FARMING WITHOUT FARMERS: DESKILLING IN CONTRACT BROILER FARMING

by

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A DISSERTATION

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DISSERTATION ABSTRACT

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Social scientists and food studies scholars have shown an enduring interest in how food is produced in our largely industrialized food system. However, there has been little research about the organization of labor on industrialized farms. These sites of production are mostly privately owned and hidden away from researchers and journalists, who are often perceived as critics or activists by farmers and other agriculturalists. My dissertation fills this gap by focusing exclusively on industrialized contract broiler farms. Contract broiler farming is a model where farmers agree to raise chickens for meat for a set amount of time, at a rate of pay based on the ratio of feed to chicken weight at slaughter. Farmers invest in the built infrastructure to execute this process, but the company they contract for is mostly in control of the upstream and downstream supply and processing chains that depend on the production of the broiler chicken for their continued functioning.

I use archival, interview, and ethnographic data to detail the history of broiler farming, the emergence of contracting, and what the experience of it is like today. The most significant and novel part of this project is my ethnographic data collected over six months spent working on two broiler farms contracted with one of the largest firms in the US. To date, no other researchers have been able to gain this level of access.

iii

In this dissertation, I begin by explore the role of management, detailing how the structure of the farming contract and ambiguous supervisory oversight facilitates farmer's compliance with company demands. Then, utilizing agricultural and labor scholarship on deskilling in the labor process, I explore how poultry farming has become deskilled, robbing farmers of autonomy, the opportunity to agitate for better labor conditions, and ultimately eroding the intimate knowledge necessary to execute successful animal husbandry. Finally, I explore the games farmers play at work. While these games obscure how surplus value is appropriated from the farmer by the contracting firm, they also demonstrate farmer's resistance and acquiescence to their deskilling and loss of autonomy.

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Coltrane, Scott, Elizabeth Miller, Tracy DeHahan, and Lauren Stewart. 2013. "Fathers and the Flexibility Stigma" *Journal of Social Issues*. 69(2): 279-302.

Fitzpatrick, Kevin M., Bettina Piko, and Elizabeth Miller. 2008. "Suicide Ideation and Attempts Among Low-Income, African-American Adolescents." *Suicide and Life-Threatening Behavior*. 38(5): 552-563.

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TABLE OF CONTENTS

| Chapter | Page |
|--|------|
| I. INTRODUCTION | . 1 |
| The Early Stages of the Research | . 4 |
| Finding the Method and the Field Site. | . 6 |
| Archival Data Collection | . 12 |
| General Project Significance | . 13 |
| Project Organization and Research Questions | . 13 |
| Pertinent Literature and Project Significance | . 19 |
| The End of the Beginning | . 23 |
| II. HISTORY AND BACKGROUND | . 25 |
| Varied Uses of Chicken Throughout History | . 25 |
| The Roots of Chicken Husbandry and the Emergence of the Expert | . 26 |
| Technology, Industrial Logic, and Agricultural Change | . 30 |
| Rationalization, Modernization, and the End of Tradition | . 33 |
| The Infancy of the Broiler Commodity Chain | . 36 |
| The Contract Farming Arrangement | . 38 |
| Food Commodity Chains and Neoliberalism | . 44 |
| Reasons to Farm and Larger Implications | . 48 |

| Ch | apter | Page |
|------|---|------|
| III. | RESEARCH METHODS | 52 |
| | Topical and Methodological Survey of the Literature | 53 |
| | Research Plan | 55 |
| | Data Creation and Analysis | 57 |
| | The Research Site: Access and Details | 62 |
| | The Field Site | 64 |
| | The Prep | 66 |
| | Chick Arrival | 73 |
| | Raising Chicks | 76 |
| | The Catch | 80 |
| | Clerical Work | 83 |
| | The Pathway of the Chicken | 86 |
| | Flows On, Off, and Around the Farm | 88 |
| | Ethnography, the Body, and Data Collection | 89 |
| | Reflections on a Method | 100 |
| | Methodological Limitations | 102 |
| IV. | MANAGEMENT | 104 |
| | The History and Function of Contracting | 105 |
| | Comparing Contracts Across Time. | 107 |
| | Contracting and Outsourcing | 113 |
| | Big Bird Chicken Organizational Structure | 117 |
| | The "Producer" and the Service Representative | 118 |

| Chapter | Page |
|---|------|
| Contracting and the Control of Farmer Labor | 122 |
| V. DESKILLING AND THE WORK OF CHICKEN FARMING | 130 |
| Caught in the Middle | 130 |
| Stereotypes of Farmer Skill | 135 |
| The Broiler Farmer's Class Position | 138 |
| The Labor Process: Degraded and Deskilled | 142 |
| Agricultural Deskilling | 143 |
| The Deskilling of Broiler Farming | 151 |
| Consequences of Deskilling | 165 |
| VI. CONSENT TO DESKILLING AND WORKPLACE GAMES | 168 |
| Consent in the Labor Process | 168 |
| Daily and Long Term Games | 172 |
| BBC's Attempt at Game Creation: Long Term Games | 180 |
| The Meta Game: Working Hard Vs Taking It Easy | 182 |
| Discussion | 185 |
| VII. CONCLUSION | 186 |
| DEEEDENCES CITED | 104 |

CHAPTER I

INTRODUCTION

"Chickens are good to think with." – Susan Merrill Squier (2012: 4)

As a child I always wondered why my parents went to work instead of farming our land. Our home in Hickory, North Carolina set on a former soybean field cultivated by my great-grandparents. To the south and east of my childhood home were open fields, and in the other directions were untamed forests of the Appalachian foothills, intersected with trails where I could sometimes find deer tracks after a fresh snow. There was an abandoned barn used by my great-grandparents with a rotting tractor inside, the first one purchased in our county. Across the eastern field was my grandparent's house, which is where during my childhood you could most often find me.

My paternal grandparents, Kate and Dermott, both had careers outside the home and they each owned successful businesses. For women like my grandmother, born during the Great Depression, this was a rarity. Much of my grandparent's leisure time, however, was spent tending to their property and their gardens. I can remember turning the corner onto our road seeing them bouncing up and down on the Bush Hog tractor, making sure those open fields were always immaculately mowed. Prior to my birth, Dermott kept a small herd of cattle, no more than 5, who kept the fields down by eating the grass. These cows were considered pets by the family, and were never eaten or sold at auction.

Kate kept a legendary garden and would let me select a few crops of my own each year to tend to in her patch. We grew gourds, watermelons, tomatoes, new potatoes, green beans, and okra, to name a few. She also had peach, cherry, and persimmon trees.

If you didn't pick the cherries the morning they reached peak ripeness, the birds would demolish the crop by that afternoon. I always hated those crows. I can still taste her fresh stewed tomatoes, her peach cobbler, and the memory of summer eating her home-canned green beans in the middle of winter. She and I would can produce all summer on her porch using an old-fashioned pressure cooker, going to the fair grounds to stock up on additional produce that we didn't grow ourselves. She used the same Ball cans every year, and as we emptied them through the other seasons we'd wash them and then stack them upside down on the shelves in the basement, with one side of the shelf occupied by food-filled jars, and the other side with empties anticipating the arrival of summer once again.

Across the field, at my own house, food was quite a different matter, although I only came to this realization in hindsight. We had an 8-foot-wide pantry with double accordion doors and 5 shelves, stuffed to the brim with shelf-stable processed food. The entire top shelf was devoted to cereal. My mother once told me that she found my father standing in front of the pantry, silent and transfixed. She came up behind him, and he said he was simply amazed to see so much snack food in one place, as he'd never had any of these items in his home growing up. The only processed food I can ever recall seeing in his mother's Kate's house was Shredded Wheat, saltine crackers, and vanilla ice cream, so I can understand my dad's reaction to such largesse.

The most frequent main course in the Miller household was oven-baked marinated chicken breast strips, which my mother bought from the very corporation I study in this research project. These were brined raw strips of white breast meat chicken, sliced into pieces about one-inch wide, sold in multi-pound frozen bags with enough

chicken to make many meals for a hungry and busy family. We were like Bubba and his shrimp in Forrest Gump with that chicken: chicken parmesan, barbeque chicken, chicken in Italian dressing, and on and on. No one at my house had a garden, although everyone appreciated the produce that we were blessed with from across the field. With both parents working and with two small children enrolled in every college-enriching extracurricular under the sun my parents simply didn't have the time.

Once I began paying attention to the cost of food, the ongoing process of globalization, and the historical changes all around me it began to dawn on me that my parents and grandparents went to work every day because there was no money in farming. Our few meager acres of land would in no way support a family on soybeans, cattle, tomatoes, or any other crop or livestock that would be suited to our climate. My great-grandparents did it because they had to, and they worked hard so that their children, my grandparents, would have other options besides making a living on the land. For my grandparents, growing food from the soil was a leisure activity, a respite from their stressful work lives. They did it just as much to relax as they did for food provisioning. My young taste buds were grateful for their hobby selection.

At 18 I escaped Hickory for good to attend UNC-Chapel Hill. I intended to study genetics and perhaps go to medical school, but was promptly side-tracked by a first-year immersion seminar taught by a senior faculty member, Richard "Pete" Andrews, the preeminent historian of American environmental policy. As I learned each week of the evils of Nike, corporate food, non-regulated non-point source pollution, and my complicity in all of these problems I was intellectually stimulated as never before and vowed to take every single class with Pete that I possibly could. Medical school would have to wait.

At some point that first year of college I read in passing that the chickens in Arkansas, my mother's home state and a poultry production epicenter, generated seven times the amount of waste each year as the state's human inhabitants. I was shocked. Unlike human waste that is treated at wastewater processing plants, livestock waste remains untreated, spread on the soil where it often contaminates groundwater and nearby streams and rivers. Arkansas was being sued at that time by Oklahoma for the latter's failure to meet EPA water quality standards. Oklahoma believed that rampant chicken manure spread on the fields of western Arkansas was polluting the Illinois River as it flowed westward into their state. I explored this case in one of Pete's research seminars that next year, and my interest in the poultry industry in Arkansas has endured ever since.

Broiler farming intrigued me. By this point chicken had been, for quite some time, the most consumed meat in the United States. I saw photos and videos of large-scale broiler farms and struggled to make sense of it. How did we get to this point? I wondered how people could do this work when it was so disgusting, so bad for people, animals, and the planet. Was it as bad as they say it is? How did farmers make sense of this whole thing when so many outside observers quickly came to the conclusion that it didn't make any sense at all?

The Early Stages of the Research:

No one in my family is a broiler farmer. I never knew anyone who did this work as I was growing up. A distant cousin grows turkey pullets in the Arkansas River Valley, and one summer during college he allowed me to visit his farm and see the male toms for myself. The sex-segregated, sexually frustrated 50 pound birds crowded me as soon as I walked into their confinement shed, hissing and squawking because, as I later found out,

they were hungry and tired of being in the dark. Needless to say, they didn't make a good first impression! My cousin was generous enough to let me field test an early interview protocol with him for this research project, but in practice conflating turkeys and broilers is like thinking apples and oranges are the same thing. For starters, there are only a few turkey producing firms as demand for this meat is much lower and more seasonally based in the US around Thanksgiving. Also, turkeys are raised to be much larger than the largest broiler chickens: turkeys can be raised up to 50 pounds while the largest broilers are typically below 10 pounds. Because turkeys are raised to be much larger, and thus are on a grow out farm for a longer period of time, they are more vulnerable to disease as they get older. Thus, the relations between a turkey contract farmer and their integrating company are usually more cordial and collaborative. For these reasons, my cousin could help me, but only to a point.

Over the summer from 2011 to 2013, as a graduate student I came to Arkansas and attempted to conduct interviews with broiler farmers, collect statistical and archival data, and generally find a way to create a dissertation project around the topic of broiler farming. Farmers I would approach to interview though shared social networks were skeptical at best and openly hostile at worst. Despite having family ties in their communities and the region, assuring them of complete confidentiality, and possessing education credentials from the University of Arkansas, the state's well-respected only NCAA Division 1 Research 1 University, I was usually perceived as a threatening outsider, my motives questioned, and access swiftly denied. I was hitting a metaphorical brick wall.

At the same time as farmer after farmer was rejecting me, I was also hitting an intellectual brick wall. The methods I was attempting to use, statistical data analysis using USDA Census of Agriculture data sets, qualitative interviews with farmers and other industry professionals, were not even getting close to answering the questions I had about the maintenance of the broiler industry on a day-to-day level. These methods could certainly generate interesting and novel findings, and I would have been more convenient use them since I was had more training on these techniques, but they were ultimately unsatisfying. To truly understand how farmers become accustomed to producing poultry at this scale and intensity, to know how they make sense of it, I would have to do it with them, and so I shifted to ethnography. In doing so, I was going to attempt what no one else has yet accomplished: conducting an ethnography on a factory farm, overtly. Ethnography allowed me to capture, via the field work, the tacit knowledges that broiler farmers use in their work process that an interview could only barely begin to tease out. Furthermore, this method generated better data for understanding the actual interactions and relationships between the farmers, other workers on the contract farm, and their position in a broader web of production: the industrialized broiler commodity chain. *Finding the Method and the Field Site:*

I met Steve and Eric (pseudonyms) through some acquaintances, which I'll leave at that so as not to blow their cover with unnecessary specificity. Steve and Eric are a father and son, respectively, who at the time of this research ran a broiler and pullet contract farm in Arkansas along with their mid-size cattle operation and a few other small agricultural enterprises that didn't provide a significant part of their farm income. Their pullet and broiler operations were contracted with a company I call Big Bird Chicken,

one of the top 4 chicken producing companies in the United States. Steve and Eric are neighbors: their farmland and home lots are mostly adjoining. They own other plots of noncontiguous land that are in 3-mile radius from their homes, and they also rent land on a seasonal basis for cattle grazing. Steve and Eric both live with their wives; Eric and his wife Maggie don't have any children. Steve and Shelley have two adult children, one of whom is Eric, and while their children left the home many years ago, they treasure their weekends when their grandchildren would stay with them from Friday afternoon to Sunday evening. The main property where Steve and Eric's homes are located has been in their family for three generations. Steve's father was a row crop farmer before his passing, and he and Eric have lived their whole lives in their small community which I refer to as Sellerville. Both Steve and Eric's wives work outside the home. In the mornings before we began feeding pullets, Maggie and Shelley would sit around the kitchen bar, putting on their makeup and gossiping.

In the summer of 2012, Steve and Eric agreed to a joint interviewed, perhaps as an act of charity or just out of sheer amusement. I conducted my interview with the two of them around Steve's kitchen table, their 8 pullet houses visible from the kitchen window. That summer the Southeast US was facing an intense drought which was negatively impacting their broiler and cattle operations. The interview was uneventful, and that summer I'd only managed to conduct 2 interviews despite having contacted 12 farmers who initially expressed interest and then changed their minds. Recall the metaphorical brick wall. In 2013, I re-interviewed Eric to follow up and see how they had adapted after the drought.

