A Social History of the Slaughterhouse: From Inception to Contemporary Implications

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Abstract

This paper traces the development of the slaughterhouse as a specialized institution through three major periods. The first began with increasing concerns about animal slaughtering in the eighteenth century and resulted in "public slaughterhouse" reforms, which marked the beginning of the concentration of animal slaughter and its movement away from the gaze of the public. Second, slaughterhouses became industrialized, as exemplified by the development of notorious Union Stockyard in Chicago during the late nineteenth century. Finally, during the latter part of the twentieth century, slaughterhouses in the United States were relocated to small rural communities, which began to exhibit negative consequences. This paper represents a modest step in developing an historical understanding of the slaughterhouse as a unique institution and moving towards an understanding of the consequences of modern slaughterhouses in what Bulliet (2005) refers to as "postdomestic" societies.

Keywords: slaughterhouse; meatpacking; abattoir; slaughterhouse communities

Introduction

Today, the slaughterhouse is cursed and quarantined like a boat carrying cholera. In fact, the victims of this curse are not butchers or animals, but the good people themselves, who, through this, are only able to bear their own ugliness... The curse (which terrifies only those who utter it) leads them to vegetate as far as possible from the slaughterhouses. They exile themselves, by way of antidote, in an amorphous world, where there is no longer anything terrible.

— Georges Bataille (1997, 22).

We seldom think about the slaughtering of non-human animals (hereafter referred to simply as animals) for meat, much less the space in which it takes place. This is no accident or simple oversight: it is intentional. As anthropologist

Noelle Vialles points out, animal "slaughtering tends to be a somewhat 'unpopular' subject: no one *wants* to know about it" (1994, 125, emphasis mine). So why write a paper chronicling the development of the slaughterhouse as an institution and the consequences for contemporary slaughterhouse communities? There are two answers to this question: the first is conceptual and the second practical.

Conceptually, an examination of the slaughterhouse as an institution has a lot to offer: it is a location from which one can view economic and geographic changes in the production of food, cultural attitudes toward killing, social changes in small communities, and the changing sensibilities and relations between humans and non-human animals. If Levi-Strauss was correct that "animals are good to think with", then it would likely follow that the institution which kills the greatest number of them and is summarily obscured from the public's gaze is particularly worthy of detailed examination. Along these lines, York (2004; 2006) has suggested the development of a "sociology of the slaughterhouse." A sociological understanding of the modern slaughterhouse and its implications will, however, require an historical understanding of the institution and its development. This paper is intended to contribute to this foundation.

The second reason for this paper is to tie together segments of the literature on slaughterhouses, which are currently divided by time period and geographic location, in an accessible, article-length manuscript. Noteworthy monographs have detailed how the development of the Chicago Union Stockyards in the nineteenth century forever transformed the production of meat and the physical landscape (e.g., Cronon 1991; Horowitz 2006; Jablonsky 1993; Patterson 2002; Sinclair 1946[1905]; Skaggs 1986). A less well known and perhaps even more provocative narrative can be found in the contemporary slaughterhouse industry where dramatic changes are once again taking place. As the industry has been relocating to rural communities in the U.S. significant social problems have begun to emerge (Artz, Orazem, and Otto 2007; Broadway 2007; Broadway 1990; Broadway 1994; Broadway 2000; Broadway 2001; Broadway and Stull 2005; Fitzgerald, Kalof, and Dietz 2009; Gouveia and Stull 1995; Grey 1995; Grey 1998; Horowitz and Miller 1999;

Stull and Broadway 2004). Tying these developments together provides insight into the trajectory of the slaughterhouse as an institution and raises new questions about the cultural implications of animal slaughter.

The paper begins with an examination of the changing sensibilities in the Western world[2] regarding animal slaughter, which provides an important backdrop against which to trace the emergence and development of the modern slaughterhouse detailed herein. It is demonstrated throughout the paper that the development of current sensibilities towards animal slaughter on the one hand and the contemporary slaughtering industry on the other have created a significant disjuncture.

Shifting Sensibilities

The way in which we view animals has changed dramatically over time (for most species at least). To make sense of these changes, historian Richard Bulliet (2005) distinguishes between two periods in our relationships with animals: domesticity and postdomesticity. During the domestic era, the social and economic structures normalize daily contact with animals (including non-pets). This era is easily contrasted with the current postdomestic era (which Bulliet argues took shape in the 1970s), where people are physically and psychologically removed from the animals that produce the products they use, yet most somewhat paradoxically enjoy very close relationships with their pet animals (see Grier 2007 for a history of pet animals in the US). A tension emerges in this era between a growing fondness of some animals and the consumption of others: "a postdomestic society emerging from domestic antecedents continues to consume animal products in abundance, but psychologically, its members experience feelings of guilt, shame, and disgust when they think (as seldom as possible) about the industrial processes by which domestic animals are rendered into products and about how those products come to market" (2005, 3). Philosopher Nancy Williams (2008) argues there is actually an unwillingness among the public to think about how their meat is produced, and that this has important ethical implications.[3] She characterizes this unwillingness as "affected ignorance", whereby a choice is made not to investigate whether a practice one is involved in is immoral.

