularly consumed by most Americans.

From a property value perspective, these crimes are relatively insignificant when compared with daily car thefts and home robberies, most of which are seldom reported in the news. In some cases a cow survived the incident entirely, meaning the animal's market value remained largely unchanged. So why then would these incidents merit news coverage? One obvious factor is the rarity of these incidents. The fact that car theft is so common means that it is not newsworthy, since newsworthiness is usually defined either by its importance or by its uniqueness. Strangers shooting cows is clearly rare and serves as interesting material for news stories, as opposed to the countless routine property crimes that take place everyday. Looking at these events more closely, however, indicates that they do not simply represent instances of unique news items, or mere 'curious-but-true' reports. Instead, most of the news agencies involved or the owners reported each case as a *violent* act against animal victims, and treated the damage to property value as a secondary element in these incidents.

The cow shootings reveal a dichotomy in the meaning attributed to animals typically classified as livestock situated in human settings and animals classified as

livestock when situated in the meat production system: given that so many animals classified as livestock as killed for food everyday in the United States, it is noteworthy that the examples described in section 6.3 were covered in the media and that the people involved tended to react emotionally to the animal deaths. That is, people are of course aware that they are eating the flesh of dead animals, but they can remain oblivious to the long process from birth, to confinement, intense growth, transportation, slaughter, and final packaging as a particular commodity such as a steak, ground meat, or a roast. The strong reactions to these incidents appear to confirm that removing slaughter from public visibility is crucial for meat production, whereby the animal and the actions performed on it are put out of mind in terms of large-scale social awareness. This raises the question though: what constitutes violence against farm animals? That is, why is it is a violent act to shoot a cow for mischief/pleasure, but not a violent act to slaughter a cow for beef?

Viewing the incidents as acts of violence runs contrary to the reality that typifies most livestock, where many exist in physically arduous conditions and are then killed for food. Moreover, the rewards offered in each case further illustrate how killing livestock in non-slaughterhouse settings heightens public concern for their lives. It is possible to dismiss some of the reward money offered in these cases as routine protection of assets, where reward money and the potential arrest of the assailants can serve as deterrents that protect the property of cattle owners. The Humane Society of the United States, however, typically offered the largest portion of the rewards. HSUS

is of course devoted to animal well being, and violent attacks on farm animals is unpleasant for those concerned with animal welfare issues. Nevertheless, it is surprising that this organization would devote attention and potential resources to a very small number of cattle killed by humans, given that so many cattle are killed daily in slaughterhouses. In some ways, such incidents are similar to what Arluke calls "beautiful cases," which help animal protection groups reinforce the need to protect animals from violence. Though cow shootings may not fit Arluke's beautiful cases view since they do not entail "egregious cruelty," such incidents are similar insofar as they can serve as "moral tales" of innocent animals being victimized by abusers-and to fully serve as moral tales, the villains must be apprehended and "pay the price" (p. 168). That is, the cows in these instances were not tortured or subject to extensive physical violence, but because the incidents are unique they can reinforce the principles of an organization like the Humane Society. As Arluke writes: "That these tales say nothing new to those who support or work for humane societies is exactly the point. Rather, this 'education' is a restatement of core norms and beliefs that are at the moral center of the concerned animal community" (p. 168).

Though the cattle in these unique circumstances and the cattle processed as food all share the same fatal outcome at human hands, there are differences in the killing process. Most obviously, cattle killed in slaughterhouses are processed as food. The spirit behind these deaths does not appear malicious, and it is assumed that those who kill the animals reap no enjoyment from their deaths. Officially, these animals are killed instantly and feel no pain and there is no element of malice toward them since federal law requires that factories stun and kill the animals before processing them into meat. The cow shootings instead evoke a sense of *violence* against animals, whereby individuals gain some form of psychological satisfaction from ending their lives. They are not killed for what is typically considered a legitimate purpose, such as food production, but for some ulterior motive-when removed from processes related to food production, it is deemed inappropriate to inflict harm on cows. The owners all appear to react emotionally, calling the perpetrators "sick" people, or find their deaths emotionally taxing, yet consider these deaths as uniquely gruesome amid the large number of cattle killed every day. These reactions therefore indicate that killing animals for food is not an act of violence and abuse against animals, but instead for those that consume meat it is a normal and necessary part of human life above moral evaluation when in a formal setting like federally regulated slaughterhouses.

These examples, in Foucaultian terms, confirm the authority invested in the butcher (as a singular abstraction, as there are multiple workers performing different functions in assembly-line meat production), much like that of the police officer, doctor, or the psychiatrist. Looking at these cases highlights that just as the systems of right and knowledge perpetuate the doctor as the sole authority over the human body in a hospital setting, the butcher is the sole authority over the cow's or the pig's body and life in the meat production system. The rancher who calls the individual who shot his cow a "sick" person is merely expressing his own opinion, but it is telling that he refers to the perpetrator of a cow shooting as a "sick" person rather than calling the many workers who professionally kill and dismember many cows on a daily basis "sick" people. The person who kills professionally does so in a specific context, with specific knowledge of the proper killing and dismembering methods, and does so for a very specific reason that is considered essential for human welfare. The butcher, in short, is in the United States today a legitimate animal killer, just as the police officer is a legitimate enforcer, and the doctor a legitimate healer. Unlike the butcher, a person who randomly shoots cows is an illegitimate killer, like a civilian that takes the law into his own hands.

Arluke's research validates this point, for his analysis reveals that violence against animals is situational, which causes confusion about its meaning (p. 184). Just as people can define "cruelty" against animals in ways that define their own identity or the identity of others, it may also be the case "violence" reflects the identity of the American mainstream. Arluke's research demonstrates that for those who neglect or harm animals, cruelty serves as a different "symbolic device" than it does for those who protect animals. If the American public is defined by the majority who read the news stories and who are not part of those who harm or actively protect animals, then one can posit that the personal nature of killing cows for seemingly unnecessary purposes is uncivil and unacceptable, and to use Arluke's words, the readers can "feel beyond reproach" (p. 185). As such, killing cows in this context is a violent act in which they would never partake, while professional slaughter for meat to which they contribute as consumers is not a violent act.

Public and government reactions to a video released by the HSUS appears to confirm that physical harm that is unnecessary for food production is intolerable, but killing the animals themselves is not a matter of concern. Workers at one California slaughterhouse were caught on video abusing downed cows: "repeatedly kicking cows and ramming them with the blades of a forklift as the animals squealed in pain ... workers jabbing in the eyes and applying electrical shocks to cows" (Fox News, 2008). Strong reactions emerged when the video was released on Fox News, as the public was shocked and upset by the images and the political response was harsh in not only condemning the acts, but also calling for an investigation. Two employees were immediately fired, and their supervisor was suspended. The company's president even suspended meat production, stating that: "We are shocked, saddened and sickened by what we have seen today ... operations have been immediately suspended until we can meet with all of our employees and be assured these sorts of activities never again happen at our facility" (Fox News, 2008). It is understandable that these acts would evoke strong reactions given that they caused visible expressions of discomfort and pain for the animals involved, but it is nevertheless odd that people would react given that the events took place in the context of preparing them for slaughter. So this again confirms (1) the role that visibility plays in the production and satiability of meat and (2) that the purpose of an animal's pain and/or death influences how it is evaluated.

