Beauty and the Beast:
An Economic History of the Meat Packing Industry in Emporia, Kansas

---

A Thesis

Presented to

The University Honors Council

Emporia State University

In Partial Fulfillment

of the Requirements for Graduation with High Honors

---

by

Kristen L. Larson

May 2006

Thesis
2006
L

Approved by Advisor

Approved by Advisor

Approved by the Director of the University Honors Program

Beauty and the Beast:

An Economic History of the Meat Packing Industry in Emporia, Kansas

Introduction

Traversing the rolling landscape of the Flint Hills region between Wichita and Kansas City will lead one to Emporia, Kansas. Historically, the community's agricultural base has been significant in its economic viability. In the past forty years, the changing meat packing industry has established a strong economic presence in Emporia. Previously, Emporia had developed from a tiny settlement to a sizable and significant place to live. Emporia has evolved economically to have some cosmopolitan elements; however, it still functions today as a modern cow-town reliant on the meat packing industry for a disproportionate share of its economic activity. The story of the relationship between the town and the industry requires a perspective of the history of the industry and of Emporia. The two are explored together giving a possible vision on the future of Emporia, the industry, and similar economic relationships throughout the Midwest. Knowledge of the past and present of both the industry and the community are helpful in anticipating the future, stimulating creative wisdom, and illuminating options that might not otherwise exist.

Chapter 1

The Evolution of the American Meat Packing Industry before 1960

The story begins with an exploration of the evolution of the beef processing industry. The factors that changed the industry and the magnitude of those changes can be determined. This allows one to understand the scope of the industry and the process by which towns such as Emporia came to the attention of beef processors. The meat processing industry operating in rural Midwestern towns for production is a relatively new development that began to occur in the 1960s. Analyzing the history of the industry before the great innovations of 1960 gives a standard of comparison for the current era of meat processing, and thus facilitates a more comprehensive understanding of the precipitants of the great changes that altered the industry and a little Kansas town called Emporia.

Emporia lies in the midst of one of the great stretches of grasslands in the world known as the Great Plains of the United States; the meat packing industry relied on these plains to feed its major nonhuman input - cattle. The settling of the Great Plains displaced Native Americans and the buffalo around which they lived their lives. In the midst of the Civil War, Abraham Lincoln signed into law the Homestead Act of 1862. This act allowed twenty-one year-old males who were heads of households, a chance at 160 acres of "free land" in the middle and western parts of the country that had not been previously settled. It was an attractive opportunity that was highly successful in bringing settlers to the Great Plains. It was not repealed until 1976, and even then special provisions were still allowed for settling in Alaska until 1986 ("The Homestead"). Land was among the least expensive inputs to raising cattle, and, ultimately, cattle fed on the Great Plains would fuel the American meat packing industry.

Great Britain played a key role in developing the Great Plains because of its demand for beef. Great Britain was the head of a giant empire with significant commercial revenues which made the British a major trading partner with the United States. An anthrax epidemic hit Great Britain in the 1860s and created a shortage of beef. Demand for beef was already high and the price of beef rose. The opening of the Great Plains created a commercial opportunity for American businessman to take advantage of high prices of beef abroad. These economic incentives fueled the cattle industry and provided financial investment opportunities that dominated the logistical difficulties that were faced in utilizing this massive section of land (Rifkin 87).

Before Great Britain helped build the railroads along which commodities such as cattle would travel, cattle trails supplied the meat packing industry. The beef industry was composed of many small businesses because of the nature of cattle. Just as Native Americans molded into the lifestyle of their food source, the beef processing industry was shaped by cattle. Compared to other livestock, cattle have long periods of gestation, many different cuts, varying body compositions, and expensive feeding practices (Simpson 7). The high costs of feed and the long length of time that it takes to raise a herd of cattle led to a large number of small farms with small numbers of cattle supplying processors. Until railroads moved cattle quickly across long distances in the 19th century, packing plants were small because of the sporadic numbers of cattle they received. The small processing capacity led to a large number of slaughterhouses. At the end of the Civil War, New York City was home to 200 slaughterhouses (Rodengen 11).

Railroads were essential to the growth of large meat packing companies. The cattle market occurred in urban areas of the country where suppliers of agricultural products met with buyers in demand for their products. Stockyards were built alongside urban centers. Large

numbers of cattle were bought and sold and then shipped to processors around the country by the railroads. Railroads would supply packing houses until the development of large feed-lots in the 1950s (Simpson 9). In 1865, the Union Stockyard in Chicago was founded in an agreement between packing companies and railroad companies. Similarly, large stockyards emerged in Kansas City and Omaha (Rodengen 12). Cattle raised and driven to the stockyards were much cheaper than those produced by eastern farmers due to the lower cost of land in the west (Rifkin 87). Consequently, Great Plains cattle soon were in high demand by packers around the country. Before the days of trucks and trailers, cattle would come to the packer after expending much energy. Cattle feeders would walk their cattle from the farm to the stockyards or the nearest railroad. Once the cattle reached the stockyard, commissioners would intervene and purchase cattle from the rancher and then sell them to the packers. While urban and foreign demand for beef was provided by large stockyards, rural populations received their beef from small local processors. Few people considered the negative impacts on the meat from walking cattle for miles and then shipping them on rumbling rail lines. Transporting the cattle resulted in negative impacts on the quality and quantity of the meat (Rodengen 11).

Technological innovations made great impacts on the meat processing industry and on the country. With the development of refrigerated shipping by sea in the 1860s, British markets of beef were opened to American supplies of beef (Rifkin 114). The increase in the beef business propelled quicker and more efficient methods of transporting cattle. This was achieved with the westward expansion of railroads to small and urban areas alike. A large percentage of the railroads built in the 1870s and 1880s were financed by sales of foreign bonds in Britain (Mishkin 28). Now the survival of rural towns depended upon the existence of a railroad in their town to take advantage of the commercial benefits of railroads. The development of the Great

Plains, financed by the British, firmly entrenched cattle in the economic prosperity of the region (Rifkin 88).

The packing houses and their development relied on the technological innovations, attitudes, expertise, and financial impetuses of entrepreneurs; though refrigeration technology was primitive in the 1860s and 1870s, its development would be essential to the industry. A Detroit meat-packer named George Hammond took advantage of refrigeration and used a refrigerated railcar to ship frozen dressed beef to wholesale meat sellers on the east coast. In 1878, Gustavus Swift opened his own packing house in Chicago and decided to ship only the edible parts of the meat. He needed an efficient refrigerated railcar and commissioned an engineer named Andrew Chase to build one. Chase developed a car that ran air over ice at the top of the car and as the air cooled, the heavier air would rise to the top. Eventually, all the air in the car would be cooled ("Made"). The Swift-Chase rail car was hugely successful and brought in Philip and Simeon Armour to the refrigerated beef business. By 1886, Armour controlled almost a fourth of Chicago's beef trade (Rifkin 114). In Omaha, Nebraska, in 1890, Armour's production manager Michael Cudahy formed the Cudahy packing company (Rodengen 14). Another packinghouse was built in Chicago by Nelson Morris in 1884, and the Wilson Holding Company also became a major player in the packing industry in the latter part of the nineteenth century (Rifkin 114).

These "Big Five" packing companies of Armour, Swift, Cudahy, Morris, and Wilson made up the Beef Trust which consolidated control over meat packing industry at the turn of the century; consolidation occurred for several reasons and would led to federal regulations and other precipitants to changes in the structure of the industry. They were successful in the terminal and railway markets of the stockyards of Chicago, St. Louis, Omaha, and Kansas City.