In the fall of 2013 I made peace with the fact that the interview approach was a failure and I began to consider conducting an ethnography. I called Steve and pitched the idea of me working with him as a researcher on his farms, and he was immediately intrigued. I suggested that at first I spend a week with him and Eric in December, so that we could all see how it worked out and then go from there. Honestly I didn't even know if I could handle it, let alone if they could put up with me, so a week-long commitment was a way to test the waters and cut loose if need be without anyone getting hurt feelings. I was still a little bruised from all those farmer interview rejections, so if Eric and Steve needed to reject me too, at least I'd already be back at school once the verdict was in.

My first week on the farm exceeded everyone's expectations. I was enamored with farm life: feeding animals, driving trucks, eating rightfully earned greasy spoon diner food, enjoying the rural landscape and working with my body. Steve and Eric loved having me around because I was helpful in a practical sense, plus they didn't have to pay me, and I was a great conversationalist. Steve said he learned just as much from me as I did from him. We agreed to continue the project, so I went back to Oregon for winter and spring terms, rustled up some grant money, and returned to the field from July to December 2015.

Beyond what I describe above, there were other reasons why Steve and Eric were willing to give me access, most notably because of my disposition and their desire to have their story heard. First, I was prepared before my initial week on the farm. I did my homework, I knew the poultry industry inside and out, and I knew a lot about Arkansas history. I was knowledgeable about the current state of agricultural policy, the national and international broiler trade, other broiler firms besides the one Steve and Eric grew

for, and I even knew a few other farmers that Steve and Eric could compare themselves to. They could see from my extensive research that I respected their occupation and came into their workplace with both an informed and open mind.

Furthermore, my training as a social scientist and experience dealing with diverse populations equipped me with the interpersonal skills necessary to navigate this potentially fraught research project. Having grown up in the rural south I understood the culture of my field site and where Steve and Eric were coming from in a metaphorical sense. Coming into the project with the mindset that it was a collaboration between me, Eric, and Steve was helpful. Despite my educational credentials, I consciously constructed my experience on the farm as a novice, framing Steve and Eric as the experts in my own mind. However, Steve and Eric thought of it differently, as this excerpt from my field notes suggests:

"At one point, Steve remarked that I probably have more education than anyone who ever worked on the farm. I told him that life is a school, and he had more years than me, and he said "Yeah, I have more years, but you have more education". My educational status is of great curiosity to Eric and Steve, they asked me several times about what I study, what do I do at work, what do I want to do when I graduate, how much longer do I have in school, how long is the paper I have to write, how hard is it, and how long does it take me to write a paper?"

Steve and Eric's respect of education would prove important, and subsequent experiences in the field would demonstrate that a person's respect or contempt/skepticism for education would likely predict if my experience with them was positive or negative.

This surprised me initially, but then I reflected on the conflicts between contract farmers

and "experts" in the supply chain around the delegitimization of farmer's experiential and sensory knowledge, and the overall shift in expertise away from the farmer to higher-status workers off the farm. Therefore, it makes sense that some farmers are skeptical or hostile towards outsider academics. Scientific training and high-status educational credentials have been weaponized by "expert" actors in various occupational settings to construct farming and manual labor as unskilled and primitive (Vallas 2001, Fitzgerald 2003).

Steve and Eric also had a desire to have their story told, especially Steve since he's been in the business longer. Steve and Eric, at the time I conducted the ethnography in 2015, were being paid less than 6 cents per pound for their broiler chickens at slaughter. They grew a bird whose goal average was between 3 and 4 pounds, which meant their pay at an average flock weight was less than a quarter per chicken. Steve and Eric are no idiots. They both love to cook and they often do the grocery shopping for their families. They see what chicken costs at the store and they know their pay is a miniscule percentage of the retail and wholesale price. They are keenly aware that they are being exploited.

They also read in the paper about the multimillion dollar year-end bonuses their integrating company pays the top executives every year, and the million and billion-dollar business deals the company enters in to on a regular basis. Steve is friends with growers at other regional BBC branches who are paid more per pound for the exact same work. The company could easily afford to pay Steve and Eric more, and yet they don't. Furthermore, as I will detail in later chapters, contract growers are under constant pressure to upgrade their facilities for the benefit of the integrator, which maintains their

continued dependence on the company for the growout contract since these facilities are only useful for raising chickens and pullets. The debt load required to finance a growout operation, combined with a lack of alternative profitable uses for it generates an unequal power dynamic where the only alternative to financial exploitation is bankruptcy.

Growers have little to no leverage to individually advocate for better working conditions and pay increases despite personally financing the company's capacity to expand production through their investment in built infrastructure. Steve and Eric's frustration regarding these circumstances, coupled with their perception that farmers are stereotyped and misunderstood more generally, motivated them to participate in the ethnography.

In exchange for this access I promised Steve and Eric I would tell their story, although I was honest that I would consistently collect data every day, both the good and the bad. That I might see patterns they'd rather stay hidden, or perhaps notice things that could make them uncomfortable or embarrassed. Furthermore, I mentioned several times that they could ask me to leave or to not tag along for particular tasks, especially toward the beginning of the research, even though they had read and signed my IRB consent form before the project began. I was also mindful to make sure that everyone I came into contact with during the field work was aware of my status as a researcher and that any interaction we had could be a part of this project, but that they too could opt out.

Only twice during the field work was I asked to strike things from the record, once by Eric and once by Leroy, a hired worker on the broiler farm. In both instances I complied as bound to my IRB approval. Other than that, I was granted total access. Steve and Eric made space for me and were consistently welcoming and accommodating. They

patiently answered my questions and allowed me to write jottings during the workday without interruption, judgment, or suspicion.

Archival Data Collection:

My ethnographic data are not the only data source in this project. I also interviewed other broiler farmers who grew for a variety of integrating firms and a manager at a BBC company processing plant a few counties over from my research site, I collected archival data from a museum and university repository, and attended a state-wide yearly agricultural conference at the University of Arkansas. I was also introduced to a BBC branch manager from a different branch than Steve and Eric's. He arranged for a service rep to take me to visit one of his top growers, then took me out to lunch with his feed mill manager and a service representative, and brought me to the integrating firm's corporate headquarters in Chickenville to meet their head of HR. Being granted this kind of access was quite the surprise, but what was more shocking is when he suggested that I work for Big Bird Chicken in their grower relations department.

Finally, I interviewed the state's Broiler Extension Specialist at the University of Arkansas (UA), as well as a law school professor there who specializes in agricultural law and a history professor whose focus is Arkansas labor history. In addition to these folks, I also interviewed an emeritus poultry science professor from UA and a retired Forrest Service agent who is a noted local hobbyist environmental historian.

While this dissertation illuminates Eric and Steve's experiences as contract farmers, it also goes beyond that. In addition to the data I describe above, I also use a wide range of secondary sources to contextualize Steve and Eric's occupation more fully in its historical context, and interrogate it using sociological theory to make sense of not

only what is happening, but why, through the lens of the labor process, the broiler supply chain, and the power asymmetries that result from the organizational context of BBC.

General Project Significance:

Although this project focuses on one commodity in the industrial food system, it's actually about the contemporary industrial food system overall. Chicken was one of the first livestock sectors to become fully vertically and horizontally integrated, and the first with the majority of its output produced under contract. The contract model, which became fully formalized in broiler farming, has now spread to other livestock and crop sectors in both the United States and abroad. Contract farming has changed the way food is produced, processed, distributed, marketed, and consumed. It facilitated the increased volume of food produced while reducing the need for human labor, contributed to the widespread abandonment of agriculture as a livelihood strategy in the United States. As the volume of agricultural production has increased and become more spatially concentrated, the negative environmental externalities associated with it are also expanding their geographic reach and ecological severity, like rising concentrations of groundwater pollutants and increasing concentrations of atmospheric carbon dioxide. *Project Organization and Research Questions:*

In the first chapter of this dissertation, I use my historical data to piece together how various social, technological, and historical changes combined to create our food system, focusing on the broad background and history of broiler farming in the United States. Next is the methods chapter, which details how I conducted the ethnography and archival work. The following three empirical chapters mainly draw upon the ethnographic data. Chapter 3 focuses on the role of management in organizing the broiler

farming labor process. Next, in chapter 4, I analyze whether or not the various tasks associated with the different phases of the growout cycle are deskilling, and then in chapter 5 I tease out the games Steve and Eric play at work and the deeper theoretical function of game playing in the labor process and the organizational structure of the integrating firm. Finally, in my conclusion I briefly synthesize the major conclusions from the preceding chapters and think through the broader theoretical implications of this project. Overall, my data shed light on the experience of farming chickens today in a highly capitalized, competitive, mechanized, tightly controlled supply chain with the largest throughput of livestock animals for slaughter in human history. Steve and Eric's BBC branch slaughterhouse eviscerates chickens at a rate of 3.64 per *second*, 16 hours a day, 6 days a week. How does the organization of the labor process, combined with relationships in the supply chain so that Steve and Eric help make this happen?

The rapid transformation to an industrialized food chain, combined with the volume and speed in which a majority our food is produced today is what animated the development of my dissertation. Why and how did we get to this point? And how do farmers, other workers, and organizations in the broiler supply chain maintain it day-to-day? The farmer's experience in the commodity chain is my primary focus in this project. The changes in how farming was accomplished from the Neolithic revolution to today are so profound and vast, it's almost impossible to grasp. We have more control over the plants and animals we cultivate than ever before, in terms of genetics, growing conditions, feed quality and nutrient profile, pesticides, et cetera. This control is part the foundation for the industrialization of the food chain. Because of this, agriculture and food commodity chains can be organized using the factory model: using detail workers,

machinery and vast transportation networks which maximize efficiency and profits while driving down costs and labor demand (Fitzgerald 2003). However, the conveniences and comforts that result from the industrialization of the food chain also make us vulnerable as risk accumulates as we become further separated from our food sources.

This is an important case study because of the uniqueness of the occupation itself and the its historical significance for the transformation of the food system more generally. My ethnographic data allow me to interrogate what the practice of farming under contract is like embedded within a multinational food conglomerate. These once autonomous farmers now have very little power over their work. How did this state of affairs come about? How did farmers, who have a reputation for independence, concede to submitting to the control of major corporations? These are the research questions I will explore in the first chapter on the background and history of broiler farming, using both secondary historical sources and archival data.

Overall in this first chapter I argue that concentrated efforts to improve chicken husbandry for meat consumption laid the basis for its commercialization in the early twentieth century. Knowledge of best practices for chicken cultivation enabled expanded production and high prices for broilers in early twentieth century which steadily encouraged more entrants into the market. Eventually the market for broilers was destabilized by massive price swings, with prices dipping below production costs by the middle of the century. These price collapses, combined with new financing schemes created by hatcheries and feed dealers effectively forced small producers out of the broiler business who could not compete unless they entered into production contracts. As the number of farms shrank and flock sizes grew, these contracting and financing firms

became increasingly consolidated, increasing their production volume to achieve profit via volume instead of on price, resulting in a monopolistic chicken market in the US today which is dominated by just four firms.

In the subsequent empirical chapters, chapters 2-4, which focus on management, deskilling, and games played at work, respectively, I explore research questions about the contract broiler farming labor process using my ethnographic data, exploring larger questions like how the reorganization of the broiler supply chain, as it was brought under the control of major corporations, affected the labor process of broiler farming. Also, I will detail how the broiler commodity chain is managed by the various actors within it, who have varying levels of power and control. Given the inequality and significant risks that are associated with entering into a broiler contract, what keeps the remaining farmers in this business? And how do they contend with these ongoing changes and remain financially solvent?

Chapter 3 details how BBC is able to manage non-employee contract farmers with little direct supervision. How does BBC maximize farmer's labor and the use of their built infrastructure without a clear management-worker hierarchy? I will demonstrate that BBC successfully secures surplus value from and controls the farmer's labor process without direct management supervision via the asymmetric power relations embedded in the contract itself. The farmer's debt for the growout facilities, which can only be paid off by maintaining the production contract, combined with the implicit threat of the contract being revoked motivates them to work harder and police themselves more effectively than any manager ever could (Davis 1980).

The organizational actor that is the closest approximation of management on the farm is the service representative, who makes sporadic visits and has some broad disciplinary power based on their on-the-farm observations. These observations are formally reported to upper management via the completion of the "purple sheet, a form with blank fields for the rep to assess house conditions, maintenance, feeding schedule, and mortality, to name a few categories of evaluation. BBC doesn't clearly specify if farmers and service reps have differing levels of authority relative to one another. Although the reps formally observe and evaluate the contract farmer and their growout operations and function much like a manager, they do not have the ability to revoke a contract. According to one service rep, farmers were free to accept or disregard the rep's guidance, but a rep could flex their power over a farmer by giving them a bad report on the purple sheet. This ambiguity over authority serves to reroute conflict that reps and growers might have with higher ups in the branch and corporate office, to conflict between one another which distracts from confronting the larger and more intractable inequalities within the organizational hierarchy that maintain the powerlessness of both growers and reps.

In chapter 4 I detail how different aspects of the contract farming labor process are deskilled, skilled, and reskilled based on different variables such as the use of technology, autonomy, and whether or not the farmers are able to learn from their work. The overall research question I address in this chapter is: Is broiler farming deskilled? If so, why do contract farmers agree to do it? I demonstrate that parts of the labor process are deskilled, and the occupation exhibits deskilling tendencies overall as expertise is transferred from the farmer to higher-status specialist occupations within the supply

chain, particularly to private sector and university research scientists. Despite this erosion of the content of occupational expertise, I argue based on my ethnographic findings that contract broiler farmers consent to this deskilling because the job allows them to maintain a cherished rural, land based lifestyle. There is a sense that as business owners, the occupation of broiler farming begets some independence, plus a psychological wage for doing a physically difficult job that feeds the world. On a more micro level, the job has plenty of worthwhile upsides, like ample leisure time and the enjoyment of performing physical labor outdoors in perfect weather.

In my final empirical chapter, I explain how contract broilers farmers consent to deskilling. Using Burawoy's framework from "Manufacturing Consent", I examine the following question in Chapter 5: how do poultry corporations generate contract farmer's consent in the labor process? Furthermore, what are the mechanisms by which integrators present choices to contractees, and how do those choices of obscure the appropriation of surplus value from the farmer by the integrator under an industrialized system of agriculture, which is quite different from the traditional factory settings of labor process research?

In this consent to deskilling chapter, I detail the daily, long term, and meta games that contract farmers play at work and how these games obfuscate the true nature of the mode of production. First, playing these games creates a collective fiction that the contract labor relationship provides the farmer with some measure of control over their work, like the choices presented in the games. Second, these games also encourage individuals to cast themselves as superior relative to other farmers and workers, which creates barriers to the recognition of their shared oppression which comes from a

common source: powerlessness within the BBC organization. While the outcomes from the games coalesce to maintain the status quo, they are also usually experienced positively by those who play. A hegemonic idea in our culture that a "fun job" is a good thing: something to aspire to. However, Burawoy and other neo-Marxist theorists argue that enjoying work as a member of the working class, even if it seems like a victory over management for stealing back part of the workday, is actually just a trap. Instead of containing the seeds of revolutionary potential, it instead stabilizes the appropriation of surplus value from the workers who create it while leaving the legitimacy of the reserve army of labor unquestioned (Jonna and Foster 2016).