Even though the general public in the United States knows rationally that meat products necessitate killing animals, it is a feature largely ignored unless evidence arises and is disseminated that contradicts the methodical and therapeutic model of death that officially defines the livestock experience in the meat production system. In short, when it comes to consuming meat from livestock like pigs and cows: out of sight, out of mind.

What the expression of outrage over these incidents reveals about the humanlivestock relationship in the United States is not only the role of visibility, but also how normalized meat production is in contrast with killing animals. A slaughterhouse is seen as a proper site for killing animals by situating them as part of the meat production process. Random killings, on the other hand, are cruel and "sick." Based on the way that many Americans evidently tend to conceptualize these distinctions, the means justify the end as much as the end justifies the means. The ends in these examples or in formal slaughterhouses may be dead animals, but the means in these anomalous cases are seen as unauthorized expressions of violence that do not follow the proper killing procedures and the result is an animal victim, while the means in slaughterhouses are legitimate forms of termination and the result is consumable meat. Shooting a cow at random may thus be legally a form of cruelty to animals, labeled by some as being the acts of a "sick" person even though the end is a dead cow. On the other hand, those who kill cows daily in a factory setting are normal working individuals contributing labor to a vital industrial process. The differences are obvious: killing an animal solely

for enjoyment from its death versus killing an animal for human consumption; killing an animal without the necessary precision to assure a quick and painless death versus the precise stunning procedures employed to ensure that cows do not suffer while being dismembered. It is a reformulation of violence, whereby it is not the act that defines violence, but the result as measured by the setting and how the target's body is used.

Cockfighting, which Geertz himself studied in Bali, is banned in most states, where not only those directly involved with cockfighting operations are criminally liable, but even spectators who do not place a cock in the ring are potentially liable to punishment as well (HSUS, 2009). Yet a similar division emerges with the cockfight and factory chicken production. Cockfighting on the one hand pits birds against one another purely for entertainment purposes (including gambling), which results in severe and at times fatal injuries from the sharp razor-like claw enhancements attached to each participant's feet. Obviously, this activity typically compromises a cock's welfare:

By throat cut I mean the jugular vein in the neck to be cut or punctured ... nothing can prevent the cock surely bleeding to death generally through the mouth. Again the jugular may be cut but the wound does not open into the throat to permit a flowing of the blood ... as the blood accumulates and gathers there appears a severe swelling in the throat and the cock rapidly goes down with his head in a drooping position ... pulling a feather or two from around the vent the cock may be temporarily awakened sufficiently to get in another blow or two and perhaps win the battle (Dingwall, 1928/2005, p. 43).

As this statement from a classic cockfighting manual demonstrates, cockfighting entails significantly high casualty levels and the animals visibly demonstrate signs of suffering. It may thus come as no surprise that most states have outlawed cockfighting given the intensity of physical harm endured by the cocks.

However, chicken meat production in the United States over the last century has also entailed procedures that compromise a fowl's welfare. For instance, The New Yorker's Michael Specter (2003) visited a chicken meat production factory to witness first-hand what takes place inside chicken meat processing factories and recounted the following:

I was almost knocked to the ground by the overpowering smell of feces and ammonia ... there must have been thirty thousand chickens sitting silently on the floor in front of me. They didn't move, didn't cluck. They were almost like statues of chickens, living in nearly total darkness, and they would spend every minute of their six-week lives that way (Specter, 2003, p. 52).

Chicken production also sometimes necessitates physical modifications to the animals, such as de-beaking or beak trimming. This procedure enhances safety by reducing the damage inflicted during cannibalistic attacks between chickens in captivity, but it also inflicts considerable pain by cutting sensitive pain receptors in the beak.

Once again, then, the issue is not pain or death for the animals as an objective result, given that both cockfighting and chicken meat production create pain and death for the animals involved, but it is a question of the settings and the use of the targets' bodies. Cockfighting clearly reflects a form of physical harm for entertainment, and so the injuries and deaths that take place are seen as unauthorized and unjustifiable in comparison to the pain and deaths inflicted during meat production. Killing animals in slaughterhouses in a regulated manner is normal, while unregulated killing is The role of truth, rationalization, and efficiency are instrumental in abnormal. normalizing meat consumption, and the fact that American society deems the deaths of the same types of animals in different circumstances unacceptable suggests that the processes described in chapter four have indeed made large-scale meat consumption possible by disconnecting human beings from the animals as living beings and instead transforming them in factory settings into material for consumable products.

Moreover, there appears to be an implicit symbolic element in the reactions to livestock deaths in different contexts, which can reveal how most Americans conceptualize their own society. The symbolic element becomes quite clear and reinforces the Foucaultian interpretation: the way that animals are killed and the purposes for killing them reflect standards of civility, development, and what it is to live in the country that is arguably the standard bearer for the modern, industrialized developed Western world—and high levels of visibility would most certainly violate these standards. Having roosters kill each other in combat or having cows die from bullet wounds clearly does not reflect imagined moral wrongs in terms of the resulting pain and deaths, given that these ends are typically accepted in other settings. They instead appear to violate standards and distinctions: decent folk do not engage in this kind of behavior, and animals in a developed society die in appropriate places, and are killed according to set standards by designated people invested with the relevant authority. This certainly can explain why Archery manufacturers contributed to the reward fund for the Utah cows shot with arrows: it is a statement of disassociation from uncivilized behavior.

6.5: Species Selection Analysis

A Foucaultian interpretation cannot fully explain why cows, pigs, and chickens in particular have become entrenched as regular staples of the American diet. Why *these* species? Why not deer or reptiles, or various other animal species that are consumed regularly in other countries or by much smaller segments of the population? For instance, despite having a horsemeat industry in the United States until 2007, Americans almost universally have not consumed horsemeat. Thick description usefully explains this distinction in American livestock and demonstrates that species selection is not entirely determined by the processes described in chapter four. Other species could have been transformed into regular staples of the American diet, but the processes identified through Foucaultian analysis have produced three staple meats (chicken, beef, and pork) and a selection of standard secondary meats like turkey and

lamb. As Michael Owen Jones (2007) notes: "eating practices reproduce as well as construct identity; in addition, both identity and alimentary symbolism, not just taste or availability or cost, significantly affect food choice" (p. 1). Cultural features can therefore likely explain why these species in particular are consumed as standard meats, but other meats fit for human consumption are rejected.

Albert Reese (1917), twentieth-century professor of zoology at West Virginia University, once wrote: "We Americans have a lot of silly ideas about what is fit for food and what is not" (p. 550). Reese's work details the nutritional and culinary value of many reptiles. The green turtle, for instance, has had considerable popularity in Britain, where as many as 15,000 approximately 34-kilogram turtles had been imported per year from Jamaica. Turtle meat is quite "digestible" and it is possible to prepare it many different ways. Reese points out that these turtles can lay approximately two to three hundred eggs, which are even more nutritious than ordinary hens' eggs, and a person can eat as many as a dozen in one sitting (p. 546).