Sociologist Norbert Elias (2000[1939]) links this growing unwillingness to confront our treatment of animals with larger social processes. In his book, *The Civilizing Process*, Elias argues that practices of meat consumption are illustrative of a growing concern with civility since the Middle Ages. He points out that beginning in the seventeenth century, carving meat at the table became less common. Prior to this point it was not only customary to carve meat at the table but also

to present various animals, such as pigs, calves, and hares, with their heads attached (see also Thomas 1983). Today great pains are taken so that people are not reminded of the origins of their meat while they are eating it.[4]

This shift in sensibilities regarding meat was coterminous with the movement of responsibility for animal slaughter from individuals in the household to specialists who would take care of meat production "behind the scenes" in slaughterhouses.[5] Yet the creation of the slaughterhouse, where concentrated animal slaughtering discreetly takes place, has not been a panacea for the mounting cultural angst. According to Otter, it might have even had the opposite effect: "The abattoir, invisible but not secret, may have been built in response to concerns about civility, or feelings of deep repulsion, but it in turn created the conditions under which true disgust can be felt" (2008, 105). Rémy (2003) and Smith (2002) point out that modern humane slaughter requirements in the slaughterhouse have resulted in contradiction or tension whereby it is acknowledged that the sentient creatures being killed are worthy of protection.

Adding to the growing tension, as we move further into the postdomestic era, the number of animals slaughtered for food is increasing and their quality of life is diminishing. Somewhat ironically, the largest meat producing countries today, including the US, Canada, Australia, and New Zealand, also have the "strongest postdomestic mentality" (Bulliet 2005), and there are indications that the massive scale of animal slaughter in these countries can be particularly disturbing. For instance, Vialles (1994) observes in her ethnography of modern slaughterhouses that "whereas the slaughter of a few animals may be a festive occasion, slaughter on a large scale is different. It is disturbing; therefore means must be found of putting it out of mind" (p. 72). Yet the attempted cultural amnesia brings its own set of consequences. For instance, Otter (2008) has warned that "this institutionalized forgetting might create the conditions of possibility for cruelty of a new kind, on a greater, more deeply hidden scale" (105). The next section of the paper examines the steps taken towards the goal of institutionalized forgetting. Later in the paper the potential consequences are examined.

From Backyard to
Centralized Animal Slaughter

The slaughterhouse emerged as a unique institution in the early nineteenth century as part of a larger transition from an agrarian to industrial system, accompanied by increased urbanization, technological developments, and concern about public hygiene (Brantz 2008). Prior to that point, animals were slaughtered for consumption in diverse places, such as

backyards. Beginning in the eighteenth century, reformers argued that "public slaughterhouses" would be preferable to "private slaughterhouses" (the term referred to any structure in which animals were slaughtered for human consumption, e.g., a butcher's shed) because they would remove the sight of animal slaughter from public places and indiscreet private slaughterhouses, they could more easily be monitored, they were generally considered more spacious and clean (Otter 2008), and reformers argued that the state should be regulating "morally dangerous" work (MacLachlan 2008). The sole purpose of the new buildings would be to slaughter animals —regulated by the state and outside of the city core. The first public slaughterhouse appeared in France at the beginning of the nineteenth century and the French word *abattoir* was introduced to refer to a specific place where animals are slaughtered for human consumption (Brantz 2008; Otter 2008; Vialles 1994).

Public authorities in other Western European countries tried to concentrate the slaughter of animals outside town walls (Thomas 1983, 294) in larger, public slaughterhouses, although it was not a uniform process (Young Lee 2008a). One common theme that linked these developments was an interest in making animal slaughter less visible. Ironically, the new slaughterhouses, which were labeled as "public", increasingly removed animal slaughter from the view of the general public.

A heated battle over slaughterhouse reform emerged in London. The main site of contention was the Smithfield Market, established in the 900s. The effects on morals that slaughter might have on the workers and the observers was raised as a concern in this case. Philo (1998, 63) cites a shop owner in London who stated in response to a committee investigation of the market in 1849 that "the chief trades 'encouraged by the existence of Smithfield' [the meat market] were 'gin shops and public houses.'" Another man interviewed by the committee said that the violence against the animals "educate[d] the men in the practice of violence and cruelty, so that they seem to have no restraint on the use of it" (Philo 1998, 65). A cholera outbreak in the 1840s eventually brought public health concerns about slaughtering animals in the city to the forefront and the live animal part of the Smithfield Market was closed in 1855 (Kalof 2007). Large, public slaughterhouses were subsequently constructed outside the city center.

Slaughterhouse reforms also took place in the US. Mass animal slaughter had begun in the New World when the first famine hit the English settlers in Jamestown in the winter of 1607-08. At that time the cattle, pigs, and sheep they brought from England were slaughtered for food. From that point on they slaughtered the surplus animals at the beginning of the winter. This quickly gave rise to the sale of surplus salted

and cured meat (Patterson 2002). The earliest reference to commercial slaughterhouses in the US dates back to 1662 in Springfield, Massachusetts where a pig slaughterhouse was established by William Pynchon (Azzam 1998; Patterson 2002). Concerns about slaughterhouses emerged shortly thereafter. Beginning in 1676, officials in New York City relocated slaughterhouses from densely populated parts of the city (Day 2008; Horowitz 2006). In 1747 an ordinance was passed which forbade people from slaughtering cattle at their home. By the end of the eighteenth century, meat was being sold in city-owned marketplaces and municipally licensed slaughterhouses (Day 2008). And according to Johnson (2008), the notion that slaughterhouses should be centralized and monitored was supported widely by municipalities in the post-Civil War period.