Pertinent Literature and Project Significance:

There is very little scholarship about contract broiler farming based on data collected from the farmers themselves. It is important for *some* scholarship on this topic to use data collected from actual contract broiler farmers directly. Who else would be a better source of data about this experience? USDA Census of Agriculture production volume measurements, Congressional testimonies and regulatory legislative records, and historical surveys of secondary sources like Cooperative Extension Records are some of the most frequently used data sources in the social science and humanities literatures on contract broiler farming. These are significant and detailed data sources that when properly assembled illuminate how and why chicken farming changed so rapidly in the twentieth century in different regions of the country. However, what is missing is empirical work that elucidates how these structural shifts are experienced by the very actors whose buy-in to contract farming is the linchpin of the whole productive system. Without contract farmer's significant investment of time and money, the broiler

commodity chain could not maintain its high level of throughput and profitability and we need to know more about how their decisions are made and enacted at the level of practice.

By my estimation, only Heffernan (1972) and Gisolfi (2017) utilize data collected directly from broiler farmers; Heffernan's scholarship is based on a quality of life survey in Missouri and repeated visits to a Louisiana parish in the 1960s and 70s. Gisolfi uses life history interviews, albeit sparingly in her monograph on the emergence of poultry agribusiness in Upland Georgia (2017). The paucity of research based on primary data collected from farmers themselves is no accidental oversight on the part of the scholars that have come before. Rather, it's most likely the result of the distrust many farmers likely have of both outsiders and university affiliates, plus their very real fear of having their contract revoked for speaking about their jobs or working conditions out of turn. Because these farmers are given contracts on a relatively short term basis (one to three years, at most), and many others have had their contracts revoked for all kinds of arbitrary reasons, their reticence to submit themselves to scientific scrutiny is not unwarranted.

In addition, if a BBC farmer knowingly or accidentally allows photos or videos to be taken on their farm that are used in a campaign to create negative publicity for the company or industry, like covertly filmed animal welfare videos, their contract can be revoked immediately. This is why generating a sample for my in-depth interviews was almost impossible. Had I been an Extension faculty or University of Arkansas poultry science professor I might have had better luck. However, if I had this type of position my research into contract broiler farmer labor conditions would most likely be heavily

discouraged since the University of Arkansas receives a significant amount of financial support from large poultry companies and their high-earning senior level staff.

Given the scant empirical work that relies on primary data collected from broiler farmer sources, my dissertation is a significant and unique contribution both to the contract broiler farming literature and the discipline of sociology, more generally. First, this project uses ethnographic data collected on an actual contract broiler farm, which no researchers have done to date (to my knowledge). Secondly, this data will elucidate what the labor process of contract broiler farming actually is like. This is a significant contribution both to the sociological literature on contracting and outsourcing and the sociology of agriculture literature, since this data speaks to the experience of contemporary farming at the organizational/environmental interface. Overall, we need to subject the various types of precarious labor arrangements that proliferating in our neoliberal, globalized society to academic scrutiny, so that we can better understand how these organizational processes deepen class antagonisms and what kinds of new opportunities to resist and building solidarity exist within them.

Additionally, the contract farming labor process is interesting for other reasons: first, to tease out how the contract arrangement is structured around and expressed through the day-to-day operations of farming, and second, to better understand what farm labor looks like when it's surrounded by an industrialized supply chain, whose proper functioning enables the massive throughput of a contemporary broiler operation. Third, this project is significant because my data provide an important link between scholarship about supplier and producer organizational arrangements, slaughter work, and the

political, economic, and social consequences of the industrialization of broiler farming.

The farm is an important piece of this puzzle.

This project is also a significant contribution to the literature on agricultural deskilling, which ought to receive more scholarly attention. As the deskilling of agriculture becomes even more widespread, which I hypothesize is highly likely, it will have a serious impact on our collective ability to maintain food sovereignty. Overall this literature has focused on how newer inputs and crops such as GMO corn, hybrid corn, and pesticides become agents of deskilling. Vandeman (1995) argues that some deskilling technologies could eventually result in agricultural reskilling as farmers' re-appropriate knowledge and processes formerly under the purview of their labor process. In addition to deskilling crops and inputs, other researchers have identified how newer ways of organizing the occupation are potentially deskilling, like the increased emphasis of the businessman-farmer identity in Midwestern agriculture at the expense of valuing ecological knowledge (Bell et all 2015). Overall this literature is focused more on teasing out how changes in various aspects of farming can devalue or restrict the farmer's ability to generate knowledge through their labor process which decreases the farmer's landbased, sensory knowledge, but these scholars don't subject their case studies to a more thorough analysis using labor process theories of deskilling that are couched in a Marxian understanding of class relations, although usually Braverman is briefly discussed. Therefore, this project is a significant and novel contribution to the agricultural deskilling literature since I bridge the gap between the deskilling literature in agricultural research and deskilling as a theoretical tool for understanding the organization of work more generally.

The End of the Beginning:

The broiler and pullet farms where I conducted this ethnography are unquestionably industrialized factory farms. Steve and Eric, at the time of my research, grew between 1.5 and 2 million chickens a year with their combined part-time labor and the labor of one full-time, live-in farm hand. That's three people who would be considered in a theoretical sense "farmers". Three people, who produce over 5 million pounds of meat per year, for pennies on the pound. No wonder meat consumption in the United States has skyrocketed in the last century!

Food has become cheaper, quicker, more widely available, and yet seemingly more dangerous and fraught with meaning than ever before. My grandmother's gardening and canning activities, which I described at the beginning of this chapter, come from a recent past where rural people were encouraged to "Work at Home" by the USDA, providing much of their family's diets with their own household production. The sudden shift to a dependence on mass-produced food, purchased with wage earnings is an enormous historical shift whose significance cannot be overstated. Farms like Steve and Eric's are an important part of what has made this change possible, and indeed the broiler industry has led the way for the industrialization of livestock agriculture more generally. This shift from self-sufficiency to consumerism is why my family's land became more valuable for real estate development than for agricultural use, it's why both of my parents and grandparents worked outside of the home, while all of my great-grandparents were farmers, and it explains why I grew up on brined chicken breast strips thawed from the freezer instead of a freshly plucked spring fryer from the backyard. In the following

chapters, I will tell you this story more fully. This is not just Steve and Eric's story, but the story of all of us.

CHAPTER II

HISTORY AND BACKGROUND

"Is any pavement as solid as the soil?" Daniel (1981: 248)

Varied Uses of Chicken Throughout History:

Egg, feather, meat, entertainment: the chicken has proven its versatility in serving human needs and desires for thousands of years. Chickens are one of the earliest animals to be domesticated, having been initially brought under the control of humans just shortly after the beginning of the Neolithic period over 9,000 years ago. The modern chicken traces its lineage to the red jungle fowl, native to southeast Asia, where its flightlessness and poorly hidden nestings made it malleable for human usage and easy to tame (Caras 1996). Today the chicken is the most populous animal in the world, present on every continent, even in Antarctica where emperor penguins bear traces of chicken viruses despite an international ban on live and raw poultry (Lawler 2016).

Raising chickens explicitly for their meat is a relatively new practice in the history of this species. Besides the utility of their eggs for human consumption, chickens have been raised as exotic pets, for their feathers, and for cockfighting prior to being bred for their flesh (Geertz 2005; Sawyer 1971). Because of the chicken's smaller body and inability to fly, it was easily transported by land or sea. Evidence suggests that chickens have been present on the North American continent from the point of initial colonial contact, but the farming of chickens remained a marginal farm activity until the early 1900s (Caras 1996).

The Roots of Chicken Husbandry and the Emergence of the Expert:

Early chicken keeping in the United States was mostly centered around egg production. Chickens were kept as yard birds, eating scrap food from the household, mainly cared for by women and children (Gisolfi 2017; Jones 2002). Male chickens born in the spring were culled and eaten as a delicacy, giving rise to the phrase "spring chicken" (Sawyer 1971). Older, non-productive laying hens were also slaughtered and eaten, but their meat was tough and early chicken recipes instruct cooks to simmer chicken meat in hot liquids for hours to soften the texture (Horowitz 2006). For these reasons, chicken was not a significant source of meat in the American diet prior to the twentieth century.

It's the early work of US farm women in particular that laid the foundations for the industrialization of chicken farming that we see today. Jones (2002) finds evidence that women were responsible for the initial development of the poultry industry in the south. Cecile Steele, a Delaware farmwoman was the first person to raise chickens solely for meat slaughter (Horowitz 2006). In the eighteenth and early nineteenth century, women and children kept flocks as a supplement to farm activity and were able to control part of the family finances through their "egg money" or "pin money". Prior to 1930, there were girl's 4-H tomato and poultry clubs, with 4-H boy's programs in corn and pigs throughout the state. One of the earliest poultry programs in Arkansas began in 1914 with The Pig and Poultry Club. This club helped secure financing for children's purchase of piglets, for boys, or chicks, for girls, with the goal of reducing dependence on cotton as a cash crop and diversifying farm production. The program's founder, booster EN Hopkins

(undated), wrote this letter in the nineteen-teens in his publication "Arkansas Fruit and Farms":

We are glad to see so many boys and girls joining the club work and planning to raise pigs, poultry, corn, peanuts, tomatoes, and gardens. You begin to realize that your parents have been raising too much cotton and not enough live stock, gardens, and feed crops. You begin to realize that raising all cotton in COTTON SLAVERY and that there is something better for our farm boys and girls than to be chopping cotton, picking cotton and working in the cotton fields nearly all the year. You are finding out that if you have some pigs, poultry, one-tenth of an acre of tomatoes, garden, an acre of corn, peanuts, or something else, that you will make more money and be able to go to school more days in the year. Pigs, poultry and other livestock will do well on our splendid Bermuda and other pasture and forage and make money for you while they are growing. You don't have to be out in the hot fields in raising livestock like you do with cotton, and while we still want to raise some cotton, we should not plant more than half as much as we have been and what you do raise will make you as much money as the price will be higher.

Besides these early chicken programs, which mostly focused on egg production, there were also early antecedents to broiler farming initiated by women in Arkansas. In 1916, Northwest Arkansas' first round of successful commercial broiler production (that is, chickens raised for meat and not eggs) was undertaken by Cave Springs high school student Edith Glover who, with her father, raised chickens over the winter in her screened-in back porch. When these birds of "tender flesh and large size" were sold for

\$1 per bird, the news of this successful enterprise spread. Edith's birds came to be known as "Arkansas broilers", and thus "broiler" farming began to slowly take off in Arkansas (Strausberg 1995: 14).

The burgeoning commercial egg and chicken industries at the beginning of the twentieth century in Arkansas, and across the country, were supported by an expansion of federal funding to support the agricultural economy and farm families, which were at that time in the majority. In 1914 the Smith Lever Act was passed, providing matching state-federal funding for cooperative extension services at the county level. Cooperative extension services were a mechanism to bring together newly established land-grant colleges, which focused on agricultural education, the USDA, and rural people, with the goal of conducting and decimating research to improve farming and the lives of those living in the countryside.

This was no abstract goal. In Arkansas, the majority of rural people were marginal farmers, either monocropping cotton under tenant or sharecropper arrangements in the more southern parts of the state, or engaging in subsistence agriculture on the poorer soils of the northern, more mountainous regions. With the exception of urban elites and rural landowning classes, the quality of life for most Arkansans was relatively deficient. Life expectancy was much lower relative to today, infant mortality was high, and diets consisted of what was grown at home, which was mostly pork and corn. These diets were nutritionally deficient causing widespread and preventable diseases such as weaning diarrhea and pellagra (Hill 2012: 38). Farm families subsisted mostly on what they were able to provide for themselves, with few things purchased outside the home, and they were continuously vulnerable to natural disasters, pests, and low prices for their crops.

While farmers were initially skeptical of Extension work, which they derisively referred to as "book farming", there was also a palpable need for new opportunities to circumvent the material drudgery of rural life.

Cooperative Extension services were implicitly gender segregated. The

Cooperative Extension Service programming was mainly geared towards men farmers

and improving cash crop agriculture using practices developed using the scientific

"demonstration" method. Home Demonstration Clubs were geared towards home

economics, the domain of farm women. The goal for both programs was to provide

"education for making decisions. It is informal education directed at helping people solve
the various problems which they encounter from day to day in agriculture, home

economics and related subjects." (The Cooperative Extension Service undated).

Because chickens and eggs were raised for home use at this time, early poultry demonstration work was done by women in Home Demonstration Clubs. A survey of club records archived at the University of Arkansas Special Collections reveals how Arkansas farm women at the turn of the century up until WWII created, shared, and improved upon the knowledge of poultry husbandry, laying the foundation for the farming of these animals on a much larger scale than the average household flock. County records from 1914 to the 1930s show that Home Demonstration Clubs were conducting programming on canning, culling laying flocks, poultry care, feeding, housing, caponizing, and keeping accurate records in poultry cultivation, to name a few. The goals of these programs were to more efficiently select breeds, improve culling selection and techniques, and to better care for flocks so that farm families would have access to chicken nutrition year-round, rather than on a seasonal basis.

A quote from a Pea Ridge newspaper article found in the papers of Home Demonstration Agent Blanche Hanks Elliott in an envelope labeled "Clippings 1930" illustrates farm women's commitment to honing their craft: "Mrs. Blanche H. Elliott...attended a meeting of the Pea Ridge Woman's club, of which Mrs. Eugene Sharp is president, at the home of Mrs. Ottinger, and gave a talk on "A Sanitation Program for Poultry". Mrs. Dora Wood of Pea Ridge, talked, on "Starting Baby Chicks," and members responded to the roll call by giving opinions on poultry equipment used by them. Mrs. Wood told of her methods with baby chickens, having lost but two out of a hatch of 250 and the loss of the two being from accident instead of disease" (Special News Service undated). This quote is just one of many that I found in my archival work paying testament to the fact that it was farm women who created the knowledge of poultry husbandry through trial and error on their own personal flocks which then undergirded its development into a commercial enterprise. These farm women were producing not only robust flocks for their own family's consumption, but they were also marketing and selling these birds outside of the home, often realizing significant profits in the marketplace (Jones 2002). Without this expertise, the broiler industry would not likely exist as it does currently. Unfortunately, women eventually became marginalized in the very industry they created, which I discuss later in more detail.

Technology, Industrial Logic, and Agricultural Change

In addition to the hands-on knowledge of husbandry developed by farm women in Home Demonstration Clubs, there were also a number of early technical and organizational innovations that improved chicken husbandry. A thorough discussion of every innovation would fill an entirely separate dissertation, so the following discussion

will focus on major highlights in nutrition, breeding, and improving flock health. The discovery of Vitamin D as an important part of chicken nutrition in the 1920s helped facilitate year-round husbandry and maintain consistent flock health (Strausberg 1995). Access to greater varieties and better quality pullets was also important. Commercial hatcheries were first opened in the United States in the late 19th century, with the first electric powered incubator patented in 1923 (Sawyer 1971). Access to various breeds of chickens were expanded when the US Postal Service began shipping live chicks in 1918 (Sawyer 1971). Finally, in 1935 the National Poultry Improvement Plan was signed into law. This legislation created a pathway for state-level poultry improvement plans to avoid common flock diseases, uniform labeling and grading of breeds and eggs, and a cooperative education program to disseminate and apply best practices in poultry husbandry (Sawyer 1971). Combined with the knowledge created by Home Demonstration Club women, improvements in chicken diets, access to breeds, and the standardization of breed types and quality guidelines facilitated chicken's expansion from a sideline activity for home use to a commercial crop.