Reese also points out that alligator meat could very well serve as food for Americans, particularly for poorer citizens living in the South where alligators exist in abundance and could serve as high-quality meat in place of low-quality pork fat products. "It has always seemed strange to me that more use is not made of the flesh of the alligator," and Reese adds that it is likely the "'idea' of eating a reptile that makes the meat unpopular" (p. 549). Indeed for those who have tried alligator meat, it is clear that this type of flesh is perfectly suitable for consumption given that its taste and texture very closely approximate a solid fish like tuna or chicken meat—personal experience while sampling local culinary specialties in New Orleans can here confirm this assessment. Reese himself also witnessed first-hand the psychological aversion to alligator meat despite its otherwise palatable features:

[someone] who was once in the swamps with me, had expressed a great aversion to alligator meat, so the guide, one day, offered him a nicely fried piece of alligator meat, saying it was fish; the meat was eaten with evident relish and the diner was not told until after a second piece had disappeared what he had been eating (p. 549).

Such an example reinforces the obvious point that Americans almost universally do not consume meats that derive from reptilian species, and as Reese indicates, the very idea of eating reptiles is likely downright grotesque for most Americans. Reese's example is not far removed from the examples found in New Orleans tourist attractions today, where alligator meats can serve as shock value culinary treats for tourists: alligator sausage or alligator leg. The decisively grotesque portrayal of eating other reptilian species in American blockbusters like Indiana Jones, and the overall absence of reptilian meat from restaurants and food stores, further indicate that many Americans harbor ideational aversion toward eating reptiles.

As Reese (1917) stresses, it is the "'idea' of eating a reptile that makes the meat unpopular." But what is this idea? Reptiles are obviously quite alien as meat products relative to standard American meats. Reptiles are cold-blooded, tend to consume

insects, and are commonly conceptualized as green and slimy—though many are of course different shades, particularly in America's desert environment in the Southwest. These creatures may be easily associated with swamps and visualized as "slimy" creatures. Consuming reptiles is so alien that Anglo-Americans employ "frogs" as a derogatory term for people from France, an epithet that originates from the country's culinary practices involving frog legs. Whereas some in southern France consumed frog legs due to its availability, abundance seems to have precluded the need for such a drastic (from the American perspective) measure in European-American history.

Aside from the apparent physical aversion to reptiles as unsavory creatures on many levels—touch, sight, and taste—consuming them could reflect an unappealing position in the food chain. The highest members on the food chain, at least symbolically, are those that eat large game, whether the lions of Africa or the wolves of North America. Lizards by contrast, are part of a different world, the micro world of swamps and crevices where they eat insects (though alligators can clearly consume larger animals). To eat such animals thus not only entails eating something viewed as disgusting, but it is also an act that makes the human consumer part of this micro world of swamps and lizards. Beef by contrast, or pork, elevates the human consumer to the appropriate realm, that being the macro world of large mammals.

Americans also demonstrate strong aversion to horsemeat, but in this instance perhaps for the opposite reasons as those for reptile meat. Horses until 2007 have been processed as a meat product in the United States, with approximately 100,000 being

processed annually into horsemeat at slaughterhouses-in 2005, according to the USDA, 91,000 horses were processed at the two slaughterhouses in Texas and one slaughterhouse in Illinois (Coile, 2006). These slaughterhouses in Texas and Illinois were closed in 2007 when new state laws made horse slaughter illegal, joining California as the only states where it is illegal to slaughter horses for food. As of 2009, however, there is still no federal law banning horse slaughter for consumption and other states could step in to fill the commercial void left by the plant closures in Texas and Illinois (Erbe, 2009). While horsemeat produced in American slaughterhouses was primarily sold to Europe and Japan for human consumption, and to American zoos for carnivorous display animals, it begs the question of why horsemeat is almost universally not consumed by humans in the United States. It is here that Geertzian analysis proves useful. The fact that horse meat has not been normalized as food for Americans the way that cow and pig meat has been is likely due to a combination of cultural and symbolic features that mark how Americans conceptualize horses, and how they conceptualize pigs, cows, and other routinely consumed animals-all of which play a different role in American identity.

Horses have positive connotations in the United States. The image of the noble steed, the graceful gallop, and the flowing mane of a powerful animal are prevalent in American film and art. The classic American Western typically posits the protagonist's horse as a loyal and dependable ally that ably serves. As Elder, Wolch, and Emel (1998) put it: "in the US today, horses are seen as … perhaps the animal symbol of freedom, nobility, beauty, grace, and power" (p. 78). Horses are indeed popular in American culture, whether as statues and other art in the American Southwest and the Plains where they are inextricably enmeshed with its regional history, or as names for professional sports teams and for so many high schools (Colts, Broncos, Mustangs). Though horses are livestock, traded and raised as animal commodities for work, racing, and/or riding, they clearly occupy a more personal role in the American psyche. It is therefore not surprising that Americans have been unwilling to consume horsemeat, despite its apparent satiability and accessibility as a meat produced on American soil up until 2007.

In some instances, even animal rights thinkers see horsemeat consumption as particularly egregious. Elder, Wolch, and Emel, for instance, single out the French alone as horsemeat consumers—though Belgium, Italy, and Japan are other notable developed countries where people consume horsemeat. Such characterizations of the French in particular as horsemeat consumers has also been often highlighted by horse protection activists who protested horse slaughter in the United States. This association could reinforce the notion that noble American animals were shipped off to be eaten in a land toward which a sizeable portion of the American population holds antagonistic views. Such an act can in this way be portrayed as so terribly alien and more typical of a people that are by some Americans not well liked, and thus by American standards consuming horsemeat is seen as additionally odious.

A similar reaction toward whale meat consumption arises, despite the fact that the whales consumed are seized in international waters and are not consumed in the United States. Though countries like Japan and Iceland have long traditions of eating whale meat, which for some people in these countries is comparable with eating cows for many Americans, the United States today strongly opposes whale consumption. As Reese (1922) writes: "It is said that there are no "choice cuts" on a whale; all the flesh is equally good. Imagine an animal from which Porterhouse steaks may be cut in half-ton chunks!" (p. 477). Whale meat is thus quite suitable for consumption, but Americans have never taken strongly to this meat even when American whalers hunted whales as industrial resources during the late nineteenth and the early twentieth century. With whales, however, the initial resistance to consuming their flesh was likely due to them being relatively alien (Reese, p. 477), while today the stern antipathy toward whale meat consumption stems from perceived cognitive capabilities and the fact that many whale species have dwindling populations. Once again, to eat such an animal with elevated cognitive skills is unconscionable in the United States, and from that vantage point could be 'unsophisticated' as measured by American standards of what is appropriate and what is inappropriate.

These examples demonstrate how meat consumption preferences are not necessarily correlated with the quality and taste of the meats themselves, for as Reese (1922) emphasized from his own research and experience: resemblance would probably be sufficient to deter most people from eating monkey meat, if the animal were cooked entire, but if the hands, head and feet be removed and the body be dismembered, the human resemblance is lost and, unless told, the average person would not know what animal he was eating. Monkey stew or minced monkey meat would probably be eaten and enjoyed by anyone who did not know what animal was before him. As in all animals, the flesh may be tough or tender, probably depending upon the age of the monkey and on how it is prepared (p. 475).