The public animal slaughtering facilities constructed outside of city centers in both the US and Western Europe were designed and sited to reduce contemplation and questioning of them by workers and consumers. They were and still are nondescript — designed to look like any other factory. In Villaes's (1994) words, the slaughterhouse is a "place that is no-place." The geography and architecture of slaughterhouses served then, as they do now, to avoid a "collective cultural guilt" (Young Lee 2008b, 47; see also Serpell 1986, Smith 2002, Thomas 1983, and Young Lee 2008a).[6] This separation of the public from the slaughter of animals they consume developed into a hyperseparated state with the industrialization of animal slaughter. This process is most apparent in the US, and it is there that researchers have started documenting the community consequences of slaughterhouses. I therefore turn to an examination of industrialized animal slaughter in the US context.

The Industrialization of Slaughterhouses in the US

In the second half of the nineteenth century, the animal slaughtering and processing industry in the US became concentrated in a few cities, including Chicago, Cincinnati, St. Louis, and Kansas City (Rifkin 1992). Chicago, however, became the preeminent meatpacking city due to changes in trade routes during the Civil War, the development of the railroad system and mechanical refrigeration (Azzam 1998). The infamous Union Stock Yard opened in Chicago in 1865. The Stock Yard was a massive slaughterhouse complex unlike anything that had come before it. Many of the workers lived in the back of the yards where a slum developed. This slum was characterized by extreme poverty, crowded conditions, delinquency, and environmental pollution, and was vividly depicted in Upton Sinclair's novel, *The Jungle* (1946[1905]). The Stock Yard community, which experienced growth up

until World War II, became home to nearly 60,000 people, about half of whom had emigrated from other countries (Jablonsky 1993).

The Union Stock Yard was also at the forefront of mechanizing the industry. In response to the growing population's increased demand for meat and the escalating volume of livestock entering the Stock Yards, the conveyor belt was introduced to increase production speed and efficiency. Importantly, this new conveyor system took control of the speed of production away from the workers and put it in the hands of managers (Patterson 2002; Stull and Broadway 2004). By the 1880s, animal slaughtering in the US had become an industrialized, mass-production industry (Pacyga 2008).[7] According to some (e.g., Patterson 2002), animal slaughtering became the first mass-production industry in the United States, from which Henry Ford partially adapted his conception of assembly-line production. The industry continued to expand during this period as a result of increasing demand and increased distribution possibilities.

The continued expansion and harmful working and living conditions inside and around slaughterhouses gave rise to labor organizing. During the first two-thirds of the twentieth century labor unions became increasingly powerful in slaughterhouses, even as unions in other industries suffered. Beginning in the 1930s, the United Packinghouse Workers of America (UPWA) and the Amalgamated Meat Cutters (AMC) worked hard to unionize slaughterhouse employees. Reportedly, by the early 1960s these two unions represented more than 95% of the slaughterhouse employees outside of the southern states (for historical examinations of labor organizing in slaughterhouses see Halpern 1997; Horowitz 1997). As a result, meatpacking became one of the best-paid industrial occupations (Brueggemann and Brown 2003). However, the power of the unions began to wane in 1969 (Brueggemann and Brown 2003), and by the end of the 1990s only 60% of slaughterhouse workers were unionized (Bacon 1999). Numerous reasons have been put forth to account for the decline of unions in the industry at this time. Brueggemann and Brown (2003) point to three major factors — economic restructuring, working class fractionalization, and employer ascendancy — each of which is examined below, as a full understanding of contemporary slaughterhouse developments requires attending to the decline in unionism.

The first explanation for the decline of unionism in slaughterhouses points to the economic restructuring in the industry that accompanied postindustrialism and globalization.[8] These effects include job de-skilling as a result of the automation of production, a reduction in the dependence of employers on experienced manufacturing workers, reduced pay, a more transient and difficult workforce to organize, and the lessened ability of unions to win concessions through collective action. As Brueggemann and Brown (2003) point out, however, the major threat of economic restructuring to organized labor in slaughterhouses has been the redistribution of jobs *within* the United States instead of internationally, which makes the industry unique because whereas the general trend has been for manufacturing companies to move from the global north to the global south, slaughterhouses have instead shifted geographically from urban areas in the northern US with strong traditions of unionism, such as Chicago, to more rural areas without strong histories of unionization, particularly in the South.

A second perspective on the decline of unions points to *working class fractionalization* in slaughterhouses, fostered by the increasing representation of minority women and men in the industry and the animosity between groups when layoffs are implemented during economic downturns (Brueggemann and Brown 2003). During the Stock Yard era the industry relied heavily on a workforce or immigrants, racial/ethnic minorities, and women. There was a subsequent shift in the workforce composition and by the mid-20th century the majority of slaughterhouse workers were white men. Since that time there has been another shift as the industry has increasingly recruited women and racial/ethnic minorities (Benson 1994). Racial and ethnic minorities are now the numerical majority employed in slaughterhouses. In 2003, for instance, 4.1% of meat, poultry, and fish processing workers were Asian, 12.7% were Black, and 41.5% were Hispanic (US Census Bureau 2003).[9] The diverse and fluctuating demographic composition of the industry and fears of job loss have posed numerous challenges to labor organizing.

