Redefining the Conditions of Possibility in the War on Pity: An Inquiry into the *Naturalness* of Meat as a Dietary Staple for Humans

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Abstract

This article supports Jacques Derrida's claim that human-animal relations are the site of "a war on the subject of pity." Looking at the issue of meat in particular, the inclination to empathize with suffering should preclude modern meat production, yet this is clearly not the case. The following analysis uses the United States as a case study and focuses on one key demand-side element necessary for large-scale meat production: assumptions about the necessity of meat in the human diet. Genealogical analysis reveals how meat consumption became viewed as a dietary staple over the course of the last century. This article argues that existing human-animal relations are not simply oppressive for the latter, as animal rights activists and animal welfare advocates often argue. Rather, this article demonstrates that human beings have been the target of power and knowledge relations that have constructed meat-eating human beings. It is therefore possible to characterize the relationship between humans and animals as also oppressive for the former insofar as it has imposed demands on the human body in terms of size and has likely increased the prevalence of associated illnesses like heart disease and colon cancer.

Keywords: Human-Animal Relations, Meat Consumption, Human Diet, Power, Knowledge, Genealogy

1. Introduction

In 2008, a small group of pigs received nationwide attention in the United States when they escaped from floodwaters in Iowa and found themselves stranded on levees made of sandbags. Officials ultimately decided to shoot the pigs because their hoofs could

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have punctured the sandbags, which would have threatened the nearby city of Kingston. There was apparent public dismay, however, when officials shot the pigs. For example, 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). This negative reactive seems surprising given that countless pigs are killed daily for consumption. The chairman of the emergency management commission in charge during this flooding episode reminded people of this fact, for killing pigs is commonplace in slaughterhouses and that people regularly eat pig-based meat products (CBS News, 2008).

This appears to present a logical conflict between public reactions to these particular pigs and the lack of public concern for the vast number of other pigs who are slaughtered for food—in essence, why get emotional over animals that routinely end up on dinner tables? It appears that when the pigs gained national attention, people saw them as living beings that were victims of the floodwaters rather than objects for the production of pork and bacon that is consumed on a regular basis. This incident demonstrates that human beings *can* care for non-human living beings that are regularly consumed and feel compassion when these beings suffer. Yet, human beings also consume animals regularly despite the harsh conditions involved in transforming these beings into food, which raises the question: what has suppressed this sense of compassion when it comes to eating meat?

Human-animal relations, according to Jacques Derrida (2002), have been the site of "a war on the subject of pity" (p.279).[1] With regard to using animals for food, it appears that such a war has indeed been waged, for the inclination to empathize with the suffering of living beings should preclude modern meat production practices. Derrida briefly suggests that the industrialization of meat production is an effect of delimiting the human-animal boundary based on the capacity for language. This broad boundary between humans and animals cannot simply result from the capacity or incapacity for reason and language, however, since some animals enjoy very different relations with humans, such as companions and conserved wildlife, while other animals, such as those commonly labeled livestock, endure arduous conditions while serving as food for humans.

Derrida's claim therefore raises a key question: how has this war been waged? This article takes up this how question regarding the war on pity that Derrida largely sets aside. The industrialization of slaughterhouses has obviously helped create the supply-side element needed to create a large-scale meat-consuming population by dramatically increasing the number of animals slaughtered, lowering production costs (Mason and Finelli, 2005), parceling meats in ways that detach consumers emotionally from the animal

body (Mullin, 1999), and therefore increasing the supply of affordable meat. This article, however, focuses on one demand-side element needed to create a large-scale meat-eating population by demonstrating that this war on pity has also been waged in the realm of truth. The roles of truth and scientific discourse have been instrumental in formulating conceptions of a healthy diet that includes eating meat as a daily dietary staple.

Looking at the United States as a case study and employing genealogy can help show how health claims were constructed in ways that served as artillery in this war on pity. A genealogical analysis suggests that the agri-business sector helped produce the nutritional truths that framed meat as a dietary staple, which has impelled those labeled as human in the United States to consume meat regularly. Though this genealogical study does not directly engage animal welfare arguments or yield prescriptive moral claims, it indirectly contributes to the existing literature related to animal ethics in two ways. First, it explains how the relationship between power and knowledge that transforms human beings into subjects helped normalize meat consumption as a dietary necessity. Second, uncovering the historical contingencies that have made meat a staple of the human diet in the American case reveals that the normalcy of meat in the human diet is a constructed truth that should not be taken for granted. Given that recent evidence demonstrates the viability of non-meat diets, people must choose what kind of human-animal relations they wish to foster, and therefore they do not *have to* continue replicating the prevailing relationship between those labeled as humans and those labeled as animals.