It is evident that symbolic and affective attachments influence culinary preferences, where monkeys resemble human beings, or horses are seen as noble animals with skills and traits that elevate them above animals fit for slaughter, or reptiles belong to the swamp-like world that is below the standards fit for higher order mammals. Why then are cows, chickens, pigs especially appropriate (turkeys and sheep may also be here included) for standard human consumption in the United States? These species are very familiar and do not have alien qualities: they are all warm-blooded, dry-landbased, and relatively large animals that have all long been raised by humans for consumption throughout European history. Unlike reptiles, they seem appropriately part of a large mammal's food chain, on top of which resides the human being. For European Americans, who have conquered the mid-continent's plains and forests, consuming lizards and swamp creatures is surely unfitting for human masters of the continent and the abundance it offers.

While these animals do not for most Americans seem alien, they are not too close emotionally either and are thus suitable for consumption. The word pig, for instance, has negative connotations: being called a "pig" infers that one is either dirty or gluttonous, while describing a person's living or working conditions as being like a "pig sty" is to imply that the person maintains his or her surroundings in a filthy state. "Bird brain," or to "run around like a chicken with its head cut off" (the high motility of a headless chicken's body could be cynically interpreted as the chicken's brain playing a relatively minor role), is a way for humans to insult other humans by associating the behavior with the insult's intended target, while calling someone "chicken" implies cowardice. Likewise, "cow" and "heifer" are insulting terms used against female humans, implying that a woman is fat or physically unappealing, while "herd mentality" has negative connotations that draws on the image of a herd of cattle as mindless creatures appropriate for human consumption and nothing else.

These species for Americans have no symbolically redeeming qualities and comparing someone with any of these species thus serves as a way to cast an insult. By contrast, a person may be as "strong as a horse" or "a charging bull" (which is eaten only when castrated, at which point it becomes a "steer"), as "graceful as a swan," have "eyes like a hawk" or an eagle, as "smart as a fox," or have "cat-like reflexes." As Leach asks: "Why should expressions like you son of a bitch' or 'you swine' carry the connotations that they do, when 'you son of a kangaroo' or 'you polar bear' have no meaning whatever?" (p. 27). Leach's own explanation, as outlined in section 2.5, that

these connotations reflect the taboo/sacred division of sexual relations is debatable (Halverson, 1976, p. 505), but there is little doubt that these animals as human descriptors carry negative connotations that reflect negative American attitudes toward these species in particular. One might object to an apparent contradiction in using dogs as an insulting reference, but the apparent love and caring that Americans exhibit toward dogs as companions does not necessarily reflect respectable qualities from the human perspective: obedience, subservience, and they are generally the least clean member of the household. Moreover, the early connotations in the English language of the word "bitch" with a female dog that is in the estrus stage, during which time the female dog exhibits behaviors of receptivity to copulating with a male dog, would imply that an insult's target is the son of a dishonorable mother from the classical standard of appropriate feminine behavior.

Only with these species specifically that are bred for human consumption, then, can the "out of sight, out of mind" reality remain. That is, only when the violence is actually seen do people react, but in its abstract form killing animals is conceptualized instead as producing meat. Removing slaughter from public visibility can only create an "out of sight, out of mind" reality for species to which Americans do not feel a close attachment, and can only work for species that do not disgust them—to use a culinary term, the species consumed must be conceptually bland for such a reality to operate. This suggests that Foucaultian analysis regarding visibility is supported by Geertzian

analysis, but it is not a sufficient condition: the species involved and the purpose for using them also matter greatly.

What therefore results is a *Goldilocks and the Three Bears* scenario: some animals like reptiles are too alien to eat, while animals like horses are too close to eat, but cows and pigs are just right as creatures between the two ends of the spectrum. The meat products created from these animals are now fundamental to the traditional conception of American identity and American lifestyle. While burgers and hotdogs have origins in Europe (wieners and frankfurters, for example), these food items are today regular cultural symbols of American life: hot dogs at the ball park (many of which have unique names based on a particular team, such as the Diamond Dog for the Arizona Diamondbacks baseball fans); burgers and dogs on the barbeque on the Fourth of July; bacon and eggs in the morning as part of a hearty breakfast; and the countless fast food chains anchored by various specialized hamburgers, like the Big Mac and the Quarter Pounder with Cheese at McDonald's or the Whopper at Burger King (and each offers breakfast-specific items based on the traditional bacon and eggs theme, such as the McDonald's Bacon Egg McMuffin). Certain meats are also part of regional identities in the United States, such as the Philly Cheese Steak in Philadelphia, the New York Strip steak in New York, and Chicken Fried Steak in Texas and Oklahoma (also known as Country Fried Steak in other states).

6.6: Endangered Animal Species Analysis

Closely examining the endangered species category also reveals disparate levels of concern based on specific animal species. The Endangered Species Act strongly supports the Foucaultian position that holds endangered species as products of governmentality, whereby specialized knowledge prescribes a particular ecological truth seeking to create specific balances in wildlife populations. While the Act does indeed treat all endangered animal species equally, as demonstrated by its provision that prioritizes assistance based on likelihood of benefiting from conservation plans "without regard to taxonomic classification," there is evidence indicating that not all endangered species are treated equally. In 1978, for instance, the discovery of an extraordinarily rare small fish called a snail darter threatened the Tellico Dam construction project in Tennessee. The Act was, however, amended so that the project could continue as planned. "One might imagine a different outcome," writes James Tober (1989), "had the dam threatened not the snail darter but, for example, the bald eagle" (p. 17).

A study by Stephen Kellert and Joyce Berry (1980) confirms that Americans do not view all endangered species equally:

[the American public] appeared to be far more aware and, in all likelihood, concerned about relatively emotional issues involving specific, attractive, large and phylogenetically 'higher' animals, than issues involving indirect impacts on wildlife and dealing with biologically unfamiliar and 'lower' animals" (p. 42; p. 18 in Tober (1980)).

Moreover, Kellert (1979) has identified eight features about endangered species that influence the public's attitude: (1) the reason why a species is endangered; (2) a species' aesthetic qualities; (3) a species' phylogenetic relatedness; (4) a species' economic value; (5) knowledge of and familiarity with a species; (6) the people affected by efforts to protect the species; (7) the cultural and historical relationship with a particular species; and (8) the perceived humaneness of the activities that are threatening a particular species (Kellert, p. 34; also Tober, p. 52). Kellert's detailed surveys offer a different explanation than the Foucaultian interpretation of endangered species conservation as a function of governmentality. Closer examination of public attitudes toward endangered species does not indicate preponderant influence from techno-scientific perspectives, but instead also indicates considerable influence from cultural and symbolic factors.

These public attitudes toward endangered species may thus explain why endangered species are not produced equally in terms of other legal provisions, such as species-specific legislation, and the variable level of funding and resources devoted to different endangered species. Two studies released in the last fifteen years on government funding of endangered species in the United States help illustrate this point: a study on the top ten most funded species by Harvard economists Andrew Metrick and Martin Weitzman, and a study by the Government Accountability Office
on endangered species expenditures. Both studies indicate that funding patterns appear to favor more popular species rather than the most threatened species, suggesting that there is in an immaterial interest in preservation. "Charismatic megafauna" receive by far greater popular attention in the media, and are often iconic creatures embedded in the human psyche from childhood when many children have toy animals like bears, lions, and elephants. "Just knowing that elephants and pandas exist in the wild has value to some people," write Metrick and Weitzman, "[but] such an effect is likely to be less pronounced for species of wild toads or eels" (p. 4). Similar to Kellert's conclusions, Metrick and Weitzman argue that the considerations that strongly affect sentiment toward preservation are taxonomic distinctiveness, consciousness and intelligence levels, and perceived degree of endangerment. After measuring the effects of these four characteristics on funding, Metrick and Weitzman conclude that government agencies create endangered listings and allocate funding in ways that favor animals considered "to be higher forms of life" (p. 14).