The final contributing factor to the decline of unionism in slaughterhouses is the *ascendancy of the employer companies* (Brueggemann and Brown 2003), which refers to the increasing power of capitalists relative to that of the working class, a shift which began after World War II and continues today. The 'old Big Four' companies (Swift, Armour, Wilson, and Cudahy) that had dominated the animal slaughtering industry (and had been well penetrated by the unions) lost ground during the second half of the twentieth century to smaller companies. The shares of sales controlled by the Big Four companies declined from 52% in 1950 to 25% in 1972. The original Big Four companies eventually gave way to a new Big Four in cattle slaughtering and processing (animal slaughtering has become increasingly species-specific over the years): Iowa Beef Processors (IBP), ConAgra, Excel and Beef America (Brueggemann and Brown 2003). By the year 2000, the new Big Four companies controlled more than 81% of beef slaughter in the United States (Stull and Broadway 2004, 15). This virtual monopoly (see Dickes and Dickes 2003) has made the increasing ascendancy of the employer companies virtually inevitable. One company in particular,

IBP, has been powerful enough to forever alter the ways in which slaughterhouses do business.

The New Era in Slaughterhouses: 1960 Onward

Since the industrialization of slaughterhouses, the demand for meat has continued to grow. Despite the fact that per-capita consumption of beef in the US has dropped since the 1970s, the gross amount of meat consumed by the entire population has risen. According to USDA Agricultural Statistics summarized by Stull and Broadway (2004), per capita beef consumption in the U.S. peaked in the late 1970s at approximately 126 pounds per year and was down to 99.3 pounds per year in 2000. However, pork consumption has remained fairly constant, and there has been an "explosive growth" in the consumption of chicken, which has placed increased pressure on the beef and pork industries (Dickes and Dickes 2003). In 2002, meat and poultry consumption in the U.S. reached its highest level — 219 lbs per person (Marcus 2005). The increase in overall meat consumption, despite the publicized associated health and environmental consequences of meat eating, has been fostered by the low cost of meat (which has been facilitated by the mechanization of meat processing, the increasing economies of scale, and the continued decimation of organized labor in the industry). When adjusted for inflation the price of meat has actually dropped, reaching the lowest price in 50 years in the 1990s. Because meatpacking is not an exceptionally profitable industry — for each $100 in sales of beef, $93 goes to production costs — slaughterhouses have become extremely competitive, continually seeking to reduce their costs and increase their production (Stull and Broadway 1990). IBP has been at the forefront of these changes.

The "Union Stock Yard era" in slaughterhouse history, which refers to the concentration of animal slaughter in a few urban areas during the late 19th and early 20th centuries, was driven by the idea that it was more efficient for animals to be slaughtered in central locations and to transport carcasses to markets than to transport live animals. The new era, pioneered mainly by the Iowa Beef Processors company (IBP), is marked by the shipping of "boxed beef" instead of carcasses (Azzam 1998; Stull and Broadway 2004), dramatic changes in the geography of production and the labor force. IBP, which was founded in 1961 and purchased by Tyson Foods in 2001, is the largest red meat provider globally (Broadway and Stull 2005; Hake and King 2002; Olsson 2002),[10] and has been particularly powerful in reshaping the industry and undermining the labor unions (Brueggemann and Brown 2003; Stull and Broadway 1990). The company has taken three steps that have substantially altered the meat-

packing industry: it developed new technologies, changed the geography of production, and obtained cheaper labor.

The development of 'boxed beef', which has reduced both labor and shipping costs, is illustrative of IBP's innovating. Instead of hanging and transporting sides of meat, the fat and bone are removed and the meat is vacuum-packed and boxed up. Working with boxed beef makes distribution more efficient, cheaper, and reduces the skills required by labor (Azzam 1998; Brueggemann and Brown 2003; Stull and Broadway 1990; Stull and Broadway 2004). Profits have also been increased by increasing the speed of the 'chain' (Eisnitz 1997; Stull and Broadway 1990), or the rate at which the animals are stunned, killed, and "processed" (or dismembered). The Health and Safety Director of the United Food and Commercial Workers union has reported that chain speeds increased between 50% and 80% between approximately 1982 to 1992 (Stull and Broadway 1995, 68). To put this in perspective, in the early 1970s, the fastest line killed 179 cattle an hour; today the fastest kills 400 per hour. In Europe, however, only approximately 60 cattle are killed an hour (Marcus 2005). Finally, profits have been increased by maximizing economies of scale, resulting in plants that can slaughter greater numbers of animals (Broadway and Ward 1990). This trend is evidenced by the increase in the number of large slaughterhouses. Between 1974 and 1997, the number of slaughterhouses employing more than 1000 workers doubled, while the number of plants employing fewer than 1000 workers dropped significantly (Broadway and Stull 2005).

IBP further altered the industry by changing the geography of production (Brueggemann and Brown 2003). In the United States and Canada during the Union Stock Yard era, slaughterhouses were located in densely populated urban areas, close to their markets and livestock were transported by rail. However, the importation of live animals to the slaughterhouses in urban centers resulted in a loss of value because of "shrinkage" (cows lose 5% of their weight in only 3 hours of shipping), bruising, and crippling during shipping (Stull and Broadway 1990). With improvements in refrigeration and the popularity of boxed beef, the slaughterhouses could be relocated to communities with smaller populations, near the feedlots, to reduce production costs.[11] The slaughterhouses therefore moved from urban areas, such as Chicago, where the Stockyards had closed by 1970 (Azzam 1998), to small towns. Most of the towns where IBP purchased or constructed plants had populations of less than 25,000 (Broadway 1998). The same number of slaughterhouses, however, did not reappear elsewhere: the trend has been toward fewer and larger slaughterhouse facilities in these small towns (Broadway and Stull 2005; Dickes and Dickes 2003).