In 1910, they controlled "82 percent of the meat trade" (Rodengen 16). The Beef Trust consolidated control for protection in the industry. Once the cattle were slaughtered, there was a small time window before the beef spoiled. Processors were susceptible to walk-out strikes that could cripple the industry. In addition, cattle were purchased at the stockyards from ranchers and feeders and payment was made the day of the sale. The price of beef greatly fluctuated causing a possible loss to processors between the time the cattle were sold and slaughtered (Rodengen 18). The supply of cattle also fluctuated with the numbers ranchers chose to send to the market. Consumers were highly sensitive to changes in the price of beef. Public concern of the power of packing houses were fueled by high retail prices and the expose written by Upton Sinclair at the beginning of the twentieth century on the Chicago Packing Houses called *The Jungle* (Rodengen 18).

The control the Beef Trust held over the industry and complaints of consumers and cattlemen led to many studies and regulations that greatly affected the industry. The public was concerned that the processing industry had evolved to resemble a shared monopoly. A study by the United States Department of Agriculture, prompted by a consumer protest in 1911, determined that numerous small butcher shops with high fixed production costs were driving up the price of beef (Rodengen 18). However, in 1919, Woodrow Wilson issued a study by the Federal Trade Commission which determined that the beef processing industry was a monopoly of control among the Big Five stating they

> met regularly [in Chicago] in a suite of rooms…rent for these rooms and other expenses connected with these meetings were apportioned among the packers in proportion to their shipments of dressed beef. At these meetings, the territory was divided and the volume of business to be done by each packer was apportioned

> upon the basis of statistics compiled...penalties being levied when one of them exceeded his allotment in any territory (United States. Federal).

To placate antitrust charges, the meatpackers agreed to the Packer Consent Decree in 1919 to "divest themselves of public stockyards, stockyard railways, market newspapers and public cold storage warehouses" (Rodengen 20). Government officials and cattlemen pushed for further regulation, and, in 1921, Warren Harding signed into law the Packers and Stockyards Act. This act was designed to prevent against horizontal and vertical integration within the industry making provisions which required licensing of packers, prevented them from owning stockyards and promised the use of railroads to all packers (Rodengen 20).

After the meat packing industry was determined to be an illegal monopoly, regulation and other factors contributed to a gradual reduction in concentration of the industry after 1920. The Beef Trust became the Big Four when Morris and Company was acquired by Armour and Company in 1923. The Big Four grew in size from 1930 to 1953, yet the sales of other companies grew by 400 percent while the sales of Swift grew by 270 percent (Arnould 25). This period saw reduced barriers to entry in the industry with innovations in refrigeration and transportation. In addition, the emergence of chain store distribution began to alter the nature of meat merchandising. The growth of the country saw emerging markets for meat outside the cities that smaller plants could supply with these changes in meat retailing. Plants near metropolitan areas with a high level of capital investment could not easily be moved and the capital invested outside the city. Thus, new firms and smaller plants were able to take advantage of these innovations and the industry was characterized by decreasing concentration and increased concentration from 1920 through 1950 (Arnould 26). By 1956, the Big Five had become the Big Four and they controlled only 38 percent of the meat packing industry (Brozen).

Another major cause of diminished concentration in the industry was high labor costs for the firms due to the unionization of workers. Unionization of workers first occurred in 1896 with the Amalgamated Meat Cutters and Butcher Workmen of North America (Fink 50). In 1904, the first walk-out occurred with 50,000 workers walking out across the nation (Rodengen 17). The Wagner Act in 1935 was passed to protect unions, and it resulted in the formation of the Packinghouse Workers Organizing Committee (PWOC). Conditions during the Great Depression were not favorable for organizing workers; however, during World War II unions became effective in bargaining wage and benefit packages. The United Packinghouse Workers of America (UPWA) emerged from the PWOC and organized meat packing in the Midwest in 1943. After the war, the Amalgated and the UPWA worked in collective bargaining with the packing companies (Fink 51).

Though unions raised the pay for workers in the standard meat packing plant at the time, the nature of meat packing has always been gruesome and challenging. The processing facilities of the early part of the century were huge structures built with many floors. In Chicago, Armour and Swift employed 5,000 men. The stockyards themselves were full with "so many cattle no one had ever dreamed existed in the world" (Sinclair). In the processing facility, cattle were driven to the top floor where they were killed and hung on conveyor belts. As the carcasses traveled down the floors toward the ground floor, workers would cut the meat and the blood would drain to the bottom level. Carcasses on the bottom floor were shipped to wholesale meat merchants or butchers who would break down the meat into further cuts (Rodengen 14). The nature of the work then and now is grisly and dangerous; however, the lack of uniformity of cattle requires human workers for processing whereas other animal processing, such as pork processing, was more easily mechanized (Fink 51). Nonetheless, innovations in production have

occurred in the slaughtering process and infiltrated other manufacturing industries. Henry Ford's assembly line for automobile production originated from the beef processing industry. He wrote in his autobiography "the idea came in a general way from the overhead trolley that the Chicago packers used in dressed beef" (Ford 81).

In the 1940s and 1950s, more changes occurred in the industry that helped bring the meat processing industry to the heartland. During World War II, packers sent soldiers meat that showed great variety in its quality. In order to protect the soldiers, the government created the federal grading system that "equalized the kinds of beef sold by various packers" and made beef into a commodity (Rodengen 21). Also, the advent of the automobile followed by highways and roadways changed the way Americans traveled in the country, and thus inevitably influenced the nature of transportation for products through the country. This signaled another great change in the meat processing industry similar to changes that occurred with the development of railroads. In *Fast Food Nation*, Eric Schlosser credits the birth of the fast food industry to the development of automobiles, which allowed people mobility and the ability to accomplish more tasks in their lives at a faster rate (Schlosser). As the pace of life changed, so did America's eating habits. Also, high labor costs due to unions in the meat packing industry and changes in transportation industry and its infrastructure created conditions for a new meat packing industry that would turn its eye to the inner part of the country and cast its gaze on Emporia, Kansas.

Chapter 2

The Development of Emporia 1857-1960

Meanwhile, during the evolution of the American meat packing industry, Emporia, Kansas, was morphing from a tiny settlement to a city of over 15,000 residents. Peering over the grassy plains, several settlers from Lawrence, Kansas, laid the foundations for a town in 1857, on a site located between the Neosho and Cottonwood Rivers. They would name their settlement Emporia, which translated from emporium means a place of important commerce. The location of the town would be one of its greatest attractions to investors for the next one hundred plus years. An analysis of Emporia's first one hundred years serves as an important part in understanding the convergence of the meat packing industry and Emporia's other economic activity. The story of Emporia's development emerges through investigating population and business data from Emporia's city directories; it becomes evident that Emporia's early history had many successful industries and many were consistent with reliance on its strong agricultural foundation and geographical location for sustenance and economic growth.

In February of 1857, the site for a settlement was located on a one square mile section of land midway between the Cottonwood and Neosho rivers in southeast Kansas (Emporia City Directories, 1885). The site was smooth in most places and the settlement would be named Emporia after a north African financial center in ancient Carthage (Emporia City Directories, 1940). A young editor of *The Herald of Freedom* named G.W. Brown from Lawrence, Kansas, pushed for the settlement of the town and developed the Emporia Town Company ("History of Emporia"). The first building finished in Emporia was a boarding house located on 6th and Commercial streets, and a plaque on the current building marks this site today. Next, a general store was completed, followed by a hotel and then a printing office where the *Emporia News* was

printed and issued. Emporia optimistically described itself in the 1877 city directory as a city with many attributes including its water power, rich natural resources such as soil and grasses, great railway lines, "firm basis" for trade, and a social scene both "refined and cultured." Furthermore:

> A city situated like Emporia, surrounded by such a country, with good society, and an enterprising, law abiding, honest, industrious and social people, Emporia is and will continue [to be] one of the model cities of the State and the great west, where intelligence, refinement and the higher qualities of man's nature must prevail (Emporia City Directories, 1877 2).