While levels of endangerment and taxonomic distinctiveness influence decisions to list a species as endangered, these two factors are "overpowered" by visceral factors like sentient status and popular perception when spending decisions are made (p. 15). A number of activist groups have seized on this apparent connection by marketing sponsorship kits based on familiar popular animals like polar bears or dolphins and link some funding from such sales directly to the type of animal sponsored. The fact that activist groups like Greenpeace and the World Wildlife Fund draw on "charismatic mega-fauna" like polar bears to generate funding and to attract potential members reinforces this appraisal of popular sentiment.

Spending levels by federal and state agencies in the United States reinforce this suggestion of species bias. For example, the top ten species in terms of spending in the early 1990s reveals that socially preferred species receive greater funding. Each species in Table 3 (data from Metrick and Weitzman, 1996) is an animal, either a mammal or a bird. Several of these ten species, moreover, were not experiencing a high threat level for going extinct during the years when these expenditures were recorded, as the grizzly bear, the bald eagle, and the northern spotted owl have sufficiently large breeding populations. By contrast, the Choctawahatchee beach mouse and the Texas blind salamander were facing a more immediate threat of extinction. Furthermore, many of these highly funded species are subspecies: a type of owl, a type of eagle, or a type of bear, for instance. The sand skink and Alabama cave fish, though, are a "monotypic genus," which means "that they are the genetically distinct unique representative of an entire genus" (p. 2). Yet, each of these relatively unknown species received less than \$10,000 in funding for preservation (p. 2). Thus, popular attraction to a species appears to take precedence over factors like genetic uniqueness and actual threat level.

TABLE 3

Common Name	Spending (\$Millions)	Cumulative Spending (%)	
1. Bald Eagle	31.3	9.9	
2. Northern Spotted Owl	26.4	18.3	
3. Florida Scrub Jay	19.9	24.5	
4. West Indian Manatee	17.3	30.0	
5. Red-Cockaded Woodpecker	15.1	34.8	
6. Florida Panther	13.6	39.1	
7. Grizzly (or Brown) Bear	12.6	43.1	
8. Least Bell's Vireo	12.5	47.1	
9. American Peregrine Falcon	11.6	50.7	
10. Whooping Crane	10.8	54.2	

TOP TEN SPECIES BY TOTAL SPENDING, 1989-1991

In a 2005 study by the United States Governmental Accountability Office, the endangered species funding pattern demonstrated a minor increase in diversity in the top ten most funded species, but as Table 4 illustrates, the overall allocation of funds appears to concentrate on popular species. The most notable change from the Metrick and Weitzman study is the presence of three fish in the top ten most funded species: the bull trout, the Rio Grande silvery minnow, and the razorback sucker. The latter fish is quite unique since it can live for up to forty years and it can reach a length of nearly one meter, which is very large for a sucker fish. There is also a reptile in the top ten most funded species for 2003, the desert tortoise—which is a popular species in the southwestern United States region, particularly the Mojave Desert, where it is part of the regional identity. There are also two birds in the 2003 list that were not among the most funded in the previous period: the southwestern willow flycatcher and the Colorado pike minnow. The other four most funded species in 2003 were also on the previous top ten list: the red-cockaded woodpecker, the West Indian manatee, the bald eagle, and the Florida panther.

TABLE 4

Species Name	Threat Level	State & Federal Funds
Bull Trout	9	\$29,295,633
Rio Grande Silvery Minnow	2	11,300,700
Red-cockaded Woodpecker	8	11,069,069
Southwestern Willow Flycatcher	3	9,909,284
West Indian Manatee	5	9,798,514
Bald Eagle	14	7,831,531
Colorado Pike Minnow	8	7,262,592
Razorback Sucker	1	7,127,470
Desert Tortoise	8	6,522,281
Florida Panther	6	6,301,276

TOP TEN SPECIES BY TOTAL SPENDING, 2003

Woodpeckers are typically well liked species, and the Bald Eagle is clearly one of the most popular species in the United States, as will be discussed in more detail shortly. The West Indian manatee and the Florida panther are two popular species, especially in the Southeastern United States. Three species that were among ten most funded in the earlier study but not in this study nonetheless remained among the most funded: the grizzly bear (13), the northern spotted owl (18), and the whooping crane When examining this list, it is clear that the level of threat or taxonomic (19). distinctiveness does not take primacy in funding decisions, as was also the case from 1989-1991. When the Government Accountability Office compared this funding pattern with the funding priority system developed by the Secretaries of the Interior and Commerce, they found that the allocation of funds is not consistent with these established guidelines. Endangered Species are ranked from one, as the highest priority, to eighteen, as the lowest priority, based on three factors: "(1) the degree of threat confronting the species, (2) recovery potential (the likelihood for successfully recovering the species), and (3) taxonomy (genetic distinctiveness)" (United States Government Accountability Office, p. 29). Based on these guidelines, only three of the ten most funded species are within the top three rankings according to these guidelines, while the bald eagle for instance received the sixth most funding despite being among the least endangered species (United States Government Accountability Office, p. 27).

Though these funding patterns could reflect costs that coincidentally correlate with species popularity, the United States Fish and Wildlife Service has made some funding decisions explicitly based on the popular appeal of particular endangered species. The Fish and Wildlife Service has formally adopted this priority system, yet its distribution of funds also does not correlate with priority rankings. In 2003, only five of the ten most funded species by the United States Fish and Wildlife Service were ranked in the top three priority categories (United States Government Accountability Office, p. 29). The reason why funding did not strictly follow the priority ranking system, according to Fish and Wildlife Service officials, is that they could leverage their funding by coordinating funds with other organizations, which depends on species popularity. For example, California Fish and Wildlife Service officials devoted considerably more resources to the red-legged frog than they did to sixty-five other species that had a higher priority ranking. Fish and Wildlife Service officials explained the reason for this:

A population of this frog was recently discovered in Calaveras County, site of Mark Twain's famous story *The Celebrated Jumping Frog of Calaveras County*, which featured the California red-legged frog. The landowner where the population was discovered was eager to work with the Service to build a stock pond to provide habitat for the red-legged frog and eradicate bullfrogs (redlegged frog competitors). The discovery of the frog population was momentous because the species is important to local lore, and a population of the frog had not been found in Calaveras County since the late 1800s (see fig. 9). Even though the field office has 65 species with higher priority rankings than the red-legged frog officials decided to address this recovery opportunity because of the frog's importance to the local community (United States Government Accountability Office, p. 25).

This example demonstrates how scientific determinations about ecological importance alone do not determine the level of protection given to endangered species. In this instance, the popular appeal of a species results from a very specific local history, which has made a typically unpopular group of animals, frogs, into an important part of the cultural fabric of local residents due to its connection with a famous Mark Twain story. This kind of importance can take precedence over other reasons when determining conservation strategies.

Aside from financial inequalities, the notion that all endangered species are equal before the law is seemingly accurate if one only considers the Endangered Species Act. However, numerous supplemental laws have been passed for iconic species. Notable federal legislation includes the Bald Eagle Protection Act and the Wild Free-Roaming Horses and Burros Act. The United States has also signed, in addition to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) that protects all endangered species of animals and plants, international agreements that specifically protect marquee species, such as the Agreement on the Conservation of Polar Bears, and is also an active member of the International Whaling Commission.