At the time the various knowledges described above were circulating and becoming conventional husbandry practice, there were also larger historical changes occurring that would impact, and be impacted by, these early attempts to standardize and increase the productivity of poultry husbandry. Beginning in the 1920s, the effects of the Industrial Revolution were beginning to seep into the organization of American agriculture. Following a price collapse after WWI for most crops across the country (where production had been high to support the war effort) and the continued unending cycle of poverty for Southern farmers engaged in cotton monocropping, agricultural

reformers thought that by applying the organizing principles of the factory to the farm they might improve the farmer's lot, increase productivity, and avoid the labor inefficiencies endemic to seasonal, mostly subsistence production (Fitzgerald 2003; Hill 2012; Jones 2002; Kirby 1987).

MIT technology historian Deborah Fitzgerald (2003) details how agriculture in the United States became industrialized in her path breaking work "Every Farm a Factory". In the introduction of her book she states, "Beginning in the 1920s, farmers and their families had to contend with a new set of opportunities and constraints, most of which grew out of the new industrial production systems. These systems, epitomized by the modern mass production factory and industrial boardroom, linked capital, raw materials, transportation networks, communication systems, and newly trained technical experts. Interconnected and often sprawling, these systems of production and consumption functioned like grids into which fit the more identifiable components of industrialization—the tractors, paved roads, bank credit, migrant labor, and commodity markets" (Fitzgerald 2003: 3). Thus, in less than a century US agriculture moved from subsistence farming or export monocropping to factory farming on the massive scale we see today.

This rapid, historical transformation is one of the most profound in the entire history of humanity, remarkable for many reasons, not the least of which is the speed with which it occurred (Mazoyer and Roudart 2006). While Fitzgerald's scholarship is focused on wheat and corn farming, the Cooperative Extension records I analyzed at the University of Arkansas bear witness to these trends in poultry specifically. I gleaned from yearly county reports published prior to the 1960s that in poultry producing counties

farmers were advised by Cooperative Extension Agents to increase the size of their flocks, invest in specialized equipment such as brooders and improved housing, and to purchase specialized feed from a dealer, to name a few significant examples. Much like a factory, farmers were encouraged by Cooperative Extension Agents to increase their production throughput, purchase and use specialized machinery which then necessitated the standardization of livestock and labor processes, and to trust in the demonstration agent "expert" who would shepherd the farming enterprise ever closer to that elusive goal of "efficiency" (Fitzgerald 2003: 23). So while the creation, discovery, and implementation of new husbandry practices did provide some relief and opportunity to poor farm families, these successes would prove later to be a double edged sword. *Rationalization, Modernization, and the End of Tradition:*

These early changes in chicken farming I detail above are part of a larger historical transformation: the second agricultural revolution. The second agricultural revolution, which began at the turn of the twentieth century in more economically developed regions, was defined by an increase in mechanization, improved breeding programs geared toward maximizing the efficiency of species under industrialized cultivation, and the expansion of agricultural activity upstream from farm in the form of inputs, and downstream in terms of processing and marketing products in urban markets (Mayozer and Roudart 2006). The second agricultural revolution in the US southeast could be more specifically defined as the modernization of rural life. For Kirby (1987), rural modernization in the American southeast was defined by the mechanization of farming and the demise of "traditional rural communities" which he argues occurred from 1920-1960 (xy).

Prior to the industrialization of agriculture during this second revolution, southern agriculture was already modernized in terms of its position in the world system of cotton production, which had expanded after the devastation of the Civil War (Daniel 1981). These export-oriented monocultures were already "modern" since they were tied to "faraway metropolises for both capital and markets for their export products" (Kirby 1987: 25). Southern tenant or sharecropping cotton farmers grew cotton solely for export, relying on an intricate system of credit for seed and fertilizer and processors who would remunerate farmers for their crop while preparing it for worldwide consumption (Daniel 1981). However, this led to impoverishment since the spread of cotton destroyed self-sufficiency. Landlords and lenders in the modern cotton system would only allow farmers to cultivate cotton on rented land by restricting their access to other crop varieties and employing extensive direct supervision of the sharecropper's day-to-day activities (Gisolfi 2017).

Thus, early attempts to stimulate and improve chicken cultivation for eggs and meat in the southeast were a way to mitigate some of the harm cotton farming families were facing at the turn of the century in the southern areas of the state with more fertile soil, or the impoverishment that faced subsistence farmers of the Ouachita and Ozark Mountain regions (Hill 2012). Demonstration work overall was geared toward improving farm families' self-sufficiency so that they would be able to meet their needs with foodstuffs cultivated at home rather than purchasing needed goods with the unpredictable earnings from farm crops (Jones 2002). There are two ironies here. First, the culture of cotton sharecropping that demonstration agents and other agricultural reformers were attempting to make more just through improving the entire farm enterprise would endure

via the modernization and industrialization of chicken farming. Second, attempts at improving poultry husbandry for subsistence mountain farmers would eventually undermine their existence by making industrial agriculture the only way a farm family could sustain a living on the land.

Besides the on-the-ground husbandry work of farm women and Home

Demonstration agents, there was an emerging class of agricultural experts, buttressed by institutional support, who were working to improve chicken cultivation through the application of science. The 1862 Morrill Land Grant Act provided federal funding for the creation of land-grant colleges that would house colleges of agriculture across the United States. These agricultural colleges had to hire professors, develop curriculums, and train demonstration agents to fan out to their states' counties and share their knowledge with farmers on the ground. The earliest research conducted in these new land grant colleges was cost accounting studies, with the goal of determining how much it cost to produce certain commodities so that farmers could rationally decide whether to produce one thing or another (Fitzgerald 2003). Scientific rationality thus began to replace the culture of agriculture.

Extension work and land-grant colleges were beholden to the US Department of Agriculture not only for funding, but also for mandates in how to structure their organizations and implement policy. In order for the USDA to make sense of the vast array of agricultural activity occurring across the nation, information needed to become standardized. As Fitzgerald states, "The seemingly simple effort to comprehend the range of farmers' experiences was governed by a reliance on quantifying and ordering. Thus it was numbers, not narrative, that became the dominant language of agricultural

knowledge." (2003: 35). Comparisons between one farm and another had to be reliable and valid. Experiments and demonstrations needed clear measurements for before and after so that folks could see for themselves the value of changing their ways. Locally, Arkansas Extension agents gave practical, field tested advice about the ordinal orientation of poultry houses, what kind of feed to mix or purchase, how to select the best breeds and breed hybrids, and how to keep chickens comfortable and safe (Strausberg 1995).

The Infancy of the Broiler Commodity Chain:

Improvements in transportation, marketing, and refrigeration were also an important component of modernizing broilers into a commercial industry. The Frisco Railroad's first passenger train arrived in Fayetteville in 1881 (Allison 2016). In 1920 the railway began using refrigerated cars which facilitated shipping locally slaughtered birds to urban markets north toward Chicago (Straussberg 1995). During the Great Depression, the construction of Highway 71 which went through western Arkansas with terminuses in Kansas City and New Orleans also provided a literal pathway for truckers to move live birds to urban markets (Riffel 2001; Straussberg 1995). For instance, in 1935 John Tyson, the founder of Tyson Foods, began driving live chickens to St. Louis and Kansas City with his innovative flat bed truck equipped with a trough to provide food and water to the chickens for their journey to market (Straussberg 1995).

Another important part of turning poultry into a viable commercial industry was the creation of local outlets for farmers to sell their birds. The most important of these outlets, which I have not been able to find much information about, are poultry auctions. Horowitz (2006) and Sawyer (1971) discuss auctions in their historical accounts of the chicken industry, but their scholarship is focused on Delaware and Georgia, respectively,

and do not mention Arkansas independent auctions at all. During my archival work, I found a photo at the Shiloh Museum of Arkansas History of a poultry auction in Springdale, located in the Ozark Mountain region of northwest Arkansas. In my consultations with historians at the museum there, historians at the University of Arkansas, research specialists at the University of Arkansas Special Collections, and also asked Steve if he ever recalled seeing a poultry auction or knew anything about the existence of one in his community. No one I've spoken with had any knowledge that these auctions ever existed. In Straussberg's (1995) definitive history of the Arkansas poultry industry he makes no mention of poultry auctions, nor does Schwartz (1991) or Riffle (2002) in their histories of Tyson Foods, Arkansas' largest broiler corporation. In the conclusion of this dissertation I will discuss future avenues of research on the topic of independent auctions that I want to explore since their closure represents the definitive end of independence in broiler farming.

Independent auctions matter because their existence was necessary for broiler farmers to maintain their own autonomy. The presence of an auction represents an open market. In an open market a farmer knows the relative local going rate for an agricultural commodity, like at cattle auctions which continue to exist today. At auction there are multiple buyers and sellers. According to Steve, prices at local cattle auction houses are often different than what the commodity cattle prices are listed as in the futures markets, since local supply and demand will determine an appropriate local price. Overall, two things are important about the existence for an open market in broilers. First, farmers will have an understanding of the actual value of their commodity through the price signaling at auction. Second, farmers will have an independent outlet to sell their products and the

opportunity to be exposed to multiple buyers in a competitive environment. Horowitz argues that poultry auctions in Delaware began to close once the majority of broiler farming occurred under contract in the 1960s. It's more likely than not that the Arkansas independent auctions closed around this time for these very same reasons.

The Contract Farming Arrangement:

Contract farming allows farmers to share risk with contractors, receive a guaranteed rate of pay and access to a sales outlet, but it also increases their vulnerability as job security is tied to the integrators' ability to stay in business or their decision as to whether or not renew a contract (Constance 2008; Gray 2013; Gisolfi 2017; Riffel 2008,). Sawyer (1971) and Kirby (1986) find the first recorded evidence of contract poultry farming in 1933, but the arrangement was not always received favorably; many farmers (especially outside of the South) considered it sharecropping.

Arkansas farmers, like farmers across the southeast, have been growing broilers under contract for quite some time. While some of the largest broiler farming pioneers of Northwest Arkansas self-financed and then grew their own operations, others entered into the broiler business with external financing (Straussberg 1995). Beginning in the 1930s, feed dealers began advancing feed on credit to broiler farmers throughout the southeast (Gisolfi 2017; Heffernan 1984). In Northwest Arkansas, financing arrangements in this decade included both purchasing chicks and feed on credit, which was extended by hatchery owners and feed mills (Straussberg 1995). While these were sometimes formalized with paperwork and signatures, they were more often than not a handshake between a feed or hatchery business owner and a farmer (Constance 2018; Riffel 2002).

These credit arrangements farmers entered into with hatcheries and feed companies eventually metastasized into a more formalized system of contract farming. Contracts came about for several reasons. Hatchery owners and feed dealers who were advancing credit to broiler farmers in the 1920s and 1930s were exposed to as much risk as farmers, since the broiler market was subject to massive price swings. In order to minimize risk and more tightly plan and control local production, feed mills began to offer production contracts that outlined the farmer's pay for the broilers prior to the actual raising of the flocks and guaranteed access to local or urban marketing outlets. Farmers also wanted to minimize risk, and Riffle (2002) argues that they were willing to swap independence for greater stability when it came to their guaranteed, pre-determined pay, despite the fact that it was often lower averaged over several flocks compared to local independent growers who took their risks in the open market.

Contracts generally provided a base pay with a feed conversion bonus, with the integrator, that is the company or entity going into contract with the broiler farmer, agreeing to provide the chicks, their feed, medicines and/or vaccines, and marketing for the finished product. Overall, while the contract may have given farmers more stability in terms of knowing there was a market for their birds at a set price, they relinquished control of production and marketing decisions to the integrator when they signed them (Gisolfi 2017). In 1940, the majority of Arkansas broiler farmers were independent, but by the end of the 1960s, the majority would be under contract, with less than 2% of broiler farmers producing independently in Arkansas by the early 2000s (Riffel 2002).

Contract farming and vertical integration both began in the 1930s, although the latter was a slower moving trend. Vertical integration is the ownership of the supply

chain by a single company. The Jewell Company in Georgia was the first vertically integrated company, controlling a hatchery, a feed mill, a processing plant, and product marketing. While some farmers raised birds independently or with non-vertically integrated contractors, such as feed dealers, in the pre- and post-war period, contracting and vertical integration were mostly merged by the end of the 1960s (Horowitz 2006; Sawyer 1971). This excerpt from a conversation with Steve illustrates his experience watching vertical integration unfold in his community: "We finished up inside the rooster house and walked outside. I asked Steve about Colonial Chicken, since we had discussed it yesterday. Steve said that before Colonial got bought out, Big Bird Chicken had bought FarMill and they had a lot of debt from the purchase. Big Bird Chicken then flooded the market with chicken, which hurt Colonial. Steve said that Alston Farms is a privately-owned company, owned by Usonian Wheat & Grain (which is also private)."

The organizational logic of contract broiler farming in the Southeast has its' roots in sharecropping or tenancy (Constance 2008). In a sharecropping arrangement, farm families worked land owned by a landlord. They would either pay "standing rent", which was a fixed amount of money or crop value, share tenancy, which was a quarter to a third of the crop regardless of the market price, or sharecrop, which was a payment of half of the crop. In these arrangements, farmers had no legal rights to their crops or to make land use decisions. These agreements were usually made with a handshake and nothing more, and were renewed on a yearly basis (Kirby 1987: 140). This was an arrangement where planter landlords "sought to exploit cropper and share tenants, maximizing profits while sharing (especially with the croppers) as many of the risks of commercial farming as

possible" (Kirby 1987: 142). The irony is that the origin of the poultry contract is "an institution thought to be the root of southern poverty" (Gisolfi 2006: 167).

Sharecroppers didn't just have the problem of coming to the agreement lacking the landed means of production: they were disadvantaged and exploited well beyond this. Landlords were in charge of book keeping and would often falsify harvest counts, pay inaccurate wages, forbid farmers from weighing their crops, and they would load croppers down with debt to maintain their dependence, sometimes doubling or tripling the interest rate compared to local banks. The most pernicious through, is the country stores that planters operated, sometimes with script cash that was unique to that specific landlord, and thus only valuable in their stores (Kirby 1987: 146). These stores usually charged inflated prices, which burdened sharecropping families with unescapable debt.

Sharecropping emerged after the end of the Civil War, spreading not only in the areas that were formerly cultivated by slave labor, but across the ravaged lands of the defeated south where self-sufficiency had previously been the way of life (Daniel 1981, 1985; Gisolfi 2017). These Southern self-sufficient farmers may have worked relatively marginal land, like the farmers in the Ozark Mountains of Arkansas, with much lower cash incomes than sharecroppers, but they "owned their poor land and enjoyed isolation and independence unknown in the planation South." (Kirby 1987: 46). The spread of sharecropping began the destruction of this more ecologically balanced way of life, turning self-sufficient farmers into consumers, and then the federal government's agricultural policies ended sharecropping for good during the Great Depression (Gisolfi 2006: 172).