The population of "The Pride of the Valley" grew steadily from a small settlement to a substantial town (Emporia City Directories, 1870 43). The following diagram of Figure 1 represents general population of Lyon County compared to that of Emporia. Data was not available on both the county and the city for all years from the U.S. Census Bureau on Lyon County and from Emporia city directories.

Year	Lyon Co.	Emporia	Percentage Estimates of the Population of Emporia relative to Lyon County
1890	23196	10174	44%
1900	25074	10609	42%
1930	29240	18965	65%
1940	26424	13138	50%

Table 1 – General Population of Lyon County and Emporia

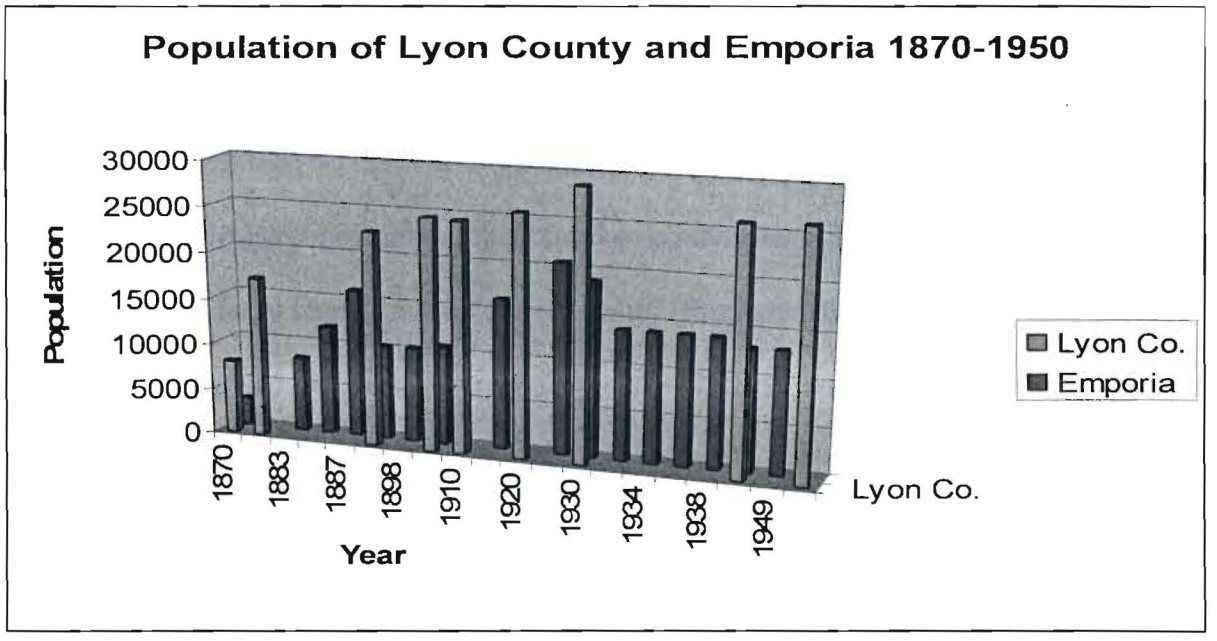


Figure 1

The measurement of the population of Emporia relative to the population of Lyon County is represented in Table 1. From the diagrams, it becomes evident that, in general, the population of Emporia and Lyon County grew throughout this period and stabilized past 1930. In addition, the city of Emporia comprised roughly half of the total population of Lyon County (Emporia City directories, 1870-1950; United States. U.S. Census Bureau. United States Census of Population and Housing. "Kansas). It is worth noting that the various populations of Emporia listed in city directories was approximated by taking the number of names listed and multiplying by a factor of either 2.5 or 3 to account for women and children. Data from official federal censuses were not available specifically for the city of Emporia (Emporia City Directories, 1870-1950).

While the population of the area was growing, the scope and structure of Emporia's industries developed; the attributes of the area set the foundation for the major sectors of business throughout Emporia's history. It has often been said in the business world that location is everything. The Emporia Town Company passed on its greatest gift to future residents of

Emporia in its location. Located between the major cities of Wichita and Kansas City, Emporia quickly established a railroad through the city. Two railroads were already completed in 1870, and its location was seen by many as the major selling point to business in Emporia. The 1870 city directory of Emporia pointed out that "the day is in the near future when it will be the great distributing point for at least one-fourth of the State" (Emporia City Directories, 1870). The article goes on to give a poignant description of early Emporia in all its youth and splendor describing the growth of Emporia as purposed toward:

> the natural development of a great central point, whence are distributed the vast quantities of supplies for the thousands who are so rapidly filling up the great southwest. Large blocks of stores, of a character to do honor to any city in the State, are rapidly rising along the business thoroughfare, elegant residences already dot the overlooking hills, while the busy hum of industry is heard on every side (Emporia City Directories, 1870).

Nearly one hundred years later the same opinion was held by town members. The *Emporia Gazette* on April 21, 1966, ran an article entitled "Emporia's Strategic Location Helps Attract Industrial Prospects." The article stated, "Much of Emporia's prosperity over the years has developed from this geographic location" (Hemstreet).

The location of Emporia attracted businesses largely based on agriculture with a large number of service and retail industries. In 1890, the largest categories of listed businesses included attorneys, grocers, meat markets, physicians, real estate, loan, and insurance businesses. Some early manufacturing businesses included a tent and awning factory, broom manufacturer, and cigar manufacturer (Emporia City Directories, 1890). In 1900, the most frequently listed business was insurance companies with 107 agents and companies listed. In 1940, the city

characterized its major businesses with "the business of the city is predominantly retail" with wholesale trade industries including Kraft-Phenix Cheese Co. and Emporia Wholesale Coffee Co. (Emporia City Directories, 1940 16). In manufacturing, the 1940 directory states "Emporia lays no particular claim to being a manufacturing center" but does goes on to list manufactured products such as building blocks, salted peanuts, and mattresses (Emporia City Directories, 1940 17). In Figure 2, the number of manufacturing establishments in Emporia is charted, with an almost symmetrical decrease in the early years of the twentieth century in contrast with the conclusion of the nineteenth century (United States. U.S. Census Bureau. United States Census of Population and Housing. "Kansas: Manufacturing). Admittedly, the number of establishments does not reflect necessarily the number of workers in these establishments, yet, it does display a general trend in manufacturing.