Most of these species clearly have emotionally and aesthetically appealing qualities that make them charismatic mega-fauna for Americans. Polar bears hold a special place for Americans as "cute" animals that are associated with childhood teddy bears, while simultaneously representing wilderness itself. Even early-twentiethcentury American President Theodore Roosevelt, famous for his interest in hunting, could not bring himself to shoot a bear cub, despite being the only available animal at the end of a hunting trip during which time he failed to shoot a single animal. Whales and dolphins, like higher primates and elephants, attract great concern because of their cognitive abilities (Metrick and Weitzman, 1996). These sea mammals are therefore not fit to eat from the American perspective, and their cognitive capacities makes their deaths especially unwelcome in comparison with deaths of animals with lesser cognitive skills. As these animals are apparently closer to human beings by virtue of their cognitive skills, killing them is therefore an act that is also closer to killing human beings.

The sciences can help maintain the ecological status quo, as a Foucaultian interpretation surmises, but can also fuel disparate levels of concern based on species type by offering hard evidence that different species are predisposed to very different types of cognitive skills. This should not be confounded with scientific determinism, but rather the scientific findings that such species are cognitively advanced plays on existing moral standards. A human being's death evokes sadness because others lament the person's absence and pity the deceased's inability to continue enjoying life. Scientific revelations that some species have the capacity for self-reflection and complex emotional capacities that make them able to connect with other members of their

species makes the sadness felt for the death of a human being applicable to the death of a higher order species: the highly sentient dolphin is no longer alive to enjoy his or her life, and other dolphins may grieve his or her absence; the apparently lower sentient lizard by contrast is thought to have never displayed genuine self-awareness, and other lizards appear not to possess the emotional capacities necessary to lament another lizard's absence. This is the basis of the Great Ape Project, for instance, which focuses on attaining legal rights for species that are similar to human beings (Cavalieri and Singer, 1993; Garner, 2005). With regard to apes with demonstrably high cognitive skills, "whatever legal rights these apes may be entitled to spring from the complexities of their minds" (Wise, 2000, p. 237; Garner, 2005, p. 22). Such an effort to ascribe legal rights, not merely ethical treatment, to some species stems from the logic that some animals suffer in ways similar to human beings: they not only feel physical pain, but emotional pain as well, and thus they require greater consideration than other species with no such abilities.

Concern for some species, however, may reflect uniquely American attitudes and their own "self understanding," in Charles Taylor's words. Returning to the examples of the celebration surrounding a young boy fatally shooting a black bear and the intense investigation and prosecution of a person who killed a bald eagle, as described in chapter five, digging deeper into the bald eagle's symbolic element may help further explain why there is such a significant discrepancy in the reactions to each event. The bald eagle is America's national symbol: it adorns America's most common coin, the

American quarter (twenty-five cents), and many other coins as well; it appears prominently in many national images; and it is the centerpiece of the presidential seal. Even Native American art employs the flag and/or bald eagles to depict the United States (Schmittou and Logan, 2002, p. 562). As Jerome Robins (1971) summarizes of the bald eagle's prevalence in the United States: "In the United States the bald eagle is commonplace, being found atop flagpoles, as ornaments on buildings and bridges, incorporated into the insignia of naval and postal uniforms, etc." (p. 1179). It most famously adorns the Great Seal of the United States, which was adopted in 1782 during the country's founding years. As Milo Naeve (1976) observes, "the Seal with the eagle swept American iconography into a new direction" (p. 2). This is in part because the symbolism behind the eagle in general has a long history in the West, serving as a symbol of power, majesty, and even spirituality. Throughout the Middle Ages, Naeve notes, the eagle served as a "prominent heraldic device," while the Renaissance witnessed the revival of eagle symbols from the Imperial Roman era. The eagle has therefore remained a prominent symbol of power throughout Western European history from ancient Roman times to the founding of the United States. The bald eagle in particular is unique to the United States (according to American beliefs when the seal was adopted, though this species is found in the skies that range from Canada to Mexico), which thus allowed for an ideal culmination of the symbolic power enshrined in eagles and a unique American identity found in the bald eagle in particular. It is no

surprise that there is federal legislation (and additional legislation in many states as well) specifically protecting the bald eagle.

When it comes to preferences for particular species, emotional attachments clearly do not stem purely from the attribution of aesthetic features, that is, the "cute" factor. Bears have great aesthetic appeal, serving as one of the most popular childhood accessories (teddy bear), but they do not have much additional symbolism for most in the United States beyond their wildness and strength. Other endangered species, including those not found in the United States, have great appeal to American concerns because they are closely related to human beings in terms of cognitive skills—dolphins, whales, great apes, and elephants for instance have all influenced American consumer preferences, government diplomatic strategies, and support for wildlife protection groups. American consumer reaction was negative, for instance, when environmental groups exposed that dolphins were often killed while netting tuna. This ultimately led to changes by many tuna fisheries that protected dolphins in order to have the United States Department of Commerce "Dolphin Safe" label (created in 1990 in response to these consumer concerns) attached to their product. The bald eagle in particular, however, is especially emotive for Americans as symbol of America's majesty, greatness, and uniqueness. Killing a black bear versus killing a bald eagle is not only a difference between wildlife and endangered species, but also represents hunting wildlife over which Americans claim dominion (which Americans strongly support, according to Kellert's study) and an attack on America itself. Killing a black bear is in effect hunting

the most powerful symbol of America's wilderness, reaffirming Americans' dominance over its wilderness, but killing a bald eagle is an affront to American identity.

"Eagle Days" hosted in Missouri in 1979 serves as a telling example of the bald eagle's importance to Americans as a non-game animal. The Missouri Department of Conservation's Natural History Section, in cooperation with the United States Fish and Wildlife Service, hosted this program, which offered visitors an opportunity to see bald eagles in the wild. Particularly interesting, however, was the relationship between demographics and the level of enjoyment: "No difference existed between the evaluations of Eagle Days by hunters and nonhunters" (Witter, Wilson, and Maupin, 1980, p. 65). That is, hunters who attended the event to observe the bald eagle in its wild environs had no intent of hunting it, and nonetheless enjoyed spotting the eagle as much as other observers. Even for most hunters, as this example indicates, the bald eagle is not game.

6.7: Conclusion

Employing a Geertzian perspective to examine livestock and endangered species as understood in the United States demonstrates that the different attitudes and levels of concern toward different species are actually consistent when considered within a particular cultural framework and system of meaning. That is, animals have been codified to represent certain prevailing values. For instance, the mindlessness that many Americans associate with cows makes it easy to reduce this species to the primary role of serving as a source of meat, while horses on the other hand symbolize redeeming qualities that make them inappropriate to eat, and reptiles represent things that are too grotesque to eat. As such, some species are viewed as appropriate to eat because they tread a fine line between too familiar and too alien. Moreover, the context and purpose of killing an animal influence attitudes toward an animal's death: killing a cow for food in slaughterhouses is acceptable, but killing a cow for amusement is intolerable. Moreover, the meat products derived from many livestock animals are now key components of foods that contribute to mainstream American identity. In short, common meat products from cows, pigs, and chickens are today as American as apple pie.