II. Theoretical Framework and Case Selection

The roles of technology and science as productive forces are very much central themes in Foucaultian analysis. The following analysis therefore draws on a genealogical approach that is influenced by Michel Foucault's work to understand how specific types of relationships between those beings labeled as human and specific kinds of beings categorized as livestock animals have become entrenched in the United States. Examining the history of this relationship reveals that contemporary relations between beings labeled as human and beings categorized as livestock animals 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. The subject is thus not simply the animal, but American social history and the relationship between those categorized as humans and those categorized as animals therein. This research takes the human being as the historical subject that has through historical practices constituted itself as a regular consumer of meat. A genealogical approach to interpreting historical data reveals how the relationship

between power and knowledge can explain the scientific and rational features underpinning the constitution of meat as a dietary staple in the United States beginning in the nineteenth century.

Foucault (1984) 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 (p.87). Genealogy, on the other hand, does not presume truths and their origins when engaging history, nor does it simply explain how things are today as inevitable progressions of unchangeable cause and effect patterns. It instead looks at the details throughout history and reveals the inconsistencies and at times haphazard developments— "it disturbs what was previously considered immobile" (p.82). This enables the analysis presented here to not only expound the differences between now and the past, but to also explain why the present came to exist as it does now and to reveal that current relations in the United States between those labeled as human and those categorized as livestock animals were not the inevitable results of taxonomic status.

Normative bracketing serves as a valuable tool for enhancing genealogical analysis, for it allows the researcher to avoid presupposing normative claims. In this case, bracketing requires suspending questions relating to standards of care for those beings commonly labeled as animals. Much of the literature on human-animal relations focuses on demonstrating why physically harming animals is morally wrong, and as Robert Garner (2005) has noted, there is a strong philosophical focus on the "moral status of animals" (p. 6) in much of the existing literature that pertains to human-animal relations. Indeed, many carefully reasoned arguments have been well articulated about the moral status of beings that are categorized as animals (Rollin, 2006; Regan, 2004; Singer, 2002; Dombrowski, 1997; Francione, 1996; DeGrazia, 1996), and a number of researchers have demonstrated the advanced cognitive faculties of these beings (Bekoff, 2007; Broom, 2004; Masson, 2003; Page, 1999; Rogers, 1997). In order to focus on a genealogical account of the matter at hand, this analysis abstains from directly engaging debates about the moral status of beings categorized as animals.

Though this research does not directly engage normative claims regarding appropriate standards of treatment for those beings commonly categorized as livestock animals, the following analysis tries to build on this existing literature by illuminating the processes by which those labeled as human have seemingly to come to uncritically accept the relationship between themselves and other beings commonly categorized as animals. This relationship may not only be restrictive for those categorized as animals, but it may as well be so for those labeled as human who have come to believe that consuming meat is a dietary requirement. Determining how these relations developed can, in James Tully's (2002) terms, let people see the contingent conditions that created the current reality and

thereby help redefine the conditions of possibility. In short, the following approach challenges the taken-for-granted nature of the prevailing social order (Tully, 2002) in relation to beings categorized as livestock animals. The following analysis thereby provides a new tool for those labeled as human to resist in this war against pity, and thereby *choose* what relations they believe are appropriate with those categorized as livestock animals.

III. Meat as a Dietary Staple: Awareness of Production Processes

Activist campaigns that aim to help beings that are categorized as animals appear to have experienced varying levels of success based on the target of the campaign's effort. For instance, activist groups like People for the Ethical Treatment of Animals (PETA) were in the 1980s and 1990s 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 from nearly two billion dollars in 1989 to one billion dollars the following year (Guither, 1998, p. 106), and indeed fur is at this time relatively scarce as a fashion item today in the United States. Activism that focuses on animal testing has also proven more salient than campaigns aimed against meat consumption. In the 1990s, for example, sixty-three percent of the literature concerning animal rights was devoted to confronting laboratory experimentation on animals, though the number of animals experimented on represents only three thousandths of a percent of animals consumed as meat (Conn & Parker, 1998, p. 1417).

Efforts to protect beings categorized as animals that are used for food, on the other hand, have not been demonstrably successful. In 1958 the United States passed the only federal law that protects the welfare of those beings labeled as livestock, the Humane Slaughter Act of 1958, which mandates that pigs, cows, sheep, and horses must be made unconscious before being killed. The Humane Slaughter Act, despite increased enforcement provisions in 2002, still represents a minor protective provision for these particular species, given that being unconscious when killed does not impact the conditions in which they live prior to being killed (and this law does not include chickens, which are the most consumed animals in the United States today).