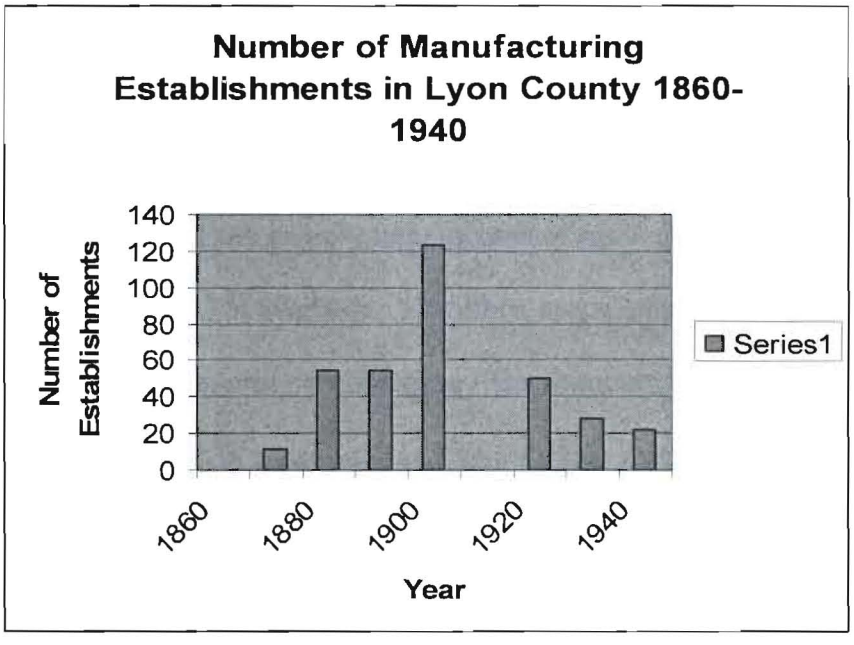


Figure 2

Also, the town was seen in 1940, as "an important retail center" with "all the conveniences and advantages of a large metropolitan shopping center without the many annoyances and the congestion found in large cities" (Emporia City Directories, 1940 19-20).

Many of the businesses listed under wholesale trade, manufacturing, and retail were agriculture related. Thus, it becomes evident that agriculture in the "Capital of the Famous Blue Stem Pasture Region" played a large part in the business of the area and is thus listed in 1940, as "the basic industry here" (Emporia City Directories, 1940 17). Products from the surrounding dairy industry led to the production of ice cream, cheese, and butter through businesses such as Hoch Dairy Company, Victory Creamery Company, and Emporia Creamery Company. Other Emporia farmers produced wheat, corn, alfalfa, sorghum, hogs, and cattle fed off "the abundant growth the bluestem grass makes each year on the hills and in the valleys of this vast section of Kansas" (Emporia City Directories, 1940 18).

Unfortunately, knowledge of the structure of the economy of Emporia with a strong agricultural base and a heavy emphasis on retail trade does not shed light into the overall or per capita wealth of its residents. Data on per capita income of residents of Lyon County in the early part of the twentieth century is not available. Therefore, speculation is necessary to evaluate the overall economic wealth of Emporia over this time. The economy was strongly founded in agriculture which was common in states such as Kansas which supported a large, though declining, number of farms after 1900. The chart Figure 3 represents the number of farms in Lyon County from 1870-1950. The number of farms peaked around 1900 and then began to decrease. It is important to recognize that this does not control for farm size. This decrease may be attributed to technological innovations that allowed farming to develop into a more capital-

intensive process that increased productivity and expanded the size of farms. Hence, while the number of farms decreased over this period, the size of farms may have increased.

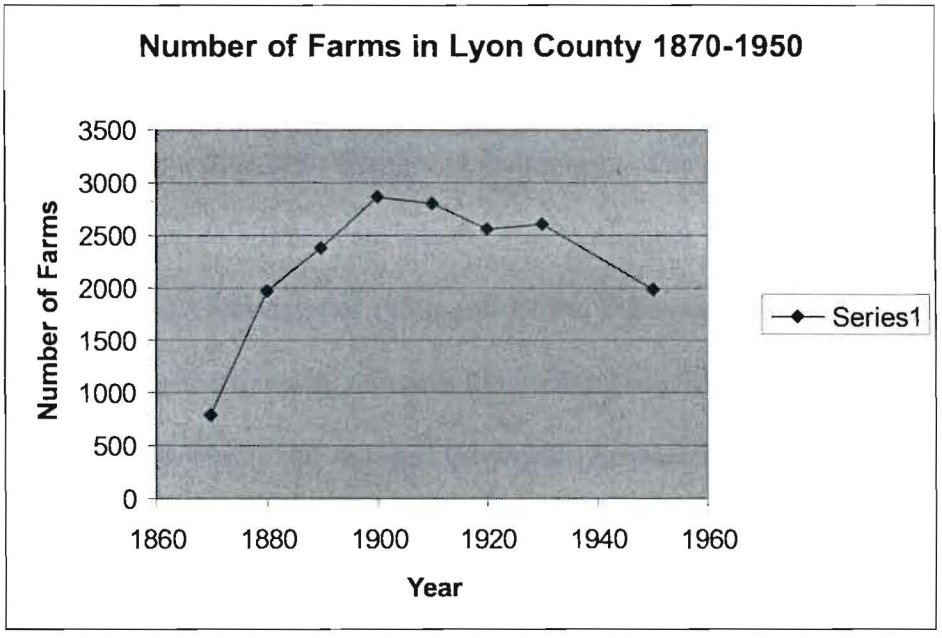


Figure 3 (United States. U.S. Census Bureau. United States Census of Population and Housing. "Kansas: Total)

The number of farms in the county may not be indicative of the economic strength of Emporia because of the changing structure of the industry. However, it may be inferred that a change in the agricultural base of the county would change the town. Also, Emporia was economically able to maintain two colleges with the College of Emporia established in 1882, with a 1940 enrollment of 500, and the Kansas State Teachers College with a 1940 enrollment of 2500 (Emporia City Directories, 1940). The town was nicknamed "The Athens of Kansas" and made famous by the philanthropist and author William Allen White who owned and operated the *Emporia Gazette.* Residents were proud to call Emporia "The Educational Center of the West" (Emporia City Directories, 1940).

Thus, the agricultural base of the Emporia economy showed a strong population growth in the first one hundred years of Emporia's history. Its location was a key to its success in being a railroad center and distribution site for Kansas. The area was also proud of its educational assets with the College of Emporia and the Kansas State Teacher's College. However, the future of the town was in question with changes in technology. The preceding charts outline changes through the 1940s and 1950s because into the 1960s, changes in meat packing would change the economy of Emporia. Through the 1950s and 1960s, highways were taking precedence as the main mode of transportation with railroads diminishing in importance. William Allen White died in 1944. World War II had changed the world. Emporia's physical location, which lured the Emporia Town Company in 1857, would hook a new kind of industry. Changes were coming to 'The Pride of the Valley" (Emporia City Directories, 1870).

Chapter 3

Emporia and the New Meat-Packing Industry

1960-present

In 1969, the meat packing industry and Emporia would become entwined. Diminished concentration within the meat packing industry allowed new smaller firms to establish a profitable presence in the industry, and with their efficiencies and other advantages, the industry would begin moving to rural locations in places such as Emporia. Emporia began to evolve as a modern cow town with increasing dependence on the meat packing industry for its economic sustenance. Many lament the reality of the industry and ponder the costs and benefits of the meat packing industry in Emporia. Yet, higher concentration in the industry has resulted in fears of its effects on the economy and the possibility of the industry moving. A significant amount of new capital investments in its meat packing plant is a sign suggesting its presence is not as temporary and unstable as might first appear, and some see consolidation in the industry slowing for the future. Emporia and the meat packing plant have developed a complicated relationship with an ambiguous future; however, there is no doubt the two entities "got hitched" a long time ago and will remain so in the future.

On March 21, 1961, a new meat-packing company started operation in Denison, Iowa; the company was called Iowa Beef Packers, Inc., and it would pioneer great changes in the meat packing industry. Andy Anderson and Currier J. Holman were the major players in the success of IBP (Iowa Beef Packers). They had both worked in the meat-packing industry for many years and saw methods to make production easier and cheaper than their competitors. Taking a gamble on the future of the industry, they built a new one-story automated meat-packing plant near cattle feedlots in rural areas away from union labor to cut labor costs. Difficulties would

arise for the company, nonetheless, many of their innovations would forever change the industry (Rodengen).