Sharecropping came to an end with New Deal agricultural policies that created acreage allotment payments to keep land out of production and along with crop quotas in an attempt to ameliorate low market prices for overproduced, export oriented cash row crops like cotton during the Great Depression. However, the Agricultural Adjustment Agency (AAA) payments that were legislated as payment to remove land from production, were administered by local elites and most of the monies went to landlords, rather than sharecroppers, who were then forced off the land with no money and no means of production (Kirby 1987). The result was that "the southern countryside was thus enclosed and depopulated as was rural England toward the end of the eighteenth century" (Kirby 1983: xv). Daniel (1981: 242) refers to this as the "southern enclosure" in which "tenants and sharecroppers personified the sacrifice to the new god agribusiness".

Right as the Southern Enclosure unfolded, poultry integrators also began to emerge in the 1930s and 40s, and by the 1950s contracts would come to dominate broiler production (Constance 2008; Gray 2014; Gisolfi 2006, 2017). For some Southern farmers, who still maintained ownership of their land or enough credit to borrow for it, contract broiler farming was an attractive way to maintain their rural lifestyle (Heffernan 1984: 250). However, these "propertied laborers" would find that their possession of the means of production would not protect them against capitalist exploitation, and would actually put them even further in harms' way (Davis 1980).

Contract farming redistributes risk, generates profitability by stabilizing volatile markets with a more consistent supply, it increases the scale of production, fosters mechanization, and ensures a steadier supply of throughput, with most of the beneficial

consequences accruing to the integrator. There have been some arguments that contracts and vertical integration emerged in the broiler industry to take advantage of mechanization and increased technology, as well as economies of scale, but these arguments do not hold up upon further scrutiny. Rather, they are a consequence of contracting. Heffernan (1984) finds that contracts came about because organizations in the broiler industry were attempting to survive, which was only possible by reducing uncertainty and controlling their environment. In particular, major agricultural conglomerates were able to survive the onslaught of horizontal integration in the 1960s and 70s because they could offset losses from their broiler departments in other divisions of the firm, whereas single-product broiler firms could not Heffernan 1984: 243) argues that this was strategic on the part of these conglomerates because they knew "that overproduction reduces their competition so that in the future they will have an increasing share of an increasing market for white meat".

Overall, broiler farming in Arkansas, as well as across the major poultry producing regions of the United States, was becoming modernized and industrialized in the early and mid-twentieth century. For Fitzgerald (2013: 189), this was a three-part process that included the emergence of agricultural experts, "new material vehicles of change" which included tractors, accounting books, veterinary inputs, hybrid seeds, et cetera, and "new metaphors" which included "the farm as a factory...and the farmer as a businessman". The farmer businessman represented a shift to a new cultural understanding of farming as an occupation, rather than a lifestyle. They relied on accurate bookkeeping and a competitive, market-based subjectivity to structure their farm business with the goals of maximizing profitability and innovating production. The transformation

of chicken farming into the broiler industry would prefigure an even greater change occurring toward the end of the twentieth century: the emergence of food commodity chains and neoliberalism.

Food Commodity Chains and Neoliberalism:

By the early 1960s, the majority of broilers in the United States were produced under contract; from 1954 to 1964 broilers went from 3% to 98% "integrator controlled" (Lauck 1996: 209). Additionally, from 1947 to 1960 poultry production increased 365% but labor in the industry only grew by 5% (Kirby 1987: 358). This economic growth coupled with a reduction in necessary labor was caused by several factors besides the emergence of contract farming. Vertical integration, the ownership of all parts of the supply chain, was an important factor in increasing contract farming in broilers, as well as an expansion of scientific research, price swings, horizontal integration, and mechanization. All of these things contributed to solidifying chicken-related activities into a formalized food commodity chain that would realize its full economic potential under neoliberalism. In the following section I will discuss these changes and their consequences for broiler contract farmers.

Vertical integration, the ownership of the supply chain by a single company, was initially pioneered in the late 1930s. The Jewell Company in Georgia was the first vertically integrated broiler company, controlling a hatchery, feed mill, a processing plant, and marketing. While some farmers did continue to raise birds independently or with non-vertically integrated contractors, such as feed dealers or hatchery owners, in the pre- and post-war period, contracting and vertical integration were mostly merged by the

end of the 1960s, which was marked by the close of independent poultry auctions (Horowitz 2006; Sawyer 1971).

Overproduction became a massive problem for the broiler industry in the 1950s, and there were several things that contributed to it. First, an expansion of research following WWII reduced mortality and increased the productivity of broiler farming overall. Farmers were able to grow healthier and larger birds, and more of them.

University Extension programs and newly established poultry science departments were rapidly innovating all areas of production. The Chicken of Tomorrow Contest, which was held in 1946 and in 1951, with the 1951 contest staged in Fayetteville, Arkansas, was a national breeding competition to develop the best meat chicken. Perhaps it would have been more appropriate, then, to call it the Broiler of Tomorrow Contest.

Overproduction caused massive price swings in the market which created uncertainty for all involved entities. According to Heffernan (1984), organizations in the broiler supply chain, like all organizations, disliked uncertainty and sought to control it. Hatcheries wanted a stable source of fertilized eggs and a dependable market for their baby chicks. Feed companies needed consistent demand for poultry feed, since this feed is high in protein compared to livestock feed and is thus only appropriate for broilers. In order for processing companies (slaughterhouses) to offer stable employment to workers, they needed a predictable supply of uniform birds. In order to reduce this uncertainty, these entities would try to control production which was most successfully achieved via the contract farming arrangement, vertical integration, and horizontal integration.

Horizontal integration is when firms buy other firms in a similar marketplace, which can eventually lead to monopoly conditions in that market. The broiler market was

quite volatile in the 1950s and 60s for the reasons I describe above. During this time many of the smaller integrators went out of business because broiler prices in the glutted market were often below production costs. At this time major agricultural conglomerates, particularly in the grain and feed industries, were able to survive these price swings and stay in business with their broiler subsidiaries because they could offset these losses from their other operations (Heffernan 1984: 242). These "conglomerates (knew) that overproduction reduces their competition so that in the future they will have an increasing share of an increasing market for white meat" (Heffernan 1984: 243). Today only 3 firms make up 90% of the US chicken market: Tyson Foods, Perdue Farms and Koch Foods (Marotti 2018)¹.

Finally, mechanization was also an important component for the transformation of chicken farming into the broiler industry. Mechanized feeding and watering equipment on the farm reduced the need for the hard, repetitive labor of bending down and feeding from 100 pound bags and carrying buckets of water into chicken houses. However, the introduction of this equipment actually increased both the cost and labor needed to raise a successful flock. According to Gisolfi (2017: 53), "Labor-saving machinery allowed farmers to increase production but often meant that farmers worked more, not less, than in years past". To purchase this specialized equipment, farmers would have to use a line of credit extended by a bank, and banks would usually not provide it unless a farmer had a broiler contract in hand. Thus, mechanization facilitated farmer dependency and eroded their independence. Furthermore, improvements in the mechanization of slaughter work significantly increased the volume of chicken processors could turn out on a daily basis.

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¹ http://www.chicagotribune.com/business/ct-biz-winn-dixie-tyson-chicken-prices-20180115-story.html

These trends I describe above can be summarized by decades. In the 1960s feed companies began to leave the broiler contract farming business, setting the stage for regional integrating firms to enter into the business in the 1970s. After that, the broiler industry came to be defined by a wave of mergers and acquisitions in the 1980s and 90s, resulting in a monopolistic industry today (Boyd and Watts 1997: 201). These trends mirror larger trends in recent global history, namely the emergence of neoliberalism in the 1970s. Neoliberalism is a philosophy that freedom and the greatest good of society is best achieved via free markets, the strict protection of private property rights, and global free trade in goods and services (Lilley 2006). In particular, the opening up of global trade in agricultural products and a reduction in protectionist and supportive federal agricultural policy meant changes in the way the broiler supply chain was managed in an increasingly competitive global environment from the 1970s forward. The organizational changes resulting from horizontal and vertical integration, mergers and acquisitions, and the increasing costs of doing business as highly capitalized and mechanized farm operations meant that broiler farmers were negotiating their position in the food commodity chain from a vastly more complicated and vulnerable position than the early pioneers of contract broiler farming just a few decades prior.

These farmers must continually negotiate their position in the food commodity chain as a business owner which entails dealing with the economic shifts in the way this supply chain is managed. As the food commodity changes and shifts, the nature of the relations of domination and power present in these relationships and organizational arrangements also changes. Understanding the relationships that sustain global food production is important. Agriculture is a major part of the global economy, its products

sustain people, and we need to subject it to on-the-ground scrutiny. Therefore, the overall research question I will be answering in this project is: how does this reorganization of the supply chain affect the labor process of broiler farming? How is the broiler commodity chain managed by the various players within it, who have various levels of power and control? Furthermore, what keeps people in the farm business? And how do farmers contend with these changes and stay in business?

Reasons to Farm and Larger Implications:

There are push factors and pull factors that drive farmers to broilers. Push factors include the difficulty of row crop farming, which can be adversely affected by price unpredictability, weather and climate problems, and seasonal labor demands which are concentrated during the summer harvest months. The use of specialized housing and machinery, coupled with the scientific sophistication of the modern broiler chicken, give broiler farming an air of technological excitement compared to row crop farming. A final push factor for broiler farming is that it is sold to farmers as an addition to their farm enterprise, so they can ostensibly continue whatever agricultural activities they were already doing, or add others onto their farm business.

Pull factors are those which make contract broiler farming more appealing.

Compared to crop farming, animal agriculture is more consistent. The workload, pay, and input demands are less seasonally based and instead are based on the age of the flock under the farmer's care. Financing for broiler operations is readily available once farmers have a contract in hand and the appropriate assets to run such a business. Finally, there are more tax incentives for this type of investment relative to crop farming, namely

depreciation allowances and write-offs that can reduce a farmer's tax burden while allowing for multi-year flexibility in structuring the farm business.

There are larger implications of contract broiler farming beyond an individual farmer's decision whether or not to do it, or whether to continue doing it once they've entered into a contract agreement. Overall, contract farming indicates the end of the "independent farmer". For contract broiler farmers their ownership of the means of production is disempowering, reducing the farmer to more of a hired hand than a business owner. This will be discussed in more detail in later chapters. Entering into a contract and taking on debt to construct chicken houses leaves farmers locked into debt, obligated to maintain a consistent income or else face bankruptcy. Their status as contractors means they lack the traditional protections and benefits guaranteed to employees, such as health insurance, vacation and sick time, retirement benefits and the right to collectively bargain with their employer.

The expanding size and global reach of the broiler industry has consequences beyond those faced by contract farmers. The increased throughput of the industry has meant lower prices for consumers of chicken meat, resulting in lower wages/compensation for farmers and slaughterhouse workers and more dangerous working conditions. Increased production also leads to an increased demand for slaughter workers, and this job is one of the most dangerous and lowest compensated in the United States. Finally, an expansion in meat consumption overall is associated with growing carbon footprints for the production of consumable meat. The need for temperature control, feed for broiler chicks, and fuel and machines used for transportation, processing,

and further processing all take a toll on the environment, to name a few of the ecological consequences of broiler production and consumption.

Overall these organizational and technological changes in the processes of getting a chicken from farm to plate are a harbinger of what's to come in the global agri-food system. Constance (2008: 17) states that the broiler industry is the "future model of agriculture". He refers to contract broiler farming as the "Southern model" which is characterized by vertical integration, decentralized production, flexible and informal labor relations that facilitate continued capitalist accumulation and the hypermobility of capital. While contract broiler farming is *not* sharecropping, Constance (2008: 27) argues that it's "a formalized form of sharecropping". Much like sharecropping, contract broiler farming is defined by extensive outsider supervision, the farmer's lack of autonomy over production and marketing decisions, and "asymmetrical power relationships between the contractors and the contractees" (Constance 2008: 17). Historically, the widespread practice of sharecropping abetted the acceptance of contract farming in the Southeast. Broiler farmers in other regions of the country, like the eastern seaboard, rejected it because of its similarities to sharecropping (Horowitz 2005). Sharecropping was modeled on US plantation slavery. Sharecropping preserved the southern social order that existed prior to the Civil War, keeping exploitative land use and ownership patterns in place which maintained a vulnerable agricultural underclass and a wealthy planter elite. Contract farming functions in much of the same way, restricting class mobility and narrowing opportunities for economic development as local economies become dependent on low-paying extractive industries, like broiler farming and further processing.

Broiler farming was the first US livestock sector to undergo the transformation to a contract model, and now this has spread to hog farming, fish aquaculture, and is even slowly making inroads into cattle farming. It's also now underway internationally, especially in Brazil, Japan, and Thailand. Broiler farming is coming to resemble the postpastoral perspective: "a paradigm shift in agriculture, as the general concept of farming changed from a way of life to a business, subject to the same strategies of rationalization, management practices, and control technologies as other industrialized businesses" (Squier 2012: 8). In less than a century chicken went from a delicacy to the most consumed meat in the United States, and along with that our whole orientation to farming has changed, for better or worse.

CHAPTER III

RESEARCH METHODS

"There is something ineffably unique about the ethnographic encounter"—Burawoy (1998: 11)

In this chapter I begin with a brief survey of the relevant literature that pertains to my research subject and then detail my research plan. Following this discussion, I explain how I collected and analyzed the data from my field work and gained accessed the research site. This is followed by a detailed description of the labor process during the different phases of the broiler growout operation, then I briefly discuss pathway a chicken takes in the "broiler fileré" (Boyd and Watts 1991), and the various material flows on the farm. Then I analyze my embodied experience of the fieldwork in a section titled "Ethnography, the Body, and Data Collection" and the experience of conducting research in a male-dominated occupation, concluding the chapter with a discussion of my reflections on this research method and its limitations.

This project utilizes qualitative research methods to explore the labor process of contract broiler farming. Specifically, I draw upon Burawoy's extended case method as a model for how to conduct the ethnography (1998). This method is unique because it is an "alternative model of science that takes context as its point of departure, that thematizes our presence in the world we study" (1998: 7). Using this method allows me to take into account my concrete experiences and interactions in the field, contextualize it within various relevant social processes from the local to the global, which is incredibly relevant for this case study, and then explore these contextualized findings in dialogue with theory, rather than starting with theory and working my findings through that intellectual sieve.

Topical and Methodological Survey of the Literature:

Much ink has been spilt over the chicken, especially because humans and chickens have been cohabitating for nearly 10,000 years (Lawler 2016; Squier 2012). A search for the term "chicken" on the academic journal database Jstor produces nearly 10,000 search results. Given that there is a whole scientific field of poultry science, there are a plethora of textbooks and peer-reviewed journals devoted to the subject.