Activist campaigns by groups like the Farm Animal Reform Movement (FARM) and the Humane Society of the United States (HSUS) have sought to expose the conditions that animals have to endure on their way to becoming food. Gail Eisnitz (1997), for example, conducted research on American slaughterhouses that reveals the disparate ways in which meat producers sometimes violate the Act. While interviewing slaughterhouse workers, she discovered that workers routinely violated the Act and

animals suffered considerably before and at times while being slaughtered. The notability of such findings is difficult to assess, and as such, one cannot conclude that people eat meat in spite of such findings—the information may simply not reach consumers. In one instance, however, the HSUS released a video that did get significant nationwide media coverage. Workers at one California slaughterhouse were caught on video abusing downed cows by kicking them, ramming the blades of a forklift into them, jabbing their eyes, and giving them electrical shocks (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 (Fox News, 2008). Public and government reactions to this incident appear to confirm that physical harm that is unnecessary for food production is not considered acceptable, since people did express outrage over this specific incident, but killing the animals themselves is not a matter of concern, since no such outrage is expressed for killing animals for food.

At this point, it is very likely that meat consumers are at least nominally aware that meat production entails placing animals in very poor conditions. The meat-eating public has nevertheless remained steadfast in supporting a system that lines up countless animals and slaughters them for consumption. Awareness-raising efforts have surely influenced some to pursue a more vegetarian diet, but the numbers indicate that meat consumption continues to grow. 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). The living conditions for those categorized as livestock animals have not improved and meat consumption rates have not been negatively impacted—per capita consumption rates have actually been steadily increasing in the United States. Activist campaigns thus appear to have only succeeded in affecting peripheral interests like fur and animal testing for non-medical research, but they have not impacted central interests like widespread daily meat consumption. This raises the question: why does the demand for meat remain so strong in spite of the general knowledge that meat requires poor living conditions for animals and their subsequent deaths?

IV. Meat as a Dietary Staple: Constructing Truth about the Human Diet

People have of course eaten meat throughout recorded history, but meat consumption has been strongly correlated with class distinctions (Adams, 1990). For much of European history, for example, Europe's aristocracy had a diet filled with many kinds of meat, while laborers had diets based on 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 industrialization of slaughterhouses has of course helped to generate the supply-side element needed to establish a large-scale meat-consuming population by creating an affordable supply of meat. The following analysis, however, will focus on explaining the role of truth and scientific discourse in formulating conceptions of a healthy diet, which reveals a key demand-side element needed to create a large-scale meat-eating population.

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 (United States Department of Agriculture, 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 (United States Department of Agriculture, n.d.). 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 the dietary role of meat. For much of the twentieth century, the daily recommended values put forth by the United States Department of Agriculture (USDA) and the ideal height-to-weight ratios defined by medical organizations helped to make meat a normal and essential dietary staple. 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. The Centers for Disease Control and Prevention (CDC) and the United States Department of Health and Human Services (DHHS), along with other medical organizations, have long had growth charts and recommended height-to-weight ratios. While the upper limits of these charts have posited many as obese (nearly thirty-four percent of Americans are currently obese), the lower limits of the threshold for what has been considered a 'normal' body size and shape was for many attainable only with high protein intake. The amount of fat and sugar in foods can contribute to being overweight or obese, and as such, reducing consumption levels of fat and sugar can in some cases bring a person's body mass into the 'normal' category. Being what would be considered underweight, however, requires higher levels of protein if one is to gain mass without negatively changing his or her body proportions in terms of what is for many the idealized body type.

These standards began to change in 1998 when the National Institutes of Health adopted new guidelines based on Body Mass Index (BMI) with lower thresholds for being considered a underweight, normal weight, overweight, or obese (CNN, 1998). Moreover, 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. The American Heart Association (AHA), for instance, stresses that a high level of red meat consumption increases the risk of heart disease, which is according to the CDC the leading cause of death in the United States (Center for Disease Control and Prevention, n.d.). 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, n.d.). Despite new information connecting meat consumption with various detrimental health effects, the level of consumption in the United States today suggests that consuming meat remains largely seen as a natural activity.