In the 1960s, when IBP began, demand for beef was growing and this fueled both new and old meat packing facilities. Between 1960 and 1965, the average consumption of meat for an American rose fourteen pounds from 161 to 175 lbs (Rodengen 47). Both the new and the old firms competed to produce hanging carcasses that would be hauled to meat middlemen who would break down the carcasses into several cuts of beef. In this process, twenty percent of the carcass was waste requiring disposal. After several years of operation, IBP's founders developed a major innovation in processing. Desiring to eliminate waste in production, Anderson and Holman decided to break down the carcasses at the plant. This would allow for more profits to be made by cutting down on costs such as transportation, and by transforming the byproducts of carcasses into profitable material (Rodengen 52).

Utilizing all the parts of a cow continues today in meat processing facilities. In the 1970s, boxing beef made IBP a successful company. According to Dave Stephens, the controller at the meat packing plant in Emporia now owned and operated by Tyson Foods, they use everything "but the moo" (Stephens). Plasma from the blood is sold to pharmaceutical companies, the hooves are used by Colgate for toothpaste, and the fat goes to Crisco. The "boxed beef" concept of breaking down carcasses at the plant was, however, new in the 1960s, and went into production on February 18, 1967 (Rodengen 54). After a year of experience with the new product, the boxed beef program called Cattle-Pak was formally unveiled in April of 1968. The success of Cattle-Pak would motivate IBP to change its name from Iowa Beef Packers to Iowa Beef Processors on February 20, 1970 (Rodengen 67). Only five years after

unveiling the Cattle-Pak program in 1973, IBP ranked 127 on the Fortune 500 list (Rodengen 79).

Around the time IBP started its Cattle-Pak program, it decided to make an investment in an old meat packing plant in Emporia, Kansas. In 1964, Armour Packing Company opened a meat packing plant in Emporia on 31 acres located at Hwy 50 and Prairie Street. The company built a new three level building employing 100 workers in the business of slaughtering cattle and then shipping the hanging carcasses to eastern cities ("Armour"). The future of Emporia industry at this time looked bright. Large feedlots had emerged where substantial numbers of cattle were primed for slaughter. The new Armour plant was located near the large feedlot of the Anderson Cattle Company. The work was unionized and the wages offered by the plant were high. Emporia city manager Steve Commons remembered that the plant offered "good jobs," and the community was excited with the opportunities the plant provided (Commons).

Two years later, the *Emporia Gazette* ran an article in appreciation of area businesses that provided insight into the business prospects of Emporia in the 1960s. The industrial growth of the city was praised with an article entitled "Manufacturing Key to Industrial Growth" (Sickle). This was a change from the 1940 city directory that claimed Emporia "lays no particular claim to being a manufacturing center" (Emporia City Directories, 1940). In the 1950s, the town lost some jobs with the Santa Fe railroad and began to struggle with its perception of Emporia's economic future. City officials began to offer incentives for businesses such as loans through income tax-exempt industrial revenue bonds. The son of William Allen White, William Lindsey White, had been the editor of the Gazette since his father's death in 1944. William Lindsey White opposed the bonds, and a debate ensued on whether or not financial incentives should be used to bring business to Emporia (Jernigan 259). The bonds would be approved; thus, the first

industrial park was created in Emporia in the 1960s, and it was located along Industrial Road on the west side of Emporia.

Many of the current and prospective businesses utilized the bonds; hence, in 1966, the future looked bright. Several manufacturing firms brought businesses to the city. These included Interstate Bakeries, Armour Packing Company, Aeroglide, Hopkins Corporation, Crawford Corporation, Didde-Glaser, and Becker and Sons ("Industry"). The practice of offering financial incentives for industries to come to the area still occurs today in Emporia (Commons). Back in the 1960s, the future looked even brighter when a shopping mall was approved for construction despite some protests on its effects on downtown Emporia (Jernigan 262).

Unfortunately, the Armour Packing Company was not successful, and it shut down in 1967 only three years after opening; however, this opened the door for IBP, and with the securing of an industrial revenue bond, IBP purchased the facility in 1968 (Jernigan 259). IBP constructed its plant in a different style than the old plants with a heavily automated production process utilizing the most modern and experimental equipment. It was reported that "plans for the plant are so vast that it will not be ready for slaughtering cattle before August 1968" ("Slaughter"). Taking even longer, it took nearly 19 months for the plant to be remodeled in the IBP fashion, and in May of 1969, it opened. Residents of Emporia hoped that the plant would be "a big boost to the Emporia area economy" ("Slaughter"). The original plant was projected to eventually employ 700 to 800 workers eventually ("IBP"). Today the plant employs 2500 people (Stephens). When the plant opened in 1969, work was still continuing on a Cattle-Pak division of the building. From the earliest stages of the Emporia plant's operation, it would play a key processing role in IBP's production of boxed beef, which, at the time, had been going on for barely a year.

Boxed beef would allow IBP many cost advantages within the industry, increasing profits for the company, and thus inducing other meat-packing firms to adopt similar strategies. Marketing materials of IBP for boxed beef listed advantages of the programs cited by Rodengen in "The Legend of IBP." These included "the elimination of carcass shrinkage, minimal contamination, fresher product inventory, less storage space...no more rail deliveries... and finally, 'the opportunity to be a leader, rather than a follower,'" (Rodengen 55). IBP's vice president for customer development, Lewis G. Jacobs, was quoted in the *National Provisioner* on May 4, 1968, as saying "the store receives a product on which much of the work already has been done, and one that will not vary in quality or uniformity from shipment to shipment" ("IBP's"). Customers did not immediately adapt to boxed beef and butchers still broke down carcasses for customers. However, it is rare today to find a successful "meat middleman." As evidence of the disappearance of the meat middleman and the streamlining of the meat production process, the site of a major butcher in Emporia in 1898 was John Henning at his butcher shop at 614 Commercial Street in Emporia (Emporia City Directories, 1898). At the time of this paper, it is the home of the Commercial Street Diner.

Though the shift from hanging carcasses to boxed beef was a major change in the meat-packing industry, other factors of the industry remain the same. Though the production process has become highly automated, it still requires human work due to the size and complexity of cattle. The industry is labor-intensive and unskilled (Melton). It is worth mentioning here that classifying the labor required in this industry as unskilled should not put the false impression into one's mind of the type of worker required in the industry. The automation of the industry requires repetitious movements, long hours, and grueling working conditions that call for a highly intensive work ethic. In the 1980s, the industry had a higher illness and injury rate among

workers than any other American industry with the average being "three times greater than the overall manufacturing average" (Stull 63).

Regardless of the worker risk, by the 1980s, the success of IBP and its strategies was evident and set the pace for other firms in the industry. In 1979, the company was reported to perform 14.5 percent of all cattle slaughtering in the United States. Major tenets of IBP success were the "location of plants near farmers and feeders" and selling boxed beef which significantly cut costs, leading some to say "what we really need in this country is some more IBP's" (Mellinger). Many firms in the meat packing industry adopted similar strategies, and the key to success today in the meat processing industry relies upon cutting costs. IBP was able to achieve major cost savings with Cattle-Pak and also by increasing the line speed of slaughter with more automation. The Emporia IBP plant was reported to have the capacity to slaughter 175 head of cattle per hour in 1969 ("IBP"). The plant controller of the plant in Emporia in 2005, reported a slaughter line speed of 250 cattle per hour (Stephens). In 36 years, that is a 43 percent increase in line speed at the Emporia plant.

Increasing the speed of slaughter and cutting costs became characteristic of all meat processing firms; yet, labor has been and continues to be the largest cost in beef packing industries (Melton 7). One motivation for moving plants from urban areas to rural places was the desire to cut labor costs through employing nonunion wage labor. Plants with unions, such as the Armour Packing Company, were driven out of the industry with the competition from lower labor cost plants, such as IBP, located in rural areas such as Denison, Iowa. It is challenging for unions to form in rural areas since the workers from one plant are not closely located to workers at other plants.