This relocation from the industrial urban contexts that had given rise to the unions and industry-wide wage and ben-

efit scales (Brueggemann and Brown 2003; Stull and Broadway 2004) to 'right-to-work' states,12 where unionism is much weaker, also provided secure sources of cheaper, non-unionized labor (Azzam 1998; Broadway 1998; Broadway and Stull 2005; Hake and King 2002). This geographic shift not only had negative consequences for organized labor, it also became "a mixed blessing for small towns where packing plants have located" (Broadway 2000, 37) — a point which will be elaborated upon shortly.

Finally, and related to the previous two steps that IBP took in reshaping the animal slaughtering industry, the company sought new sources of cheap labor. In addition to relocating to right-to-work states, they were able to drive wages down through technological innovations. These innovations made it possible to employ a less skilled workforce, and by locating in small communities where there was not a reservoir of labor available to meet their needs they were able to take advantage of the recruitment of immigrant workers for less pay (Brueggemann and Brown 2003), actually facilitating the entrance of immigrants into communities that had no recent history of immigrant settlement (Gozdziak and Bump 2004). For instance, IBP opened a new meatpacking plant in Garden City, Kansas in 1980, and by 1985 the population had grown by 33%. The majority of the new residents were Southeast Asian refugees and Latinos, many of whom were from Mexico (Stull and Broadway 1990).

The steps taken by IBP to increase their profits have not only resulted in reduced labor costs and union protection in their own plants, but have also placed pressure on their competitors to reduce their production and labor costs. As a result of these changes, slaughterhouse wages, which had once been the highest of manufacturing industries, dropped to 20% below general manufacturing work by 1990 (Stull and Broadway 2004). These changes in the industry also provided additional incentive for mergers (Azzam 1998; Dickes and Dickes 2003), resulting in an industry more concentrated than ever before (Dickes and Dickes 2003). In sum, the context of animal slaughtering has changed dramatically (again) over the past fifty or so years, and IBP has been at the forefront of these changes; the consequences of which are just now becoming apparent.

The Effects of the Contemporary Slaughterhouse Industry

These recent and dramatic changes in the industry have attracted the attention of scholars who have begun to document their effects. The literature on the transition of industrial slaughter to rural areas in the US began in the early 1990s and has continued to grow (Grey 1999). Most of the research has been conducted by anthropologist Donald Stull

and geographer Michael Broadway. They have examined several communities where extremely large slaughterhouses have opened. Their research has documented ten likely impacts of slaughterhouses moving into an area, including increases in the number of minority workers, low-paying jobs, offensive odors, demand for low-cost housing, strains on local infrastructure, crime, persons utilizing social services, the homeless population, health care strains, and linguistic and cultural differences (Broadway 1994). These impacts can be grouped into three major categories: the impact on the *physical environment and human health*, the impact on the workers, and the *social impacts on communities* (these effects are not, of course, mutually exclusive). Each of these categories is examined below in order to provide an understanding of the wide-ranging consequences of the contemporary slaughterhouse.

Effects on the physical environment and human health

Parallel to the development of modern, high-volume, slaughterhouses located closer to the supply of livestock, a shift occurred from raising livestock on small to medium size family farms to producing livestock in much larger numbers on farms colloquially referred to as factory farms and referred to in the literature as Concentrated or Confined Animal Feeding Operations (CAFOs). Between 1982 and 1997 the number of CAFOs in the United States dropped from 435,000 to 213,000. The reason for the decline is that smaller operations went out of business as larger operations swallowed them up (Stull and Broadway 2004). Thus, while there has been an increase in the number of animals being raised or produced, there has been a decrease in the number of facilities where these activities take place. Because of the increasing physical proximity between the raising and the slaughtering of the animals, concerns about the physical environmental consequences of raising livestock have tended to encompass the slaughtering industry as well.

Negative impacts upon the air and water quality have been documented in regions experiencing growth in the livestock industry (Caldwell 1998; Walker, Rhubart-Berg, McKenzie, Kelling, and Lawrence 2005; Wing, Horton, Muhammad, Grant, Tajik, and Thu 2008). Stull and Broadway (2004) explain that much of the problem is caused by the amount of manure these large operations produce. The nitrogen and phosphorous contained in manure can be extremely dangerous to the environment and human health when they enter the water systems in large quantities. Environmental justice movements to keep CAFOs out of communities have consequently emerged (DeLind 1998; Edwards and Ladd 2000; Ladd and Edward 2002; Tacquino, Parisi, and Gill 2002; Wing et al. 2008). These movements have challenged the rights of large corporations to come into their communi-

ties (which are predominantly rural and economically disadvantaged), establish large CAFOs, and put pressure on local farmers to establish CAFOs in order to compete with the larger corporations (Stull and Broadway 2004), and some communities have successfully removed CAFOS from their jurisdiction (see DeLind 1998 for instance). The Farmers Union has appeared before the U.S. Senate, arguing that livestock concentration (spearheaded largely by the large slaughterhouse companies) is negatively affecting their livelihoods and as one member stated, it is "sucking the lifeblood out of rural communities" (National Farmers Union News, 2002).