These competing claims demonstrate that it is important to understand that the sciences are themselves not necessarily agents of unquestionable truth. Whether it is dietary recommendations, growth charts and ideal height-to-weight ratios, or the perspective of some animal 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 appropriate height-to-weight ratio. This relies on discourses that Foucault (1980) would argue "in themselves are neither true nor false" (p.118). This is not to belittle largely uncontested medical assessments, such as the links between obesity and its numerous threats to human health, but some positions apparently seek to discover a true diet and a true size ratio appropriate for human beings. While correlations between certain foods and certain health effects can demonstrate the need to follow certain dietary guidelines, body size and claims of innate human affinities for certain kinds of food are subjective.

Different perspectives at different points in American history highlight the role of scientific claims in understanding the human being's dietary nature. The idea that meat was not simply a luxury, but instead a normal dietary staple, emerged in the United States in the late nineteenth century. For example, nineteenth-century medical doctor George Beard argued that the human diet should evolve as human beings develop over time. The human diet should, according to Beard, include fewer cereals and fruits and include more meat as humanity develops (Beard, 1898; in Adams, 1990, p.40). It is likely that Beard's

belief was widespread, and was influenced by Darwinian theory. The evolutionary hierarchy implicit in Charles Darwin's (1859) 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 argued that certain traits are more conducive to survival in a given environment than other traits. Some could thus interpret Darwinian logic in a way that makes human consumption of animals 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.

Moreover, the belief that red meat and physical strength were correlated was relatively common in the nineteenth century and the early twentieth century. For instance, health manuals from this time period 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—foods that 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).

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. Some giant meat companies had chemical departments, which created by-products and conducted research related to meat production. One company, for example, used as many as 1,200 white rats per week for dietary experiments: each was weighed regularly and monitored, which produced various statistics related to comparative dietary values (Clemen, 1923, p.373). Such research likely helped discredit gendered claims by the early twentieth century and supplant them 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 the early twentieth century.

The USDA released its food guide in 1916 and dietary recommendations in 1917, which further reinforced the importance of meat for a healthy human diet. The recommendations, which applied to children and then adults as well in the following year, 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.

The USDA, however, is a government department 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 who owned animals categorized as livestock and he had also worked as the director of the experiment station at Iowa Agricultural College (United States Department of Agriculture, n.d.). Some who later served as Secretary of Agriculture and other experts in the USDA have also come from the meat industry, where the scientific truths operating were produced by the meat manufacturers themselves. The USDA states in its mission statement and "Strategic Plan Framework" that it is concerned with factors like the expansion of existing markets and development of alternative markets for agricultural products, but also concerned with providing nutrition education and promotion (United States Department of Agriculture, About, n.d.).

The USDA's mission statement indicates a potentially significant conflict of interest by seeking to further develop markets and job opportunities in rural America, while also seeking to provide "nutrition education and promotion." As the Harvard School of Public Health's (2008) bulletin *The Nutrition Source* notes, dietary standards from previous decades "have often been based on out-of-date science and influenced by people with business interests in their messages." The now largely uncontested link between obesity and a myriad of problems initially resulted from previous recommendations that exceeded many of today's recommended dietary standards by health organizations. This may help explain why the recommended dietary guidelines started to include less meat in 2005 when they started being issued jointly by the USDA and the DHHS. By 2010, the dietary guidelines had become highly nuanced, by including recommended daily intake of more specific groups of food in quantities that are proportional to recommended caloric intake, which is determined by age and gender. The 2010 guidelines even include suggested adaptations for vegans.

This does not necessarily mean that a small group of meat producers with vested interests in meat consumption patterns subversively manipulated the American public. In line with the notion of governmentality, what this does mean is that the system of knowledge operating within the meat industry could be deployed widely throughout the

state as a function of government regulations influenced by the USDA. Governmentality implies that it is not necessarily the case that the state dominates society, but rather that the state is being governmentalized as a result of scientific discourse rising to the level of the state as experts make determinations that influence legislation (Foucault, 1991; Curtis, 2002; Miller & Rose, 2008). From this vantage point, scientific expertise relating to meat supply, consumption, and nutritional value became bound up in state regulations as the scientific knowledge produced by the agri-business sector was absorbed by the state.

To sustain the demand for 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 sixty kilograms to fifty-seven kilograms per year per person, and from 1985 to 1990 consumption dropped from fifty-seven kilograms to fifty-one 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 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. 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 fifty 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 seventy-six to eighty-three hours, but only forty-two hours for vegetarian foodstuffs—meaning that stool remains in a person's bowels for nearly twice as long (Jones, 2005).

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, meat, poultry, and fish producers accounted for three percent of all food advertising, and dairy products accounted for just over seven percent of all food advertising (Gallo, 1999, p.178).