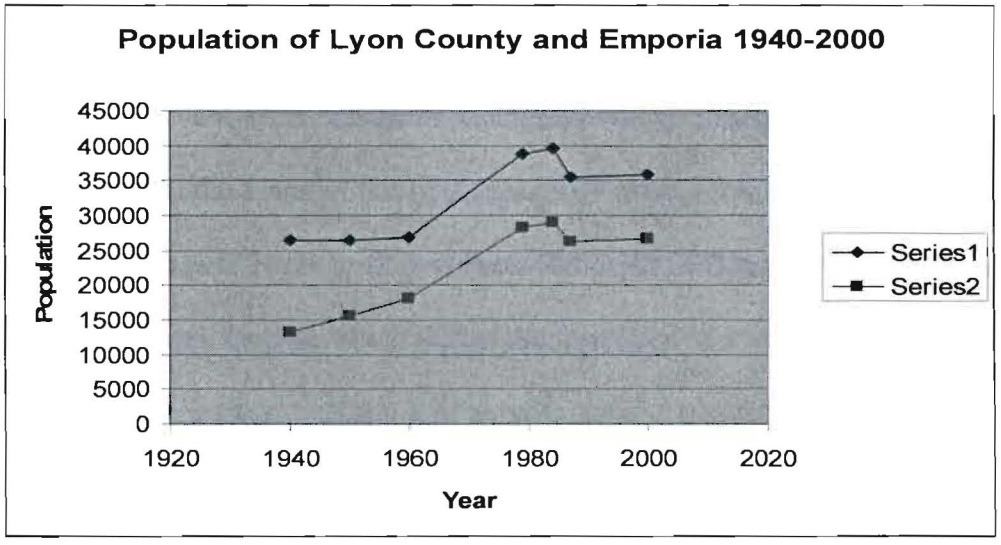
Consequently, with plants such as IBP moving to rural areas such as Emporia, union membership representation in the industry over the past forty years has greatly decreased. Unions focus on increasing wages and improving working conditions; yet, lack of unions may be among the American meat-processing industry's cost advantages and ensure its future. Across the period from 1963 to 1978, membership in unions for labor in meat products gradually declined. Yet, from 1978 to 1984, the rate of decrease nearly doubled. The rate continued this trend and by 1988, the rate of unionization among labor in meat products had declined 55 percent between 1963 and 1988 (Melton 7). Although some union practices aim to increase wage rates of union members in their industry, often they significantly raise costs and cause the unionized firm to suffer financially and eventually close. This trend has recently occurred in manufacturing industries such as the automobile industry. General Motors (GM) recently announced the cutting of 30,000 jobs in response to foreign competition ("GM"). GM incurs relatively high costs of labor with many of its workers being unionized. Food manufacturing industries have an advantage over other manufacturing industries in that food spoils, especially meat. Therefore, American jobs in the meat-processing industry may be relatively safe of foreign competition, and the absence of unions may help preserve these jobs.

Sustaining meat processing firms has become vitally important to towns such as Emporia. Across the years, many of the manufacturing firms in Emporia have closed. Didde-Glaser, which became Didde Corporation, suffered major losses with the development of new technologies in printing that diminished the demand for Emporia-manufactured Didde presses. Modine Manufacturing, which had manufactured heat transfer equipment such as radiators in Emporia, moved to Mexico to take advantage of low labor costs. Several of Emporia's significant businesses in 2006 came to the town in the 1960s and include Dolly Madison,

Hopkins Manufacturing, and IBP (which was acquired by Tyson in 2002). Today, the Tyson plant contributes 70 million dollars to the Emporia community in payroll alone. Many industries of Emporia such as EVCO food wholesaler, Modern Air Conditioning, trucking companies, and other service companies are reliant on the Tyson plant. Dave Stephens, plant controller, said that for every worker employed at Tyson, he/she directly affects five people in the community.

Hence, the Tyson plant across time has become embedded in Emporia's economic survival. The following table shows the population of Lyon County compared to the population of Emporia from 1940-2000.

Year	Lyon Co.	Emporia	Percentage Estimates of the Population of Emporia relative to Lyon County
2000	35935	26760	74%
1987	35480	26300	74%
1984	39500	29000	73%
1979	38852	28192	73%
1960	26928	18190	68%
1950	26576	15669	59%
1940	26424	13188	50%



As evident from the table, an increasing percentage of the total population of Lyon County resides in Emporia (United States. U.S. Census Bureau. Kansas; Emporia City Directories, 1940-2000). The above chart represents this relationship graphically. Clearly, both Lyon County and Emporia are following similar population growth patterns. It may be inferred that the future of Lyon County is increasingly becoming dependent on the future of Emporia. Using Stephens's projection that each employee at Tyson affects 5 people, assuming 2500 employed workers that equals the Tyson plant directly affecting approximately 12,500 people in the community, or 47% of the 2000 population of Emporia (United States. U.S. Census Bureau. "Census 2000).

Although the meat processing plant in Emporia has brought many jobs to the community and sustained its growth, due to the nature of the work and wages the impact on the standard of living in the community is not clear. An influx of low-wage workers have come into the community. In 2002, the meat packing industry had the highest reported incidence rate of nonfatal occupational illnesses among U.S. private sector (nonagricultural) industries (Hennessy 1). This may be attributed to increased line slaughter speed. Thus, the industry sees a high worker turnover rate; yet, rural areas often do not have high amounts of surplus labor. For example, the reported turnover rate at the Emporia meat-packing plant was 30 percent in 2005 (Stephens). To fill the void, recruiters from plants now will go find low-wage workers to bring into the community. At the Finney County, Kansas, IBP plant, recruiters ventured as far as Alabama, New Mexico, and Texas to find workers (Stull 30). Often the workers are minority workers who do not speak English which makes the formation of a union in these firms more unlikely. The minority workers perform jobs at meat packing plants that, as Senator John McCain said recently, "Americans won't do" (McCain). Throughout the history of the Emporia plant, Stephens said, "the minority has typically been the majority" (Stephens). Today, 80

percent of those employed at the plant are minorities. In 1990, 7.8 percent of the population of the town was of Hispanic/Latino origin (United States. U.S. Census Bureau. United States Census of Population and Housing. Detailed). In Emporia, 21.5 percent of the 2000 population of the town was Hispanic/Latino, almost twice that of the 12.5 percent of the United States 2000 population (United States. U.S. Census Bureau. "Census 2000").

Economic indicators may provide insight into the economic impacts of the industry over time on Lyon County regardless of their demographic impacts. From 1982 to 1992, real wages in the meat processing industry fell sharply to between 20-30 percent in both rural and urban areas (Drabenstott 79). Also the median household income from 1969-1989 for the United States showed a real percentage growth of 6.5 percent from 1979-1989, whereas Lyon County showed a 9.9 percent decrease in the same period (United States. U.S. Census Bureau. "Median"). Finally, the per capita income of Lyon County experienced a rise from 1959-1979, however, in the period of 1979-1989, the per capita real income fell from $11,661 to $11,251. In 1999, the per capita income of the nation was $21,587 while Emporia's per capita income was $15,157 (United States. U.S. Census Bureau. "Per Capita"). Also, the poverty level in Emporia was higher than that of the nation with 12.4 percent of the families in Emporia living under the poverty level while 9.2 percent of United States families live under the poverty level (United States. U.S. Census Bureau. "Census 2000"). These indicators illustrate a composite of Emporia's economic conditions are not commensurate with the nation. With a relatively large portion of the community's population affected by the payroll of the meat-processing plant, there is a mixture of economic ramifications. In some ways, the community is fortunate to have these jobs. However, the meat packing processing industry causes an influx of low wage workers. The effects of low wage workers are questionable when focusing on economic growth. Growth

and development is indicative of rising per capita incomes. Yet, the migration of new workers to meat processing jobs rather than unemployed workers on the community filling these jobs causes a reduction in the value of per capita indicators. Thus, with approximately 47 percent of the population affected by the payroll of the meat-processing plant in Emporia, it seems that while the plant sustains the city, the nature of the sustainability may be called into question.