Additionally, there are all manner of Extension and trade publications, dating back to the early twentieth century, such as the Arkansas Poultry Historical Society newsletters, the Arkansas Poultry Times, a publication of the Arkansas Poultry Federation, and the trade magazine "Broiler Business", all of which I found conducting my archival work at the Shiloh Museum of Ozark History.

Social scientists, historians, and humanities scholars also have a voluminous publication record when it comes to the humble chicken. In particular, the scholarship of a handful of historians provided much needed contextualization for my research while also complicating any simple narratives of what transpired prior to this historical moment (Gray 2014; Gisolfi 2017; Sawyer 1971; Schawarz 1991; Strausberg 1995). There have been a few qualitative works on slaughter work in the chicken supply chain: Striffler's (2007) ethnography of processing work in a Northwest Arkansas slaughterhouse, Gray's (2014) historical work on black women in poultry processing in El Dorado, Arkansas using life histories and historical work, and Fink's (2003) account of Guatemalan-born slaughterhouse workers struggling to unionize in a Morganton, North Carolina processing plant, which also utilizes life histories. Gisolfi's (2017) account of the rise of poultry agribusiness from the ashes of cotton sharecropping in Upland Georgia also relies on life

history interviews with former broiler farmers, although the bulk of her book is (unfortunately) derived from secondary historical sources instead of these interviews. Although not about chicken specifically, Pachariat's (2013) ethnography of cattle slaughter work is a particularly vivid and though provoking peek into the psychological mechanisms kill line workers use to justify their innocence in eviscerating cows at the rate of five per minute.

In addition to these ethnographic and historical works, there are numerous peer-reviewed social science publications about the political, economic and social ramifications of contract broiler farming, most of which combine various strains of macro-political theory, production data such as USDA Census of Agriculture counts, and on-the-ground events like political maneuvers and siting decisions made by broiler agribusinesses to construct their narratives (Boyd and Watts 1997; Constance 2008, 2009; Heffernan 2000, 1984, 1972).

This is a multi-methods project which combines historical, interview, and ethnographic data that I personally collected during two rounds of fieldwork in Arkansas, totaling one year in the field. The ethnographic method specifically is useful because it allows me to answer my questions I had about the actual practice of raising birds to slaughter under a contract labor arrangement in an industrialized food chain. Although I asked farmers questions about their work abstractly during my (scant) interviews, being able to witness and participate in the daily practice of contract farming is more informative than hearing it recounted secondhand. Combining my various sources of data allows me to compare different themes across various data sources, making my findings more nuanced and rigorous.

Research Plan

For this study I conducted ethnography for six days in December 2013 and from July 8 to December 17, 2014. On December 17, 2014 we had a 6 house flock of broilers picked up for slaughter, with the houses sitting empty for the holidays, so this date was a natural stopping point for data collection. I typically worked from 7 am to 3 pm, sometimes spending the night on the farm and occasionally finishing the day around noon. I usually conducted ethnography during the Monday to Friday workweek, with a few occasional Saturdays.

I was gone from the farm for 10 days to complete my annual pilgrimage to Burning Man, and missed a handful of days for personal and research matters, such as going to the doctor, attending an animal welfare conference, or conducting interviews. Additionally, there were several days that Steve and Eric had to do laborious prep for chick delivery and/or work their cattle. On some of these days they asked me to not come to the farm so that I wouldn't slow them down and put myself in harm's way. While my inner scientist was begging me to push back against this, I knew from my experience to honor and respect their requests as a sign of my understanding of what they needed to get done. On the days when I'd return after they'd asked me to stay home, I would ask follow up questions about what they did during the days I was gone or I'd call Steve or Eric that evening after I'd stayed home to get a summary of the day's, and I would type notes on my computer as we chatted on the phone.

Overall, out of 110 possible week days to work on the farm (104 days from July to December 2014 plus 6 days in December 2013), I worked 90 days, which averages to about 4 days per week. After the field work was completed I maintained communication

with Eric and Steve over the phone and also did 3 follow up farm visits, and we still keep in touch over the phone to this day. I kept notes about all of my phone calls and follow up visits, and analyzed them notes using the coding technique as the ethnographic notes. In total my ethnographic notes consisted of 395 MS Word single spaced pages from the field work, plus 15 pages of single spaced notes from the follow up phone calls and farm visits.

I also conducted 16 interviews with farmers, assorted industry personnel, and relevant University of Arkansas and Extension faculty. I was able to record and transcribe 8 interviews with farmers; the other 8 interviews were with the non-farmers I describe above. I did not record these interviews but took copious notes while conducting them. These interviews were less formal and more information seeking than my farmer interviews. All of my transcribed interviews and interview notes were also coded in the same manner as the ethnographic data. My interview schedule was developed in a survey research methods class which I used with the farmers. My interviews with non-farmers were more ad hoc and conversational, although I would write out specific topic and questions for each person I spoke with based on their area of expertise.

In addition to this original data, I also gathered secondary data from two archival sources: The Shiloh Museum of Arkansas History and the University of Arkansas Special Collections. From the resources at Shiloh I found 19 life history interviews from significant actors in the history of the broiler industry of Northwest Arkansas, over 500 photographs, 38 primary documents, and wrote 28 pages of single-spaced notes on the materials there. At the University of Arkansas Special Collections, I wrote 148 single-spaced pages of notes and scanned 40 primary documents.

I included archival material that related to broiler farming specifically, focusing on goals, programming, technology, breeding, and farm financing, to name the most significant topics. I tended to focus less on corporate news, marketing and promotional activities, slaughter, and further processing. My general rule about what to include or exclude was whether or not an item or piece of information was relevant to broiler farmers or the actual act of farming chickens. Because there was so much archival material I needed to filter it somewhat, although there is likely something lost in doing so.

Data Creation and Analysis:

There are two important parts of conducting ethnographic research: being in the field and writing the field notes (Emerson, Fretz, and Shaw 2011). The field work was not easy. During the course of the ethnography I lived at my grandmother's house, an hour away from my field site. This meant getting up at 5:30 am every day, getting out the door by 6 to arrive at the farm by 7 am to begin working all day, and the farm work was definitely more physically demanding than what I was used to as a graduate student. Each day when I was done I'd have to drive another hour back home, then I'd promptly shower and wash my clothes for the next day. After that, I'd usually eat dinner and then begin typing my full notes for that day. This usually meant I was out of the field for at least 2 hours before writing the day's full notes.

Ideally, I would have written the full day's notes before leaving the farm, or at a location nearby the farm before returning home, but this was not possible for several reasons. There wasn't a private room at Steve or Eric's where I could write the notes, although I did sometimes write notes in Steve's kitchen if we were busy. Also, at the end

of each day I was disgusting: I smelled of sweat and chicken waste, was coated in a fine layer of dust, and usually had stains and streaks on my clothing. After work I couldn't just change clothes, I needed to *really* bathe in order to be physically comfortable and unremarkable in public. When I first began the field work, I tried to write my notes on my laptop at a local Waffle House, but my newer computer, my dress and smell, plus my female embodiment marked me as an outsider. The wait staff lavished me with attention and questions, so I quickly abandoned this strategy. Plus, I wanted to shower before eating or touching my laptop anyway.

The farm field work combined with early wake up times meant that I was usually tired after my day on the farm. Most days I needed time to eat and clean up before I could motivate myself for the second shift of note writing. Would my notes have been better had I written them right after leaving the field for the day? Of course. In hindsight, I wish I had found housing closer to the farm so that I could have avoided 2 hours of driving per field work day.

While I was on the farm I took jottings as needed, time allowed and I tried to jot whenever I could, and would make time to do it if there wasn't a lull. Many times, Steve or Eric would go into a chicken house to do something and I'd sit on the concrete pad under the feed silo or in the truck, jotting as long as necessary. However, this was not my preferred strategy, since not being present while they were working meant missing out, but sometimes I needed to write down important details before they were lost to the fragility of memory as it passes through time.

When I first began the field work I was self-conscious about taking jottings throughout the day. Conspicuously writing notes brought to the fore my role as a

researcher and Steve and Eric's position as subjects under inquiry, highlighting our differences rather than engendering solidarity. During the first week I was writing outside a pullet house when Steve came out suddenly and I felt the need to explain myself by exclaiming, "I need to write this down before I forget!". Steve kindly said that was fine, and remarked that wasn't that what I was supposed to be doing anyway?

Sometimes it was others who made me feel uneasy, like one morning when "We all went outside together and I went with Eric to feed #3. I pulled out my notebook and Eric remarked that I was "already writing notes so early, better watch what I do". This made me feel self-conscious." As the field work went on, Steve, Eric and I became more comfortable with my jotting, but I would never do it in front of BBC employees or outside vendors on the farm. Sometimes I'd even be asked to use my notebook for other purposes, like when Steve asked me to write down propane levels for each house or reminders for him at the end of the day.

Despite needing to take time to jot, I usually tried to do it without having to step away from the work. I did my best to try to always work alongside Steve and Eric for three reasons. First, was the "research bargain": a gift of my free labor to repay them for allowing me to be present (Warren and Karner 2005: 84). This quote from my fieldnotes illustrates my learning process: "I am learning more and more everyday about what I can do so that I am not constantly asking them what I need to do, and wasting time." Second, I wanted to learn the job and ask questions, which I couldn't do while jotting. Three, I wanted to work as much as possible in order to relieve them of some of the burden of the work: I would often do menial, bending tasks at the level of the chickens on the ground, or simple things like getting tools from the truck or bringing over the ladder so they could

focus on more complex problems, like getting the feeder running or reconnecting the shocker wires. This was a way for me to demonstrate I cared and understood their work, and that we were a team.

I kept my notes in a small composition book and used 9 total over the course of the project, writing on both sides of the page. The books are 4.5 inches by 3.25 inches, which was small enough to fit in the front pocket of my overalls along with a pen. These small notebooks were also easy to hold in the palm of my left hand while writing with my right hand, so I could write inside a chicken house or standing up, without a surface to place the notebook on. They also had the benefit of being inconspicuous once they were in my pocket, and it was easily secured in my overalls.

If I thought of something I had forgotten to jot while in the field when driving to and from the farm, I'd type it in a note on my phone or make a voice memo to revisit later. Once I got home, showered, ate and sat down to write it would usually take me between 2 to 4 hours to write the full day's notes. It took longer the in the beginning and less time as the field work went on, since I needed to focus less on descriptions of the work and environment later in the project. I wrote my notes in Microsoft Word in a narrative style, sometimes ending the day's notes with bullet points of things I remembered having happened, but not exactly when during the day they had happened. I'd also write in bullet points things I wanted to research further, follow up questions, or answers to questions I'd ask Steve and Eric interview-style, like the structure of the integrator's branch management team or the order of clean out tasks.

On days where I was too exhausted to write or finish writing I would write in bullet points important things from the day that weren't in my notebook so that when I

had the time to write the notes I'd have more data to work from. The few days that I didn't write field notes after work were toward the beginning of the field work; as the project went on my time management improved and the notes were less detailed on process and setting, and more focused on interactions. Honestly I couldn't think too analytically about my notes while I was in the field. I didn't write observation notes separate from my emotional reactions, nor did I write analytical memos while I was in the field. I struggled just to keep up with the farm and research work. My main goal was to get it all down on paper as soon as possible.

After I left the field but before I began coding, I re-read my fieldnotes 2 times. The first time I did some light copy-editing and formatting for consistency, and added a few lines of text as my memory was jogged. The second time I cleaned the data of all remaining identifying information and inserted pseudonyms and obscured identifying details that were irrelevant for the project. After this, I began the process of open coding, which is using the fieldnotes to identify "ideas, themes or issues" (Emerson et al 2011: 172). For the most part, I used an inductive approach for coding, which is where the concepts and codes come out of the data, instead of starting with concepts and then fitting them into the data (Warren and Karner 2005: 8).

To begin the process of coding, I coded roughly 20 pages of my data to show to my dissertation writing group led by one of my committee members. After getting positive feedback and thoughtful suggestions from the group I began to code in earnest in Atlas.ti. I created codes as I coded, then circled back to re-code with new codes as they emerged. Some significant highlights from my codes are: stages in the grow out process; codes differentiating my experiences, emotions, and presence; sociological codes for

race, class, gender, healthcare, and leisure; codes for integrator employees and outside vendors; and farm-related codes such as "rodents" and "natural disasters". An example of how some codes emerged as I worked through the data is that I needed to code for chickens, chicken feed, and the chicken houses since these were separate issues upon further analysis, and they came up quite often.

As I coded I wrote memos on emergent themes such as the supply chain, the service representative, time conflicts, sensory knowledge, daily and long-term games, and skilled and unskilled labor. What emerged as I coded the data was how the labor process was becoming both deskilled and reskilled, via veterinary innovation, mechanization, and organizational pressures both from the integrating firm and various outside vendors, to name a few important factors. I knew that this finding was important because it wasn't what I was looking for: it just bubbled to the surface. I didn't find it, rather it found me. *The Research Site: Access and Details:*

I wanted to do this project because I knew it would be an interesting experience. I wanted to know what it was like to do this kind of work and how people who did it made sense of it for themselves, and how I might make sense of it after doing it too. I'm always looking for adventure, in all aspects of my life. I don't think it's a bad thing to seek that out in my academic work. There were no other methods that would answer my research questions besides ethnography. As I described in my introduction, Steve and Eric allowed me to conduct ethnography with them after interviewing them over two summers and explaining my methods and perspectives to them. I promised Steve and Eric that I would tell their story to the best of my ability, and the only caveat was that I not make the project about animal rights.

The issue of "animal rights" is a flashpoint in agriculture circles—it's not a respected perspective or movement since it's perceived as an inflammatory attack on their business that sensationalizes and decontextualizes what happens on large-scale livestock farms. Steve and Eric's contracts specify that if they were to knowingly let someone film in their chicken houses this could be cause to revoke their contract. This is because surreptitiously filmed footage is often used by animal rights groups to discourage the consumption of meat, which the companies perceive as threatening their bottom line. I agreed to this condition for two reasons. First, there are copious sources of information regarding the conditions chickens are raised in on an industrialized broiler farm, and I didn't see how I could add to that conversation. Secondly, given that there have been no ethnographies conducted on a contract broiler farm I felt that it was worthwhile to agree to not speak to this in order to gain access to this novel field site. My cousin, the turkey farmer I mentioned in my introduction, helped me craft my informed consent language in my IRB protocol, which I have included below with the relevant phrases in bold:

I am interested in studying the labor process in contemporary agriculture; my focus in this project is not animal welfare. I will take handwritten notes during the workday and then after the workday I will type up these notes, adding detail from the day. In these notes I will be using pseudonyms for names and locations, since this could potentially be identifying information. There is a slight chance that your employer could perceive your participation in this project as controversial. To minimize this risk, I will not take any photographs or record any digital media (videos, sound recordings, photography) on your farm. I will not identify your name, town, employer,

or any detailed information that may identify you or your farm. I am not an animal rights activist; I am not affiliated with the EPA, the IRS, the USDA or any federal, state, or local governmental organization.