Research indicates that campaigns by the meat industry resulted in an average of over five dollars in income for each dollar spent on its campaigns (Blisard, 1999, p.184). Though advertising in the face of increased health claims about meat has apparently helped maintain the role of meat as a normal dietary staple, the consumption rates for specific meats have changed, especially in favor of chicken. This means that consumers who increase their intake of one kind of meat likely decrease their intake of other types of meat (p. 188). In short, the cumulative advertising efforts and promotions by meat industries have helped sustain meat consumption, but health claims and their portrayal in advertising campaigns have changed the distribution of consumption among 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 have thus 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—the prevalence of meat consumption should therefore not be viewed as resulting from physiological necessity.

V. Conclusion

Scientific knowledge always develops, according to Foucault (1972), 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" (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 large-scale agricultural practices across the continent. The great apparatuses of meat production facilities and the respective councils/organizations affiliated with them have helped standardize meat consumption.

This does not mean that animal rights groups advocating vegetarianism are "right," but it explains why vegetarianism has not been standardized to the extent that eating meat has been. Animal rights advocates have no such parallel and extensive apparatuses through which to produce truth claims, though medical associations like the AHA and government health agencies like the DHHS have helped produce 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 truths that make meat central to the human diet. Consequently, meat consumption has become a standard part of most dietary habits. As Robert Garner (1993) pointed out in the 1990s, people are so obsessed with consuming animal-based protein that an estimated one million poor Americans include pet foods in their diet instead of consuming alternative sources of protein (p.93). 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 and the way that the American state has managed 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.

Eating meat became no longer a luxury or choice by the end of the nineteenth century. It became perceived as an indispensable component of the human diet for all Americans, and increasingly so as affordable supplies became more abundant and dietary recommendations made meat consumption a key part of human health. This has spawned huge economic effects. In the United States the meat industry annually uses five billion birds and one hundred million mammals to generate its meat output (DeGrazia, 2008); it is one of America's largest industries, which in the 1990s was worth approximately fifty

billion dollars per year—second only to the automotive industry (Garner, 1993). The standardization of meat as a dietary staple and the industrialization of its production have had effects beyond this specific industry and may have even helped to shape the American economy more broadly.

Nobel laureate Robert Fogel (1999) has pointed out that America's meat consumption rate was a key part of America's power. According to Fogel, per capita calorie consumption in the United States was higher than anywhere else in the world, and the proportion of calories from meat and fish was also higher than anywhere else in the world. Fogel calculates that at the end of the nineteenth century, American meat consumption per capita was twice as high as per capita meat consumption in Germany, eight times as high as in Italy, nearly twice as high as in England, greater than three times as high as in Russia and the Netherlands, and two and a half times as high as in France (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 about 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.

The USDA's 2005 changes in dietary recommendations that decreased the recommended quantity of animal-based protein may result from the fact that recommendations are now being made in conjunction with the DHHS, which does not have the USDA's objective of maximizing agri-business (DeGrazia, 2008). In 2010, the dietary guidelines were again revised, and though there is no explicit recommendation to reduce meat consumption, the guidelines recommend increasing the diversity of protein sources and eating more seafood in place of meats (United States Department of Agriculture and Department of Health and Human Services, 2010). Contemporary evidence linking high rates of meat consumption and serious illnesses has clearly resulted in a shift in recommended dietary guidelines, which if followed, could lead to greater health efficiencies and decrease pressure on heavily burdened health care facilities. The historical exchanges in health claims may thus reflect what Foucault (1997) calls the rise of bio-political power. Bio-political power focuses on efficiencies directed toward human population management, and this kind of power that emerged in the nineteenth century has population management as its domain. Meat may well have been seen as instrumental for the human population's health and strength based on scientific truths operating during the nineteenth century and much of twentieth century. New scientific truths that link meat and health problems are now changing this, however, as truths produced in

American medical institutions have grown to operate more prominently and offer the potential increased population health efficiency.

Seen in this way, meat has been and remains a central component of bio-political power. Modern meat production and high consumption rates have not only sustained agri-business interests, but they have also served as tools to strengthen the American labor force for the most efficient output. In the process, however, billions of beings categorized as animals have been and continue to be killed annually, while thousands of beings labeled as human have likely died and continue to die prematurely every year and strain healthcare services. Recognizing that meat consumption as a dietary staple was historically constructed, as opposed to an assuredly natural dietary requirement, will hopefully lead some to reflect on the relationship between themselves and those beings categorized as animals—and in so doing liberate themselves from the war on pity and the restrictions it places on both animals and humans.

Notes

1 "…une guerre au sujet de la pitié."

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