With regard to endangered species, Geertzian analysis offers a different conclusion than the Foucaultian interpretation. While all endangered species are equal in terms of ecological roles and subjecting the environment to knowledge and population management, not all endangered species receive the same level of concern in terms of legal protection and funding. Species that reflect key features of American identity or demonstrate complex cognitive skills receive greater consideration. At times, prioritizing species protection can result from peculiar regional histories, as is the case with the red-legged frog that was featured in a Mark Twain story. One species in particular stands out as emblematic of America itself, the bald eagle, and not surprisingly many resources have been devoted to its protection: when a bald eagle dies, a piece of America dies. Such examples make it clear that cultural and symbolic

elements significantly influence species protection, despite the scientific determinations that preclude such factors. In the United States, one can therefore hold this truth to be self-evident, that not all endangered species are produced equally.

CHAPTER SEVEN:

CONCLUSION

7.1: Consequences of Foucaultian Bracketing

Foucault's concern is that all systems of power inhibit struggle and resistance to their effects. Foucault "hyper-politicizes" consciousness (Thiele, 1990) so that human beings can recognize that knowledge and truth are inextricably linked with power: his books and writings are meant to serve as "toolkits" that help readers understand the relations of power around them. More importantly, his "toolkits" can help ensure that existing systems of power do not permanently entrench themselves in a way that makes change impossible. So, why should people resist? Foucault's work indicates that the purpose of struggling is for "the perpetuation and amelioration of the conditions that make struggle itself possible" (Thiele, p. 918). A society without restrictions is of course inconceivable, but restrictions have to be within reach so that people maintain the ability to change the systems of power.

Despite claims that Foucault's analytical strategy creates a moral wasteland, positing his work as a series of "toolkits" for understanding the world appears to rebuff these claims. Foucault was clearly committed to certain liberation projects and was not free from moral commitments at a personal level, but his own commitments do not preclude using his work without similar commitments. Instead, his work allows readers to identify why there are prisons or psychiatry, and regardless of his own normative commitments, this revelation does not necessitate a particular normative standard for other researchers. Rather, others can maintain, reform, or abolish such institutions based on this new understanding of the emergence of these institutions and the reader's own normative standards.

Psychiatry may indeed be beneficial as Janet Semple (1992) writes, but it is vital that people understand how it came about and what its function is in society rather than taking its existence for granted. Similarly, this research does not require a particular moral commitment by the researcher or the readers. This runs the risk of legitimizing oppressive and discriminatory perspectives, as Thiele says of Foucault's work. Indeed, from the perspective of animal welfare as a liberation project, suspending normative claims relating to the ethics of animal consumption may effectively support those who use animals for human interests. However, this project was not geared toward animal liberation. The results instead explain how animal categories developed in the United States and their relation to the human population without any particular normative prescriptions, making this explanation a "toolkit" for other analyses with different objectives, such as normative evaluation by various concerned parties.

In particular, this dissertation has tried to reveal how the categories "livestock" and "endangered species" emerged. In Foucaultian prose: Why? For curiosity's sake? No. For the sake of recognizing that these categories today entail unquestioned standards of treatment and how these categories emerged through various historical contingencies that do not necessitate these standards of treatment? Yes. This does not mean that such forms of treatment are either appropriate or inappropriate—such value judgments are beyond the scope of this dissertation, and they are as such left to the reader.

7.2: Explanation for the Differences in Species Valuation

On the surface it appears as though an ethical contradiction exists when eating some animals and subjecting them to various physical strains when preparing them for slaughter, while offering extensive legal protections to other types of animals. As Wennberg (2003) argues, the very essence of ecological conservation conflicts with animal welfare by delimiting the boundary between animals worth protecting and those not worth protecting based on numerical value. Derrida (2002) also implies moral connotations in the treatment of animals by suggesting that there has been a "war on pity." That is, human beings do not pity living things that according to Derrida should be pitied given the arduous conditions in which many exist. These analyses, however, presuppose the singular concept of animality that pervades much of the literature on animal welfare issues. Wennberg's comments, for instance, suggest that animal species are equally animalistic, and their moral worth is distinguished solely by population levels. As this research demonstrates, different animal categories situate different types of animals in very different scientific and social locations, and as such, different animal categories supersede animality as a singular concept.

This research has employed Foucaultian and Geertzian analytical frameworks to explain how different categories have been produced. The two interpretations presented here suggest that the apparent ethical contradiction in terms of treatment results from socially and scientifically locating different types of animals. Animals that are labelled livestock or endangered species fit within a given system of knowledge and a given system of meaning. A Foucault-based interpretation suggests that different species fill appropriate roles in population management, and a system of scientific knowledge and anatomo-political power shapes some animals in ways that allow them to fill these roles. A Geertz-based perspective suggests that different types of animals function consistently within a given system of values to which certain animal traits correspond.

Foucaultian analysis actually expounds on Derrida's claim of a war against pity when restricting this claim to livestock, and along the lines of war as conceptual metaphor, reveals the kind of artillery and tactics employed to wage this war. Foucault's explanation of power that transforms human beings into subjects also reveals that similar processes can explain how meat consumption has been normalized as a dietary necessity, and how technical processes have made large-scale meat supplies possible without significant resistance from the human population. Meat producers and the United States government by the beginning of the twentieth century had determined that meat was an essential part of the human diet, thus helping make it a dietary staple rather than a preference or luxury. Shifting toward factory settings in which specialized knowledge and techniques for physical modifications radically transformed some animals into efficient bodies for generating meat. The processes have not only increased the efficiency with which animals are dispatched for meat production, but they have increased the quantity of meat obtained from each animal—which helped create the necessary supply to normalize meat as a regular dietary item. The animals used for meat production have also been situated into an efficient system that transformed every part of the animals into various products.

These modern meat production techniques are instrumental for the ablation of violence in American society. The Humane Slaughter Act and society's inability to see what takes place inside the slaughterhouse walls transform the violent act of killing an animal into a controlled transformative process that produces meat. This effectively cuts violence out of the public mass—from human punishment as Foucault has thoroughly demonstrated, to animal slaughter—by transferring the processes away from the public view to isolated conditions that are officially "humane," thus contributing to a therapeutic and disciplined society focused on population welfare. The end product is thus easily detached from its source: most consumers do not eat cow flesh violently cut out from its dead body, but instead eat ground beef or roast beef processed at licensed facilities.

Endangered species conservation in its infancy was strongly influenced by basic material interests, namely the supply of certain wild animals for commercial and recreational purposes. As conservation ideas emerged, there was no concern for

endangered species in general, but only concern with some particular species that were facing the threat of extinction. Over the course of the twentieth century, however, the increasing concern with ecology led to increased scientific management of the American ecosystem, and eventually a concern with the population of every species. А Foucaultian interpretation of American endangered species protection suggests that the rise of governmentality and population welfare came to include wildlife as a target of management. Scientific assessments increasingly influenced government decisions regarding wildlife. The Darwinian interpretation of evolution moved human beings from being exclusive to nature to being part of nature. The realization in the United States that human activities could destroy entire species, however, helped posit human beings as disciplined consumers of nature, thereby making ecological concerns increasingly prevalent. Scientific influence culminated in strong endangered species legislation that maintains the current ecological balance in the American wilderness, and even includes restoring former ecological balances by reintroducing species that were once abundant in the wild.