This language put Steve and Eric, and other farmers I managed to interview, at ease. What is interesting about the topic of "animal rights" is how this discourse is used as a disciplinary and surveillance tactic by the integrating firm. I will discuss this in further detail in the next chapter.

The Field Site:

Steve and Eric's farms are located in Sellerville (pseudonym), a small Arkansas city with a depopulated main street, a handful of local restaurants and national fast food chains, 4 gas stations, a small local school system, and a growing Latino business district and population whose adults are drawn to Sellerville to work in the town's poultry slaughterhouse or in other outsourced areas of the chicken industry, like catch crews or vaccination services. The local BBC slaughterhouse where Steve and Eric send their broilers processes 1.3 million pounds a week. Much of the local economy in the city and county is derived from agriculture and its tertiary industries: processing, inputs, machinery sales and repair, and truck driving. Soybeans, corn, and a growing number of acres in rice dominate row crop production. Broilers and cattle are the major livestock sectors in the county, with some growth in turkey production and a few contract hog farms, according to the county's Extension agent.

Steve and Eric, at the time of my research, owned two chicken farms both contracted with Big Bird Chicken. The first farm was an 8-house pullet farm, which is a farm where grandparent flocks are raised in sex-segregated houses to sexual maturity

before being moved to a laying farm where they will be sex mixed and lay fertilized eggs. Should you be reincarnated as a chicken in the contemporary broiler food chain, try to manifest yourself as a male pullet. If you survive your childhood and adolescence, you'll spend 18 months in a spotlessly clean laying house knocking up hens, and you'll be busy because there's 10 hens for every male in the house. Perhaps this will make your eventual rendering into chicken soup less tolerable. They also owned a 6-house broiler farm where they raised smaller broilers, at less than 4 pounds at slaughter, which were mostly sold to a large chicken fast food chain. This globally recognized chain asked that BBC produce a smaller bird for their signature menu so they could continue to market their bone-in chicken combos at the same low price by reducing the size of the chicken pieces.

On a practical level, the day to day tasks of pullets and broilers are generally the same bird. There are some significant differences between broilers and pullets, namely that pullets are under Steve and Eric's care for a longer period of time and they are paid by the square foot every other week to care for these birds. Almost like rent. They are paid at catch by weight and feed conversion ratio for the broilers in a tournament finish where they compete with other growers whose flocks were caught that week. Steve and Eric have the opportunity to earn performance bonuses with both the broilers and pullets, which is based on livability, feed conversion ratio, and for the pullets, their fertility once they're at the laying farm producing broiler eggs. I will discuss compensation in more detail in later chapters. In addition to these two chicken farms, Steve and Eric also had a medium-sized cattle operation at the time of my field work (under 300 head). They also have some other smaller agricultural revenue streams that did not significantly contribute to their cash flow.

There are 4 main stages to broiler and pullet operations: setting up for the delivery of birds, chick delivery, taking care of the birds, and then prepping for the bird pickup.

Usually Steve and Eric would ask me to not come to the farm on busy set up days because they were having to use the tractors to spread litter and various treatments in the houses, and were in a game against the clock to get it all done before chick delivery.

Next, I will briefly describe each phase of this process.

The Prep:

As soon as the last flock is caught, the farmer must immediately begin prepping for the next one. While company policy dictates that Big Bird Chicken give farmers at least a 14-day out time between flocks, the pace of prep is hurried during these two weeks. BBC farmers only remove the litter (chicken waste) out of the houses every two years, and in between flocks without removal they have to perform various treatments on the litter to kill bacteria and parasites. Then, repairs must be made that couldn't be performed with chicks in the house, litter must be re-spread, the house heated, and equipment set up to ensure the one-day old chicks can easily access food and water. BBC dictates to the farmers what must be done by the time the chicks arrive, but it is up to the farmer to properly manage their timing in accomplishing all these tasks.

After the catch if litter isn't removed, the first thing the farmer does is put the litter in 2 lengthwise piles down the side of the chicken house using a spreader attachment on the front of a small tractor. This is so the litter can go through a heat: with the litter in the piles, it reaches an internal temperature of 131 degrees F and harmful bacteria is presumably killed. It takes 2 days for this heat cycle to complete; this process is referred to as *windrowing*. According to Steve, the litter retains some of the antibodies

to common poultry diseases such as cocxy and air sac illness. The old litter helps the chicks to build immunity to illnesses. The idea is that the chicks are exposed daily to this "natural vaccine" instead of periodically through an administered vaccine.

In the past, the litter was cleaned out of the house after every single flock and used as a fertilizer on grazing land for cattle (and still is after being removed bi-yearly). In this way, cattle farming and chicken farming are complimentary, as the litter can be used to increase the growth of grasses and increase hay yields. As chicken production expanded across Arkansas in the 1970s and 80s, it was accompanied by an increase in the volume of chicken litter. Until 2003, land application of poultry litter in Arkansas was unregulated despite numerous complaints of noxious smells, increases in various rare cancers linked to arsenic present in poultry litter, and soil and watershed pollution.

Following a lawsuit filed by the state of Oklahoma against Arkansas regarding meeting EPA Clean Water Act standards for the Illinois River, the state began to regulate litter application. Because the chicken litter remains on the property of the farmer, it is the farmer's property and not the integrator's, so dealing with it is the purview of the farmer. In this way, the integrators outsource one of the negative externalities of poultry production.

The National Resources Conservation Service (NRCS), a USDA office with branches at the county level, is tasked with record-keeping in regards to chicken litter. Before March 31, farmers must report to the NRCS how many chickens they had over the last calendar year on their farm and how much litter they cleared out of the houses by Bobtruck load which is estimated at 5 tons per load. They have to report the days they cleaned the litter out, where they spread it, and the temperature, humidity, and wind

speed and direction of those days. The NCRS determines how much litter can be spread per acre and every 5 years they take a soil sample on each farm. I was able to observe soil samples taking place on Steve's pullet farm. While Steve and Eric have always been in compliance in this matter, I observed that the NCRS sample taker isn't the most welcome farm visitor as their presence is perceived as an intrusion. It costs \$10 per year per farm to report to the NCRS.

After the completion of windrowing, the farmer has to spread the litter back down and get the ground smooth, which is called *leveling out* the houses. This takes about half a day per house to accomplish. It is extremely important that the ground be leveled consistently throughout the house, which is why this task takes such a long time. The feeding and water equipment lines run lengthwise down the houses and is adjusted based on the height of the chicken standing on the ground. If the ground isn't level then the feeding and watering equipment will not be at a consistent height, which can limit the bird's access to food and water. If the birds aren't able to easily access food and water they will have difficulty putting on weight and maintaining a consistent weight per bird across the flock, which will reduce the farmer's pay at the end of the flock.

After the litter is windrowed and leveled, it is *top dressed* with sawdust or rice hulls; each poultry house takes 2 Bobtruck loads per house. Rice hulls are cheaper because 10 Bobtruck loads can be fit on a trailer, in contrast to just 4 loads per trailer for sawdust; a significant cost for shavings is the cost of transporting them via 16-wheeler truck to the farm. The drawback to rice hulls is that the chickens will eat the rice, which provides no nutrition and cuts down on the feed they eat. The rice hulls are a byproduct of Arkansas' large rice industry and cost \$1100 for 11 loads versus \$4000 for wood

shavings. On the broiler farms, BBC doesn't provide the shavings and the farmer can decide which type of top dressing to use. For pullet farms, BBC provides sawdust shavings. However, the company can fail to provide these shavings, or fail to provide them in a timely manner, thus disadvantaging the farmer because the house conditions will not be optimal for chicken performance (livability and feed conversion ratio). Shavings absorb moisture and control dust and other parasites, which contribute to overall health. Once during my field work, the company neglected to provide shavings to the pullet farm despite having told the farmers they would do so, and another time the farmers asked for shavings and their request was ignored while the farmers waited to complete house prep in anticipation of the arrival of shavings, which put them behind schedule.

Following the windrowing, leveling out, and top dressing, which takes 12-14 days on average on the pullet farm and 13-15 days on the broiler farm, pesticides are applied on the ground surface of the poultry house that kill the darkling beetle. The darkling beetle is one of the most common pests in a poultry house; they can transmit various poultry viruses, e coli, and salmonella when eaten by the chickens. They also damage poultry houses by eating insulation and wood. BBC provides the spray to the farmers at no cost. This spray is applied before lowering the feed equipment because the beetles like to congregate under feed pans and water lines. After the spray is applied it must sit for 24-48 hours to effectively treat for the beetle. It takes about 2 hours per house to apply the spray, and the farmers I worked with usually try to apply to spray on a Friday so that the house can sit for the weekend and then they can return to house prep on Monday.

After the pesticide is applied and allowed time to permeate the house, the feeding and heating equipment must be lowered and prepared for the chick's arrival. This involves lowering feed and water lines, which are held up with cables that can be manually adjusted using a drill with a long metal screw attachment. During house prep, this equipment is put back into place in such a way that the baby chicks can access it and the various lines are tested for functionality. Water lines are lowered, flushed out, tested for leaks (with broken nipples replaced) and then birdie cups are attached, which catch a flow of water in a circular cup. These are used on the water lines when the chicks are small and are provided by the company.

The feed lines are cleared of the finishing feed that older chicks eat and also tested for leaks. Feed hoppers are secured back in place and repaired for openings where chicks could get stuck and killed. Because one-day old chicks are too small to reach into chain feeders or auger feeders, their feed is manually distributed throughout the house in trays that must be laid out in regular intervals. The feed is put out by hand in the pans about 3 days before the chicks come and this takes about 6 hours per house. The feed is placed in a wheelbarrow from the feed silo outside of each house, then rolled down the length of the house and hand scooped in each pan, 3 scoops per pan. This task is monotonous and back-breaking; I often did this for Steve and Eric while they completed equipment repairs to save them the trouble and provide more help to them. The feed is a ground meal which produces a fine particle dust when handled that the farmers breathe in and it smells faintly of soy sauce. The feed is finely ground so that it is easy for the baby chicks to consume; as the flock matures the feed composition changes to be less powdery and chunkier consistency.

Brooders, which are propane powered heaters, are lowered and cleaned of dust and tested to ensure their functionality. In the broiler houses, vent heaters powered by sawdust pellets are also used and they must be lowered and cleaned off as well.

Additionally, Steve and Eric must make sure that there has been an adequate delivery of pellets and propane to power the heaters before the arrival of the chicks; these fuel sources are secured from a third party and sometimes their delivery is delayed. Vent doors along the sides of the houses are raised and lowered via cable like the feed and water lines; these must be tested, repaired and cleaned. Additionally, there are 4 large ventilation fans at the end of each poultry house and these are repaired, motors replaced, and cleaned as needed. Once a year the houses will get washed with a pressure washer during out time.

Completing the work of lowering and repairing feed and water lines, heaters, vents, and fans usually takes about a day per house. While the farmers generally repair broken equipment on the spot during the flock, there tends to be some damage that occurs during the catch as a result of errors from the catch crew. In particular, cables, water lines, nipples, and doors often get broken during the catch, which must be addressed before the arrival of the new flock. Because catching has been outsourced to a third-party crew, and is not done by the farmer, the catch crew is unfamiliar with the placement of cables and equipment and they can easily do significant damage in the house creating more problems for the farmers to address.

After this work is completed, the farmers let down a half-house curtain made of plastic which divides the rectangular poultry house width-wise. This curtain is lowered so that the farmer only needs to heat half of the house when the chicks are small, cutting

down on fuel costs. Additionally, a half house fence is put up, made of chicken wire, which corrals the chicks to half of the half house down one side length wise. Since the chicks are so small at delivery, they do not need the entire space of the house to have freedom of movement. This also functions to keep the chicks in proximity to heat because they need a warm environment during their early days, and less heat as they mature.

Forty-eight hours before the chicks arrive the houses are pre-heated to 90 degrees so that the ammonia will begin to volatize from the poultry litter (which occurs around 75 degrees). During these 48 hours the houses will be ventilated by opening the vents along the length of the house on either side and by running the fans at the end of the house to pull the air out. This is probably the worst time to be a residential neighbor to a poultry house as it makes the surrounding area smell of litter. When driving through the countryside I can tell if a farmer is venting their house without even seeing their fans or vents open just by the smell alone.

The day the chicks come the farmers put out another chemical treatment called Poultry Litter Treatment (PLT), which is provided by the company. PLT reduces ammonia in the house from the litter, which makes it a better environment for the birds. Ammonia causes lung lesions and breathing difficulty, blindness, and can burn the paws and bodies of the birds when they sit on the floor of the house. In order for the PLT to work the house has to be warm enough for the ammonia to volatize; the PLT works for 5-7 days after which it dissipates, and then the farmers must ventilate the houses more to keep the ammonia pulled out. PLT is caustic and corrosive, it will make holes in clothing and can be dangerous to handle. Since the PLT is provided by the company, farmers are

dependent on a service representative bringing it to the farm for application in a timely manner. While I was in the field, the service representative failed to bring the PLT on two cleanouts. The service tech was nonchalant about forgetting it, saying both times that it wasn't a big deal and that we would have to do without it. Steve, Eric, and I disagreed with his assessment.

Chick Arrival:

Prior to the catch of the matured flock, farmers are told what day their new batch of chicks will arrive and as the day comes closer the farmers are told what time they will arrive. Pullet chicks come from a grandparent flock owned by a poultry breeding company and their arrival usually occurs as scheduled, as these chicks might be coming from farms hundreds of miles away, sometimes from a different state. Broiler chicks come from the company's hatchery nearby, which is part of the branch office that the farmers are contracted with. The delivery of the broiler chicks does not often occur as scheduled. Instead, the farmers are given a timeframe for their arrival, like between 8 am and 11 am. Eric likened this to waiting for the cable company. Chick trucks will make deliveries to multiple farms during a day, so delivery can be delayed if there is a problem at another farm or the hatchery. For each broiler delivery I participated in (3 total), the chicks never once arrived on schedule and I spent many hours sitting on the back of a truck listening to conversations about air planes, football, and deer hunting. Steve related a story of waiting for a broiler flock that was supposed to arrive at 8 am on a Saturday. The truck didn't come until 2:30, so he "pissed away all of Saturday waiting on chick trucks". Since farmers aren't employees paid hourly, the cost of their time is not a consideration for BBC. House dumps can also be split depending on the hatching

schedule; it's not uncommon to have part of a house's flock delivered with one batch, then the rest of the house's chicks delivered later in the day.

Farmers also have little to no say of when they will receive a new flock; they are only guaranteed at least a 14-day out time. The 14-day out time is a mandate from the home office out of Chickenville (pseudonym); if service representative places a farmer with birds before 14 days they will be automatically fired and their supervisor put on probation. For the service representative, guaranteeing a 14 day out time is serious business. However, out times can be extended beyond the 14-day window, which is costly to a farmer since they aren't making any money with their houses empty. Out times can be extended to reduce chicken production if prices or demand dips below acceptable levels according to company accounting. Steve told me that an 11 week out time would add a year onto his loan payment. During my field work, Steve requested to have a pullet delivery delayed by a week so that he could attend a football tailgate and the company complied. If farmers are upgrading equipment they can also have their deliveries delayed until this work is completed which is agreed upon by all parties prior to beginning the upgrade. Long out times can also be punishment for a farmer that is arguing with their service representative or for refusing to pay for house upgrades.