In addition to the dangers posed to human health in the form of pollution caused by the industry, there is also the danger posed by food poisoning (Walker et al. 2005). An increased demand for meat, coupled with the decline in prices and profitability, has resulted in faster production, or increased chain speeds as discussed earlier. It is claimed that the increasing speed of production in the United States makes the contamination of the meat during processing more likely (Eisnitz 1997; Stull and Broadway 2004). Pathogens such as Campylobacter, Salmonella, and Escherichia coli O157:H7 have been documented entering the food supply (Stull and Broadway 2004; Walker et al. 2005). There has been a sharp increase in food poisoning deaths that corresponds roughly to the increase in the chain speeds and CAFOs. In the ten year span from 1984 to 1994, deaths from food poisoning more than quadrupled from 2,000 to 9,000 cases (Eisnitz 1997).

As a result of the effects the production and consumption of meat have on the environment and human health, some (e.g., Walker et al. 2005) have recommended creating a regulatory framework that would make the industry responsible for the costs of the externalities in producing meat. Calls for increased regulation of the industry also emerge in discussions of the effects of the industry on those who work within it.

Slaughter and the worker

Increasing chain speeds are not only a potential source of meat contamination, they also constitute a safety hazard for the approximately 150,000 workers employed in slaughterhouses. In light of this risk, an editorial in *The New York Times* remarked that "What is most alarming at the slaughterhouse is not what happens to the animals — they have already met their fate. It is what happens to the humans who work there" (NYT editorial 2005).

The illness and injury rate of workers was higher in slaughterhouses than in any other industry for "much of the last quarter of the twentieth century" (Broadway and Stull 2008, 28). The reported injury rate in the industry did begin falling in the early 1990s, which can be at least partially attributed to advances in ergonomics and the desire of the companies to reduce the costs of worker compensation and of

fines for safety violations (Broadway and Stull 2005). Yet at the close of the century the reported injury and illness rate remained quite high: In 1999, the reported rate was 26.7 injuries/illnesses per 100 full-time workers, three times the average for industries manufacturing other commodities (Stull and Broadway 2004, 75). As of 2008, the rate was down to 10.3 injuries/illnesses per 100 full time workers (Bureau of Labor Statistics 2009).

The type of work undertaken in slaughterhouses lends itself to high levels of injuries and illnesses. The use of sharp knives in the dismembering or processing of the animals (Stull 1994) coupled with the fact that too frequently animals are improperly stunned and regain consciousness (Eisnitz 1997) and workers receive inadequate training (Stull 1994), result in the potential for many accidents in the workplace. This has been exacerbated by the increasing speed of the line (Benson 1994; Broadway and Stull 2008; Olsson 2002; Stull 1994), which translates into more opportunities for accidents and increased repetitive movements. These repetitive movements can lead to muscle strain and cumulative trauma disorder, such as carpal tunnel syndrome (Stull and Broadway 1990; Stull 1994).

Relatedly, modern slaughterhouses have an exceptionally high employee turnover rate: rates as high as 200% in the first year of operation are not uncommon (Broadway 2000, 39).[13] In Lexington, Nebraska, within the first 21 months after a slaughterhouse opened the turnover rate was 250%, or 12% each month. An Excel plant opened in Dodge City, Kansas experienced a 30% monthly turnover rate and an IBP plant opened in Finney County, Kansas saw a monthly turnover rate of 60% (Gouveia and Stull 1997, 3). The high turnover rate is said to actually benefit the industry (Broadway and Stull 2008; Grey 1999; Grey and Woodrick 2002; Stull and Broadway 1990), in spite of the fact that it results in less experienced workers and more accidents, because it keeps the costs of wages and benefits down. The high turnover rate has been attributed to the dangerous working conditions and the physically demanding nature of the work (Stull and Broadway 1990).

The high turnover negatively impacts worker safety because it results in a high number of inexperienced laborers working in slaughterhouses, which compromises not only their own safety but also the safety of those around them. Exacerbating the problem, inspections by the Occupational Safety and Health Administration (OSHA) have declined markedly, dropping to a record low by the late 1990s (Olsson 2002), a trend started during the Reagan administration when the number of OSHA enforcement workers and inspections were reduced (Claybrook, cited in Stull and Broadway 1995, 65). (See Worrall 2004 for a detailed discussion of the regulation of slaughterhouses).

In light of the concerns regarding worker safety in the industry, the following suggestions have been made: to institute longer and improved worker training; improve the staffing of work crews; vary the jobs in order to reduce muscle strain; implement longer recovery periods for injured workers; slow down the speed of the chain (Stull and Broadway 2004; Stull and Broadway 1995); and involve employees in the development and administration of safety programs (Worrall 2004). Significant changes remain to be seen.

Slaughter and the social impacts in the community

In his book detailing the changes in animal agriculture since 1950, Marcus laments that "While stories of work-related tragedies at slaughterhouses are commonplace, the impact that the facilities have on communities is every bit as disturbing" (2005, 226). These impacts include housing shortages, increased demand for social assistance, and an increase in crime (Broadway 2000; Stull and Broadway 2004). The increased demand for housing and social assistance can be explained by the influx of people into the community looking for work in the slaughterhouse(s). The increase in crime rates, however, is the least readily explainable of these social problems and therefore warrants focused attention.