One should not simply view slaughterhouses, meat production processes, protected habitats, and species reintroductions as repressive apparatuses that constrain animals to exist as their category demands, for as Foucault emphasizes, power is also productive. As much as they constrain and shape animals into various products or pieces of a larger system, these processes also help produce human beings as regular consumers of meat and as protectors of the natural environment. Scientific assessments have until recently normalized meat consumption and the human being as a carnivorous entity, and ecological studies are increasingly interacting with public opinion to foster cooperation for maintaining a particular ecological standard. These strategies of power that produce livestock and endangered species, in short, maintain what Foucault describes as the "wheels of power." From a Foucaultian standpoint, categorizing animal species helps sustain an economy of power, whereby the techniques for producing and the scientific procedures for determining these categorizations circulate continuously, bringing animals and people's relation to animals under the scientific scope and making them part of the broader development of governmentality.

A Geertzian interpretation of anomalous cases supports the Foucaultian view to some extent, insofar as such examples reveal how hindering visibility is a crucial component in meat production. Thickly describing these examples suggests that removing animal slaughter from visibility contributes to the ablation of violence by implicitly defining violence not as a means, but as a result—killing a cow for meat is not a violent act, but killing it for pleasure represents a form of violence. Geertzian analysis suggests that different attitudes and levels of concern toward different species are consistent when considered within a particular cultural framework and system of meaning. Certain types of animals represent desirable or undesirable values: cows and the mindlessness that Americans often associate with them make it easy to reduce this species to the primary role of meat or milk supply, while a horse is inappropriate for

consumption because it symbolizes positive traits and has been portrayed as loyally serving Americans. It is appropriate to eat species that tread a fine line between the too familiar, such as is the case with horses, and the too alien, such as is the case with reptiles. Moreover, the meat products derived from many livestock animals are now key components of foods that make up key elements of traditional American identity.

Geertzian analysis does not significantly overlap with the Foucaultian interpretation of endangered species. A Foucaultian view posits endangered species as valuable according to the level of threat and taxonomic distinctiveness, as assessed through scientific environmental management. A Geertzian interpretation, on the other hand, indicates that endangered species do not receive legal protection and funding in ways that are consistent with these scientific determinations. Species that reflect key elements in American identity receive greater consideration. The bald eagle in particular stands out as emblematic of America itself, and has received considerable legal protection and financial wherewithal for its preservation. In the United States, Geertzian analysis indicates that not all endangered species are produced equally according to their ecological roles as Foucaultian analysis suggests. Nevertheless, this does not mean that each explanation rivals or neutralizes the other, but instead both the scientifically constructed value of endangered species and the cultural value of marquee endangered species have likely contributed to endangered species as an important animal category with determinate standards of treatment for the species it contains.

7.3: Geertzian Analysis Can Complement a Foucaultian Perspective

Thickly describing anomalous livestock cases reinforces the Foucaultian interpretation that removing meat production from visibility and passing legislation that on paper makes the production processes humane have made large-scale meat production possible. In this sense, thick description can support Foucaultian analysis. With regard to species selection for meat consumption, however, thick description answers a question that the Foucaultian analysis cannot fully answer: why these species? Closely examining the animals that typify meat products in the United States reveals negative associations that make it easy to consume these particular animals. With regard to livestock, then, these two perspectives complement one another by explaining different facets of this inquiry: a Foucaultian interpretation can explain how these animals have been transformed into standard dietary staples, while Geertzian thick description makes it possible to conjecture why these species in particular have filled this function, and why other abundant species are rarely consumed. That is, removing slaughter from visibility and mass-producing meat products efficiently can explain why meat consumption has increased dramatically; however, this out of sight, out of mind reality is not sustainable with all species, as alligator meat or horse meat would likely be unwelcome on most American dinner tables.

A similar pattern between the two perspectives emerges when examining endangered species insofar as each perspective complements the other, but they do also present rival explanations to some extent. Foucault's analysis of governmentality

reveals a systematic approach to managing population, for which wildlife is a key component. The role of the sciences is instrumental in maintaining America's natural environment. The ecological perspective advocated by the American government perpetuates a static view of wildlife that suspends human beings from natural environmental evolution and attempts to suspend natural evolutionary changes that might see some species disappear even as a result of natural processes, such as predation by other animal species. Species have throughout history gone extinct as a result of disease, natural disaster, predation, and other "natural" causes, yet the Endangered Species Act guarantees that all species are protected regardless of cause, which could include natural phenomena.

The Geertzian interpretation does here rival the Foucaultian perspective to some extent: endangered species conservation is quite discriminatory, where legislation outside of the Endangered Species Act and the funding devoted to particular species disproportionately favors marquee species. Thick description makes it possible to postulate that certain species attract considerably more concern because they speak to the traditional American identity. Though these two perspectives do offer differing interpretations, they do not necessarily neutralize each other's validity. They instead highlight the differing forces that shape endangered species: governmentalization shapes endangered species in terms of ecological roles, but opinions toward different endangered species can be based on cultural identity and symbolic traits associated with different animals. These two explanations thus complement one another since both influences have clearly shaped endangered species: the scientific model highlights the importance of different species as parts of a delicate ecological framework that is easily damaged, while cultural attachments to certain endangered marquee species reinforces and facilitates wildlife conservation.

7.4: The Necessity of Situating Animality within Particular Animal Categories

It is impossible to completely dismiss the perceived division between humans and animals in general in the United States. Throughout recorded Western history there has existed a firm boundary between human and animal. In the Book of Genesis, God makes a covenant with Noah that clearly distinguishes man from animal:

God blessed Noah and his sons and said to them: "Be Fertile and multiply and fill the Earth. Dread fear of you shall come upon all the animals of the earth and all the birds of the air, upon all the creatures that move about on the ground and all the fishes of the sea; into your power they are delivered. Every creature that is alive shall be yours to eat; I give them all to you as I did the green plants." (Genesis, 9, 1-4).

The Judeo-Christian view of animals thus makes a firm distinction between human beings and all animals, regardless of species. Similarly, despite the confined selection of edible species, many different species have been consumed on occasion throughout American and Western history, but cannibalism has never been tolerated.

Though Americans make a clear distinction between human and animal, the categories within the latter have been constructed so differently that "animality" is today conceptually inadequate: discourse on animal welfare issues (from any point of view) must be situated within specific categories. Given the factors identified in this research that can explain the reasons why certain animals comprise one category or the other, it is imperative to move future analyses away from the traditional view of animality as a singular concept, one that rests on the long-held view of animals being subjugated to human interests because they cannot reason. While many species are demonstrably (though not necessarily conclusively) incapable of reason, different kinds of animals function in the human context differently. Therefore, in response to those who view animals as *just* animals: yes, a creature may from a particular ethical point of view be *just* an animal. That is, if one does not believe that animals have any cognitive skills or moral worth, then yes, an animal may indeed be *just* an animal, the subject of which does not merit any debate. As this analysis on the production of different animal categories shows, however, an animal is in the United States today invested with considerable human historical baggage. Regardless of cognitive skills, or perceived moral worth, animals in the United States have been produced in different forms, such as livestock or endangered species. From this point of view, and in a final note, no, it is not *just* an animal.

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