Moreover, as Emporia was becomingly increasingly dependent on the meat processing plant from 1960-2000 with the decline of its other manufacturing industries, the industry was becoming increasingly concentrated. This has raised fears that increased market power may lead to adverse effects, such as lower prices for cattle and higher prices for the processed meat. In 1994, the top four packers in the industry had a combined market share of 82 percent (Paul "Market"). The Herfindahl-Hirschmann index measures the degree of concentration within an industry by summing the squares of shares of each firm within an industry. Indices below 1000 have no concentration whereas those between 1000 and 1800 are moderately concentrated. Industries with a HHI of above 1800 are highly concentrated. In 1998, Federal Reserve economists measure the HHI for the meat processing industry to be 1986, which is well into the highly concentrated range (Barkema).

The high concentration within the industry may be attributed to changes in consumer demand and production processes. The retail food industry has been transformed in many ways with consumers demanding pre-cooked foods. This is potentially a result of demographic changes such as more dual income households. Approximately 40 percent of the consumer dollar is spent on "dining out" thus creating competition for food retailers from service industries and mass merchandisers. Mass merchandisers are able to purchase directly from the manufacturer (Barkema). In 2002, IBP was the number one producer of pork and beef in

American. In 1936, John Tyson began a commercial chicken feed business. Nearly thirty years later, Tyson Foods went public, and in 2002, Tyson Foods was the number one producer of chicken ("History Timeline"). Since the meat processing industry is facing challenges in demand, it is cutting costs on the supply side. Tyson purchased IBP in 2002 in order to offer to retailers an entire line of protein at a cheaper price than purchasing chicken, pork, and beef separately. The gamble has paid off and Tyson Foods today is ahead in paying off loans made to purchase IBP. Tyson services major U.S. chains such as Wal-Mart, Pizza Hut, and Taco Bell (Stephens).

Even with the large size of modern processing firms such as Tyson Foods, small profit margins exist resulting in increased emphasis on technology to discover even more methods of cutting costs on the production line. The profit margins were reported to be less than 3 percent per cow slaughtered at the Tyson plant in Emporia (Stephens). Thus, methods of cutting costs have driven the expansion of plants to take advantage of economies of scope and economies of scale to increase efficiency within production processes (Paul, "Cost"). Therefore, market power over suppliers does not seem to drive consolidation of the meat-packing industry while increasing efficiency does drive consolidation (Paul "Market"). Stephens reported that the field of ergonomics has been used by the company to develop worker-friendly environments at plants to lower the turnover rate and increase production (Stephens). Ergonomics involves creating friendly workplace environments, and has been called "human engineering" ("Plant").

Thus, with high concentration of firms within the industry, one wonders where the future of the meat-packing industry and, thus, Emporia lies. Even with the great size of Tyson, it still receives competition from specialty foods, and other major processors such as Excel and ConAgra (Stephens). Some argue that the lack of huge profit margins in the industry is

indicative of effective competition suggesting that the industry may be close to equilibrium and consolidation will slow (Paul "Market"). They see that the ability to take further advantages of cost cutting is minimal for the future (Paul "Cost"). With high levels of capital invested in some plants in rural areas, it appears that the move of the industry from urban areas to rural areas is not temporary. The Emporia plant recently underwent an expansion in 2003 that nearly doubled the size of the plant. New jobs within the industry are likely to be found in large plants whereas smaller plants are losing jobs, so this could be a positive sign for the future of the plant in Emporia (Drabenstott 74).

The future of the meat processing industry will continue to be driven by cost cutting methods and adapting to changes in demand. Tyson has recently began a protein promotion campaign with slogans such as "Have you had your Tyson today?" The company is also investing in pre-cooked meals to adjust to consumer preferences as well as ergonomically developed production processes. In some ways, Emporia's future is linked with Tyson's. The agricultural environment on which it has as its foundation has moved to greater specialization. As the number of farms decreases and the size of farms increases, the rural farmer who Emporia once sustained has disappeared. The new larger agricultural processing firms such as Tyson Foods are a more dominating presence as communities have not grown as rapidly as the firm or industry. Unfortunately, these changes are not always stable: Tyson has recently closed a beef slaughtering plant in West Point, Nebraska and a beef processing plant in Norfolk, Nebraska. In an eerie similarity to Emporia, Tyson acquired the plant from its acquisition of IBP, and IBP purchased the plant in West Point in 1967, from the same company that it purchased its Emporia plant - Armour and Company ("Tyson").

Assuming the industry stays in Emporia, the Emporia community is likely to find simultaneous positive and negative effects of being specialized in meat packing. Drabenstott recommends that communities such as Emporia understand the environmental and economic impacts of the industry on a community, forge new partnerships between the community and the industry, and target areas of meat production where wages are highest. It seems true that communities such as Emporia must "weigh the costs and benefits of tying their economic future to the meat industry" (Drabenstott 81). However, in places such as Emporia, few choices seem to exist.

Conclusion

The evolution of the meat processing industry and Emporia, Kansas, requires an exploration into the separate histories of the two entities, and then delving into the intricacies of their metaphorical marital-like relationship. Emporia has a disproportionately large emphasis on the industry, and new capital investments seem to point to the industry's reliance on its Emporia plant. The location of Emporia, its infrastructure, and its agricultural base made it attractive to certain industries and investors. Nonetheless, if changes within the industry occur in the long run, leading away from Emporia, then the meat processing industry may move away from the area. Though the economic nourishment aspects the plant provides are subject to question, there is no doubt about the adverse economic impact of closing such an important entity in the community.

The story of the relationship and speculation on the future of Emporia and the meat processing industry is important. Perhaps, the Emporia community's most frequently heard complaint relative to Tyson, the odor from the plant given off when the blood of cattle is boiled, serves as a reminder of its presence. It requires one to remember what sustains the modern rural community and to consider the potential debate about the costs of the plant relative to its benefits. However, knowledge of the past and present of both the industry and the community are helpful in anticipating the future; this level of understanding may can stimulate creative wisdom and illuminate options that may not otherwise exist without an understanding of the past and vision of the future.

Works Cited

"Armour Buys Lyon County Livestock for Processing." *The Emporia Gazette.* 21 April 1966.

Arnould, Richard J. "Changing Patterns of Concentration in American Meat Packing, 1880-1963." *Business History Review.* 45.1 (Spring 1971): 18-34.

Barkema, Alan, Mark Drabenstott, Nancy Novack. "The New U.S. Meat Industry." *Federal Reserve Bank of Kansas City Economic Review.* (Second Quarter 2001) <http://www.findarticles.com/p/articles/mi_qa3699/is_200104/ai_n8944032>.

Brozen, Yale. "The Attack on Concentration." *The Freemen: Ideas on Liberty.* (January 1998). < http://209.217.49.168/vnews.php?nid=204>.

Commons, Steve. Personal Interview. 13 October 2005.

Drabenstott, Mark, Mark Henry, and Kristin Mitchell. "Where Have all the Packing Plants Gone? The New Meat Geography in Rural America." *Federal Reserve Bank of Kansas City Economic Review.* 84.3 (Third Quarter, 1999): 65-82.