In their recent book, *Slaughterhouse Blues* (a title which aptly describes the state in slaughterhouse communities) Donald Stull and Michael Broadway (2004) report that in Finney County, Kansas there was a 130% increase in violent crimes within five years after two slaughterhouses opened, which can only be partly accounted for by the 33% increase in population (Broadway 2000). Property crimes in the county also increased, and the incidence of child abuse increased by three times and was 50% higher than the state average (Gouveia and Stull 1995). Increases in crime in slaughterhouse towns have also been observed in Nebraska (Broadway 1994): In Lexington, monthly police bookings increased 63% over a three year period (Gouveia and Stull 1995). Crime rate increases have also been documented in Iowa: crimes increased in Perry (Broadway 1994) and in Storm Lake, where the number of burglaries in the first nine months of 1992 was four times that of the previous year (Grey 1995) and by 1994 serious crimes reported were 2.5 times greater than in other Iowa cities of similar size (Grey 1998). Crimes also increased with slaughterhouses in Oklahoma: in Guymon total arrests increased 38% (Stull and Broadway 2004). Finally, increases in drug-related criminality have also been documented in at least one poultry-processing town — Georgetown, Delaware (Horowitz and Miller 1999).[14] Increases in intimate partner violence appear to be behind much of the increases in violent crime in these communities (Broadway 1990; Broadway 2000; Gouveia and Stull 1995; Stull and Broadway 2004).

Two quantitative studies were undertaken subsequent to these community studies to examine if the observed increases in crime in slaughterhouse communities are statistically significant, whether the crime increases can be explained by other factors, and if the increases only occur in the unique communities studied by ethnographers where extremely large slaughterhouses have recently opened. One study examined 1404 nonmetropolitan counties in the US from 1990 to 2000 (Artz, Orazem, and Otto 2007). The authors examined the effects of meatpacking, poultry processing, meat processing, rendering, and frozen specialty food's share of the county's total employment and wages on economic growth, crime, and government spending. They found that growth in the industries as a share of total county employment raises county employment growth, while lowering wage growth compared to counties without the industry. Further, employment outside of the industry grows more slowly, which they argue is indicative that growth in the meatpacking and processing industry results in less growth in other areas of the economy. When they combine the meatpacking and processing industries, they find that there is no significant change in property and violent crimes in counties with and without the industries. They also conclude that there is little evidence of growth in government spending. Importantly, however, when they examine each one of the industries separately their findings are different: expansion in meatpacking, or slaughterhouses, "lowers wage and income growth without the accompanying increase in total employment growth seen in the estimates for all industries combined. Counties with growth in meat packing also experienced faster growth in violent crime rates over the decade relative to counties without packing plants" (Artz, Orazem, and Otto 2007, 568).

The other study examined 581 nonmetropolitan counties in the US from 1994 through 2002 and focused on the relationship between the number of people employed in the slaughterhouse industry in the county and various types of crime, controlling for various theorized correlates of crime, such as the proportion of young men in the county, income levels, and immigration, among others (Fitzgerald, Kalof, and Dietz 2009). The authors find that slaughterhouse employment is related to increases total arrest rates, arrests for violent crimes, rape, and other sex offenses. They also find that these relationships are unique when compared to other manufacturing industries.

The findings of the community case studies and the quantitative studies in combination provide evidence that modern slaughterhouse communities are experiencing higher levels of violent crime in particular than other communities. As a result of these studies, Dillard (2008) recommends that slaughterhouse work be considered "an ultrahazardous activity for psychological well-being" and that occupational

health and safety regulations be developed to improve psychological well-being in slaughterhouses. Further, MacNair (2002), who has examined perpetration-induced stress among soldiers, executioners and law enforcement officers, suggests studying slaughterhouse workers for perpetration-induced stress. She poses the following questions: "Does the fact that these are merely animals prevent the psychological consequences that would accrue if people were to be treated in this way? Does the fact that this kind of violence is done in massive numbers make it more of a psychological problem than violence to one or a few animals would?" (p. 88). These questions remain unanswered; however, it is possible that what these communities are experiencing is symptomatic of the growing tension between the state of the modern slaughterhouse and postdomestic values.

Modern Slaughterhouses and Postdomestic Cultures

As demonstrated herein, the history of the slaughterhouse as an institution can be traced through three major periods thus far. First, "public slaughterhouse" reforms in the eighteenth century marked the beginning of the concentration of animal slaughter and its movement away from the view of the public. Second, the slaughter of animals became industrialized, which is best illustrated by the Union Stockyard in Chicago during the late 1800s and into the twentieth century. This industrialization is said to have created an unprecedented break with nature: it distanced people from the animals they consume, the act of killing, and the natural environment in which the animals were raised (Cronon 1991). Finally, during the latter part of the twentieth century the negative consequences of slaughterhouses on the small communities in which they are being relocated became apparent. Some of these consequences would be expected with an influx of people into a community, such as housing shortages and strains on social services. Others have been more pernicious and appear to be somewhat unique to the type of work undertaken in and around slaughterhouses, such as increasing environmental problems, worker injuries, and crime.

Western sensibilities regarding animals have been shifting alongside the changes in the slaughterhouse, and have certainly been responsible for some of the changes therein. Consumers increasingly want to push slaughterhouses out of sight and out of mind, and slaughterhouse companies have been happy to oblige. The changes in slaughterhouses and sensibilities towards animals, occurring side by side, however, have created a tension in postdomestic cultures: a growing unease is developing regarding the slaughter of animals for human consumption at the same time that the number of animals being slaughtered is increasing dramatically and their quality of life, if not death, have arguably been diminishing. In his examination of attitudes towards nature and animals in England from 1500-1800, Keith Thomas describes the emergence of this tension as follows:

> *There was thus a growing conflict between the new sensibilities and the material foundations of human society. A mixture of compromise and concealment has so far prevented this conflict from having to be fully resolved. But the issue cannot be completely evaded and it can be relied upon to recur. It is one of the contradictions upon which modern civilization may be said to rest. About its ultimate consequences we can only speculate (1983, 303).*

The small communities in the US to which slaughterhouses have recently relocated might provide a microcosm in which at least some of these consequences are becoming increasingly apparent.

What the next chapter will be in the slaughterhouse narrative is yet unclear. Perhaps the consequences of the tension between the modern slaughterhouse and postdomestic cultures will become increasingly evident. If so, this could give rise to a new sort of environmental/social justice movement. Such a movement has already developed around the siting of Concentrated Animal Feeding Operations (CAFOs) (Edwards and Ladd 2000; Ladd and Edward 2002; Tacquino, Parisi, and Gill 2002; Wing et al. 2008). Another related movement could potentially develop around the siting of slaughterhouses.

It is also possible that as the tension between modern, industrial animal slaughter and postdomestic values grows, the separation between livestock animals and meat in our lives will become intensified. Vialles (1994) has referred to the importance in Western cultures of putting an ellipsis between animal and meat. This ellipsis might become even more drawn out, or in Williams's (2008) terms, the "affected ignorance" regarding animal slaughter could continue, if not become even more rationalized and institutionalized. One thing is for certain: the tension between the modern slaughterhouse and postdomestic culture will not simply disappear, even as slaughterhouses continue to seemingly drop from our cultural consciousness.

Acknowledgements

Endnotes

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2. This paper focuses primarily on the slaughtering of cattle and pigs in North America and Western Europe.

3. Williams (2008) asserts moral culpability exists in this context because there is a refusal rather than an inability to investigate whether one is engaged in something immoral.

4. See Adams (1991) for an insightful examination of contemporary steps taken to conceptually distance the meat on the plate from the animals used to produce it, or what Vialles (1994) refers to as putting an ellipsis between animal and meat.

5. The terminology used to describe this "behind the scenes" location is still contested. The term "slaughterhouse" originally did not refer to a specific structure used for slaughtering animals. It referred to any building where animal slaughter took place (such as a butcher's shed) (Otter 2008). The term has since fallen out of favour with some because it is more graphic than other terms used to refer to the location where animals are killed for human consumption, such as the French *abattoir* or meatpacking plant. Due to its clarity, the term "slaughterhouse" is employed in this paper in line with its current use denoting a specific structure designed and used for slaughtering animals for human consumption.

6. Serpell (1986) includes concealment as one of four categories of distancing devices used to mitigate guilt associated with the harming of animals more generally. The other three categories he delineates include detachment, misrepresentation, and shifting the blame.

7. For a discussion of the consolidation within the industry at this time see Azaam (1998).

8. For a thorough examination of the effects of postindustrialism and globalization on the agricultural industry in general see Bonanno, Busch, Friedland, Gouveia, and Mingione (1994).

9. Women, however, are still underrepresented in the industry (Horowitz 1997). As of 2003, only slightly more than a quarter (26.6%) of meat, poultry, and fish possessing workers were women (US Census Bureau 2003).

10. Other changes in the monopoly structure of the meatpacking industry are worth noting: In 2002, ConAgra sold the majority of the interest in its Red Meat division and it was renamed Swift & Company; and in 2003, the beef and hog processing operation of Farmland Industries were sold to the world's largest hog producer and processor, Smithfield Foods (Broadway and Stull 2005).

11. The location of hog processing has not undergone as dramatic a regional shift as cattle processing (Broadway 1995). Additionally, in England, slaughtering has not become as concentrated in livestock producing areas as it has in Canada and the United States. Broadway (2002) speculates that this may be due in part to slaughterhouses locating in areas where they can obtain government grants, livestock holdings are less concentrated in Britain in the first place, and due to environmental concerns large feedlots are not as common as they are in Canada and the United States.

12. In these states employees have the option to join unions, pay dues, and quit the unions at any time (National Right to Work Legal Defence Foundation 2005), which has hampered union organizing (Broadway and Stull 2005), and kept labor costs suppressed.

13. Ascertaining the exact turnover rate for the industry is difficult: "Industry spokespersons do all they can to avoid revealing turnover rates, but everyone agrees that employee turnover is higher than virtually any other industry" (Stull and Broadway 2004, 80). Illustrative of this high turnover rate is the fact that only 48 out of 15,000 hourly workers at IBP received retirement benefits between 1974 and 1986 (Stull and Broadway 1995, 70), and reportedly one-third of slaughterhouse workers quit within the first 30 days (Stull and Broadway 2004, 80).

14. An increase in crime rates after the opening of a slaughterhouse has also been observed in at least one Canadian community to date: the town of Brooks, Alberta, experienced a 15% increase in population within approximately 5 years of plant expansion but also witnessed a 70% increase in reported crime (Broadway 2001; Stull and Broadway 2004, 123-124). The town of High River, Alberta, which hosted a new slaughterhouse, has not experienced the negative impacts that Brooks has, presumably because it is close enough to Calgary so that many of the workers live there in order to have access to more affordable housing (Broadway 2001).

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