Emporia City Directories. Lyon County Historical Archives. (published for 1870, 1877, 1887, 1885, 1898, 1921, 1930, 1940, 1960, 1970, 1980).

Fink, Deborah. *Cutting Into the Meatpacking Line: Workers and Change in the Rural Midwest.* Chapel Hill: The University of North Carolina Press, 1998.

Ford, Henry. *My Life and Work.* New York: Arno Press, 1973 [c1922].

"GM to Shed 30,000 Jobs, Offer Union Buyouts." NPR.org. 23 March 2006. 25 March 2006 <http://www.npr.org/templates/story/story.php?storyId=5297305>.

Hemstreet, Earl. "Emporia's Strategic Location Helps Attract Industrial Prospects." *The Emporia Gazette* 21 April 1966.

Hennessy, David A. "Slaughterhouse Rules: Animal Uniformity and Regulating for Food Safety in Meat Packing." *American Journal of Agricultural Economics* 87.3 (August 2005): 600-609.

"History of Emporia: A Strong Beginning." *emporiakschamber.org*. Lawton Printing Inc. Emporia Area Chamber of Commerce and Convention & Visitors Bureau. 16 February 2006 <http://www.emporiakschamber.org/custom2.asp?pageid=887>.

"History Timeline." *tyson.com.* 2006. Tyson Foods. 24 March 2006 <http://www.tyson.com/FoodService/AboutTyson/History/Timeline.aspx>.

"The Homestead Act." Homestead National Monument of America. 28 January 2006. < http://www.nps.gov/home/homestead_act.html>.

"IBP Plant Finally is Ready." *The Emporia Gazette.* 13 May 1969.

"IBP's Brand New Merchandising Plan," *The National Provisioner*, May 4, 1968.

"Industry Boosts Area Economy." *The Emporia Gazette.* 21 April 1966.

Jernigan, E. Jay. *William Lindsay White, 1900-1973: In the Shadow of His Father.* Norman, Oklahoma: University of Oklahoma Press, 1997.

"Made in Chicago: The Refrigerated Railcar." PBS.org. 1999-2003. 25 March 2006 <http://www.pbs.org/wgbh/amex/chicago/sfeature/sf_made_06.html>.

McCain, John. Question and Answer Session. Rainy Day Books - book signing. Uptown Theater, Kansas City, Missouri. 16 December 2005.

Mellinger, Gwyneth. "IBP Annual Meeting Is [cut off]." *The Emporia Gazette* 31 March 1980.

Melton, Bryan E., Wallace E Huffman. "Beef and Pork Packing Costs and Input Demands: Effects of Unionization and Technology." *American Journal of Agricultural Economics* 77.3 (August 1995): 471-85.

Mishkin, Frederic S. *The Economics of Money, Banking, and Financial Markets* 7th Ed update. New York: Columbia University, 2006.

Paul, Catherine J. Morrison. "Cost Economies and Market Power: The Case of the U.S. Meat Packing Industry." *The Review of Economics and Statistics*." 83.3 (August 2001): 531-540.

Paul, Catherine J. Morrison. "Market and Cost Structure in the U.S. Beef Packing Industry: A Plant-Level Analysis." *American Journal of Agricultural Economics* 83.1 (Feb 2001): 64-76.

"Plant Profile: Human Engineering." Nationalprovisioner.com. 2006. 26 March 2006 <http://www.nationalprovisioner.com/content.php?s=NP/2005/09&p=8&sc=6>.

Rifkin, Jeremy. *Beyond Beef: The Rise and Fall of the Cattle Culture*. New York: Dutton, 1992.

Rodengen, Jeffrey L. *The Legend of IBP*. Fort Lauderdale, Florida; Write Stuff Enterprises, 1998.

Schlosser, Eric. *Fast Food Nation: The Dark Side of the All-American Meal*. Boston: Houghton Mifflin, 2001.

Sickle, Terry Van. "Manufacturing Key to Industrial Growth." *The Emporia Gazette*. 21 April 1966.

Simpson, James R. and Donald E. Farris. *The World's Beef Business*. Ames, Iowa: Iowa State University Press, 1982.

Sinclair, Upton. *The Jungle*. New York: The Viking Press, 1976.

"Slaughter Plant Operations to Be Vastly Expanded." *The Emporia Gazette*. 20 Jan 1968.

Stephens, Dave. Personal Interview. 21 December 2005.

Stull, Donald D., Michael J. Broadway, and David Griffith, ed. *Any Way You Cut It: Meat*

Processing and Small Town America. Lawrence, Kansas: University of Kansas Press, 1995.

"Tyson Plant Closings Take 1,665 Jobs From Norfolk, West Point." Nebraska StatePaper.com. 15 February 2006. 25 March 2006 <http://nebraska.statepaper.com/vnews/display.v/ART/2006/02/15/43f35f8cd2d65>.

United States. U.S. Census Bureau. "Census 2000 Demographic Profile Highlights: Emporia, Kansas." 2006. 1 March 2006 <http://factfinder.census.gov/servlet/SAFFFacts?_event=ChangeGeoContext&geo_id=16000US2021275&_geoContext=&_street=&_county=emporia&_cityTown=emporia&_state=&_zip=&_lang=en&_sse=on&ActiveGeoDiv=&_useEV=&pctxt=fph&pgsl=010&_submenuId=factsheet_1&ds_name=DEC_2000_SAFF&_ci_nbr=null&qr_name=null&reg=null%3Anull&_keyword=&_industry=>.

United States. U.S. Census Bureau. United States Census of Population and Housing. Detailed Data, Emporia city, Kansas, 1990. 24 April 2006 <http://factfinder.census.gov/servlet/DTTable?_bm=y&-context=dt&-ds_name=DEC_1990_STF1_&-mt_name=DEC_1990_STF1_P001&-mt_name=DEC_1990_STF1_P007&-mt_name=DEC_1990_STF1_P008&-mt_name=DEC_1990_STF1_P009&-mt_name=DEC_1990_STF1_P010&-CONTEXT=dt&-tree_id=100&-all_geo_types=N&-geo_id=16000US200840&-search_results=16000US200840&-format=&-_lang=en>.

United States. U.S. Census Bureau. "Median Household Income by County: 1969, 1979, and 1989." 13 May 2004. 1 March 2006 <http://www.census.gov/hhes/income/histinc/county/county4.html>.

United States. U.S. Census Bureau. "Per Capita Income by County: 1959, 1969, 1979, and 1989." 13 May 2004. 1 March 2006 <http://www.census.gov/hhes/income/histinc/county/county3.html>.

United States. U.S. Census Bureau. "Kansas: Population of Counties by Decennial Census: 1900 to 1990." 27 March 1995. 7 March 2006 <http://www.census.gov/population/cencounts/ks190090.txt>.

United States. U.S. Census Bureau. United States Census of Population and Housing. "Kansas: Manufacturing Establishments." July 2004. 12 January, 2006 <http://fisher.lib.virginia.edu/collections/stats/histcensus/php/newlong3.php>.

United States. U.S. Census Bureau. United States Census of Population and Housing. "Kansas: Total Farms." July 2004. 12 January, 2006 <http://fisher.lib.virginia.edu/collections/stats/histcensus/php/newlong3.php>.

United States. U.S. Census Bureau. United States Census of Population and Housing. "Kansas: Total Population." July 2004. 12 January, 2006 <http://fisher.lib.virginia.edu/collections/stats/histcensus/php/newlong3.php>.

United States. Federal Trade Commission. *Report on the Meat Packing Industry*. Washington D.C.: U.S. Government Printing Office, 1919.