Chicken breed selection is also the domain of the poultry corporation. Today's contract farmers have no say in this process, nor do they have any knowledge of the health of the breeder flock of their chicks. They don't know the age of the flock or the time of day their chicks were hatched. Older hen's eggs tend to hatch in the morning and younger hen's in the evening. Chicks from older flocks have a higher mortality. However, the broiler manager does know where the eggs are coming from and where

they are going, meaning that certain growers can get a favorable placement of better chicks depending on their relationship with the broiler manager. Steve said that another farmer, Owen (who I interviewed and helped with dumping 3 times), once got placed chicks in 17 days when at that time Steve had to wait 33 days. Owen got better chicks because he has newer houses. Thus, the company can manipulate a farmer's performance by placing chicks of different quality in their houses and the farmer usually has no knowledge or input in this process.

When the chicks arrive, the pace is hurried to get the chicks from the truck into the house as quickly as possible. This is because the chicks are generally in a cooler environment than the house (which is heated to 90 degrees). The chicks are delivered in an enclosed 16-wheeler trailer and they are in plastic trays with 100 chicks per tray on forklift pallets. The truck driver drives a forklift, which is on the back of the truck, and loads pallets of trays onto the lift, then drives the pallets inside of the house. The farmers and other helpers then dump the trays into the enclosed area of the chicken house, where the water, food and brooders are placed. We literally pick up a tray and then dump it on the ground, with the chicks tumbling from above onto the soft cushion of the floor, which is covered in the shavings. The trays are stacked as the dump proceeds, then the truck driver picks up the pallets with the empty trays. To retain the brooder and vent tube heat in the house, this process is hurried so that the doors at the end of the house can be shut as soon as possible. After this is complete, the farmer begins their task of raising these tiny animals to maturity.

Raising Chicks:

Raising the chicks and keeping them comfortable is the most important part of poultry farming, and in many ways, the easiest. The main goal is to keep the animals happy: eating, drinking, moving about, and healthy. After the rush of the prep and the dump, it feels like once the chicks are in the house you can take a deep breath. Now, it's all about maintaining. Raising the chicks is all about managing various material flows: light, water, heat, food, and airflow. BBC provides farmers a chart that lists the appropriate flows based on the age of the chick and the season, but farmers must make daily decisions about how to best adjust and calibrate the house conditions based on numerous variables outside of their control, such as that day's weather and the dependability of ventilation equipment and sensors.

The dream of industrial farming is automation. Push a button, flip a switch, and in a few weeks' time, have a chicken ready for slaughter. In such a system, there is no need for a farmer. Most anyone can push a button. Yet, things are not so simple. Equipment breaks, water lines leaks, weather changes on a whim, markets fluctuate, and chickens get sick. In these instances, a farmer's experiential knowledge is an asset, yet BBC's attempts at organizing the labor power of the farmer reduces opportunities to generate this knowledge and undermines its application in the day to day running of the poultry farm. I will discuss this further in Chapter 4, where I focus on how contract broiler farmers are deskilled in their work.

With the chicks in the house, the farmers have control over the hours of light, light intensity, water volume, water pressure, the level of feed in the pans and trays, temperature (through brooders, fans and tube heat) and static pressure. However, the

farmers are supposed to follow company guidelines on temperature, static pressure, feed and water flow, the lighting program, and water-based treatments. These guidelines come from several sources, official and ad hoc. The company provides a guide to what the temperature, ventilation, fan settings, light curve, and water volume should be depending on the day age of the chicks, as well as guidelines for ammonia levels and feed presentation to chick ratio. This information is imparted on laminated sheets stapled to the wall of the chicken house by the control panel. Interestingly, while there are guidelines regarding ammonia levels, the company does not require ammonia sensors in the houses.

The birds are checked on at least once each day, usually in the morning. When the birds are larger, they are more vulnerable to risk, and during the highs of summer and lows of winter temperatures they are also at higher risk of harm if various fan and heating equipment malfunctions, so they will be checked more often. The lights, fans, water and ventilation are adjusted if needed, and if the birds are supposed to be fed that day, then they are fed. With the pullets, they are not fed every day (usually about 5 days a week) in order to slow their growth, since they are bred for their reproductive capabilities and not their meat. Broiler chickens are fed daily.

The farmers have no control or input in feed quality, and they often complained about the poor quality of the feed. Steve told me that the feed they were using was made with spent brewing grains, the bi-product of beer production. These grains had been used to make beer, stripping them of their nutritional value, and used in feed as a cheep filler, almost like a Cheet-o for chickens. One time I found broken metal and plastic bits and a screw in the broiler feed. The farmers complained bitterly and often of the poor quality of

the feed, which impacts the health and weight gain of the birds. On a few occasions we also experienced problems with timely feed delivery. Each branch of BBC has its own feed mill, so the branch managers are in control of feed input purchasing and conditions at the feed mill.

Each day the farmers or their hired hand walk the houses and collect dead birds, tallying up the day's count of dead and marking it on a sheet in the house. These records are kept so that the company will know how many birds to expect at the slaughterhouse or in the laying houses when they are moved. The first week's dead are attributed to conditions at the hatchery, dead birds after that are blamed on the farmer. Once at the broiler farm, the broiler service representative told the farmers to tally up the dead but not write it on the sheet until the first week was passed in order to not make the hatchery look bad (we obviously ignored this advice). The dead chicks are stored in a freezer and the company collects the dead birds when the freezers are full and they are rendered down into chicken feed, according to Steve and Eric. The company provides and maintains the freezers. Once there was conflict with the company because they hadn't emptied the freezer before it became too full and we didn't have a place to put the dead birds. Another time, the freezer broke and the chickens inside rotted which we then had to dispose of by digging a hole in the middle of a field and burying them on a hot summer day. To say this was disgusting is putting it lightly.

Once the chicks are a certain size, the fence and half-house curtain are removed, usually in 10-12 days, and after that the chicks have full roam of the entire poultry house. If it's colder outside the farmers will take longer to remove the fence and curtain in order to keep the chicks warmer under the brooders without having to heat the entire house.

Usually I would undertake the removal of the fence to save the farmers from having to bend down and roll up the fence. Removing the curtain is a 2-person job, with one person on a ladder removing the curtain from the staples on the beams and another on the ground to roll up the curtain and spot the person on the ladder. Removing the fences and curtains usually takes less than half an hour per house.

Periodically throughout the flock the service representative will take an average weight of the flock by selecting 10 chickens and weighing them, calculating the average weight and standard deviation. The pullets will be measured every week and the broilers will be measured around 3 days before the catch, around 32-33 days old, so that the company will know the weights going into processing. The company wants a low standard deviation so that the flock is uniform. A service rep can make a farmer look bad by purposely selecting larger and smaller birds to weigh, thus increasing the standard deviation. However, this process has changed since I left the field, as reps now put the birds in a random pen of 30 in the house and weigh from the pen. These figures are provided to the company so that they have an idea of where the flock is in its growth cycle and so that they can calculate the best day to move or catch the flock.

With so many birds in a confined space, sickness can spread quickly in a flock and common threats must be addressed and eliminated rapidly in order to ensure livability. However, strict USDA guidelines prevent the application of antibiotics in a flock. If a flock becomes so sick that it is needed, then the flock will be condemned and rendered into pet food. Farmers do sometimes apply other medications, such as dewormer, through the automated watering equipment and an outsourced service paid for by BBC will come throughout the pullet flock to manually vaccinate each bird (broilers

are vaccinated at the hatchery before delivery and not vaccinated again before slaughter).

For the most part, both broilers and pullets are vaccinated and treated with various medications in the hatchery before their arrival on the farm.

The day-to-day with the chickens thus entails the following: checking the heat and air flow, adjusting the lighting program, collecting and tallying the dead, giving the birds food and water, managing the flow of necessary materials and capital, and repairing any problems. Problems could be water or food leaks, light leaks on the structure of the poultry house, or malfunctioning equipment. The farmers will repair things as the come up or at the direction of the service representative. The service representative can make things more difficult for the farmer by nitpicking small problems, such as light leaks. The service reps will write problems down on their visit sheets, which are returned to the complex with a copy given to the farmer, and if the farmer doesn't address their problems in a timely manner then they can be disciplined by the company and even have their contracts revoked. Thus, keeping a cordial and friendly relationship with the service rep is of utmost importance, as they can make a farmer's life difficult should they choose to do so. The service rep is the closest thing to management that the farmer experiences in the day-to-day operation but the power dynamic of this relationship are murky because the rep has no authority to extend or terminate contracts. This relationship will be discussed in further detail throughout the next three chapters.

The Catch:

The catch is *always* a hectic time around the farm because workers, equipment movement, and conditions in the houses must be delicately managed in order to ensure the smooth flow of the work while minimizing disturbance and stress on the flock.

Equipment is shut off and raised up, with each line being staggered (heat, water, and feed lines). Thus, the farmer is continuously changing things in the house at various intervals, with little to no rest during this period. Each house is caught on a staggered catch schedule so that there is a consistent flow of birds into the slaughter plant and so that the birds aren't sitting on the catch truck for too long before slaughter, which could affect their livability, weight, and stress levels. Thus, each house has a slightly different time to run and lift the various equipment lines, so each house can't be completed all at once. The company decides when the birds are ready, and if the company chooses to catch broilers at a time when the birds aren't quite up to the weight desired, they are penalized in their pay for the broilers (since farmers are paid by weight).

While I was conducting my field work I helped with several catches on both the broiler and pullet farm, but these were staggered catches, meaning that only a portion of the houses on the farm were being caught. At the very end of my field work I was able to participate in an entire farm catch on the broiler farm, which I will describe below.

For the broilers, the feed is run 12 hours before the catch, then the feed lines are rolled up 8 hours before the catch. This is because BBC says that it takes 4 hours for the birds to eat the feed out of the lines. So, feed is run and the lines are left down for 4 hours, then 8 hours before the catch the feed lines are rolled up so that the birds have 8 hours to digest the feed before slaughter. If the birds have feed in their stomachs at slaughter this can introduce contamination in the eviscerating line if the stomach ruptures and the contents get on the bird's carcass.

For this catch on the 6-house broiler farm we shut the feed off at the following times: 10 pm Sunday, 4 pm Monday, 8 pm Monday, 10 pm Monday, 4 pm Tuesday and 8

pm Tuesday, with feed being ran in each house 4 hours before it was shut off. This created an almost endless work day from Sunday night to Wednesday morning. During this time checking temperatures is also important: the chickens are at their largest, and they generate a lot of body heat compared to when they are chicks. Thus, keeping the house cool enough is important, but not so cold that they shiver and lose weight.

Additionally, the lighting has to be adjusted so that the birds are in darkness when the catch begins, but it has to remain on while they are eating or they won't move to the feed lines. The birds are caught in the dark because they are calmer when the lights are out; when it is dark they sit on the floor and tend to not move about.

Right before the catch begins, the water lines and heat tubes must also be raised. For this catch, catch times for each house ranged from 9:30 am on Monday to 8 am on Wednesday. Thus, we were up by 3 am each day to raise the lines and ensure that the catch crew had what the needed to catch the flocks and up until 11 pm each night to finish running and turning off feed lines so that everything would be appropriately timed for the catch, which began as early as 4 am in 2 houses on Tuesday and Wednesday. Thus, there were short bursts of activity, then lulls of a few hours (where we talked, I typed field notes and we watched some movies), but no significant stretch of time where we could get some decent sleep or do anything that would involve leaving the farm.

During the catch, company policy dictates that the farmer must remain on the farm should any problems occur with the houses or equipment. From May 15 to October 1 the farmers must have a garden hose at each house so that the birds can be sprayed in order to keep cool. The truck driver is supposed to spray the birds, but Steve says they only do this about half of the time. The hoses often get run over and destroyed by the

catch crew, so this is just another expense for farmers and a particular source of annoyance for Steve.

The catch crew is outsourced from BBC, meaning that BBC pays a company to do the work so that they are not responsible for ensuring the legal work status of catch crew workers. Leroy, one of the hired hands I worked with on the broiler farm, said that the driver of the crew is "probably the only one that is legal". The catch crew consists of 6-10 workers and when I observed the broiler catch all of the workers appeared Latino men and from their conversations I concluded that they were native Spanish speakers. These workers labor in the dark of early morning stuffing birds into wire cages in a cacophony of squawking and air thick with feathers and particulate dust. To the casual observer, it looks like a scene from a dystopian film of an undesirable future. The driver brings the workers in big trucks (like pickup trucks with extended cabs), with one truck towing a flatbed trailer with a porta-potty on top for the catchers.

After the catch is complete, the farmer must walk through the house and pick up any birds the catch crew left behind. The crew will leave birds behind that are too small or sickly to be processed. Usually the catch crew will kill these birds and leave them in the house, but sometimes they leave them alive. Having to kill these undesirable birds depressed me. Then, the process of repairs and prep for a new flock begins again. *Clerical Work:*

In addition to the daily labor of maintaining the farm and raising chicks to maturity, farmers must also do the clerical work of the farm: managing cash flows, banking, and paying taxes. While this work constitutes a relatively small percentage of farm labor, it is nevertheless an important piece of running the operation. As discussed

previously, these chicken farmers are contract workers, meaning that they are selfemployed and owners (or debtors) of the farming means of production (land, buildings, and equipment).

Managing the cash flow on and off the farm is one part of clerical labor. Farmers are paid bi-weekly for pullet farming by the square footage in the chicken houses plus bonuses for certain upgrades and flock conditions. This pay is mostly consistent for each paycheck, and Steve has this directly deposited. For the broiler farm, they get this payment in a check after each flock. Because there are often problems with broiler pay, farmers typically opt to receive this payment as a check, then they can compare their pay to the settlement sheet from the processing plant, making sure that they are paid correctly based on the pounds delivered at slaughter. The settlement sheet lists the number of chickens slaughtered from the farm, their weight at arrival, the feed conversion ratio for the flock, and their ranking compared to other farms that slaughtered that week. Steve told me that it can take 2-3 months to fix a broiler pay error with the company since this payment is routed through the corporate office in Chickenville and it is more difficult to rectify if the check is already deposited. He said by his estimate, 90% of broiler farmers take checks instead of the direct deposit. Interestingly enough, BBC doesn't sell processed chicken directly to businesses, but to a chicken broker who then facilitates the sale of the processed chicken to restaurants, food suppliers, and other entities. BBC is paid by the broker for the processed chicken before it leaves the processing plant, yet broiler farmers will sometimes have to wait up to two weeks to get their payment.

During the field work we often visited Steve's local bank to deposit checks and get cash for pocket money but he never had any meetings with his banker or any business

that took longer than a few minutes there. Steve occasionally visits his banker to discuss the terms of his farm loan and adjust his payments as needed based on his cash flow. Steve can renegotiate the terms of his loan, add to his loan, and adjust when his payments are due with his banker. His bank is locally based and has extensive dealings with farm operations in the community, so they are understanding of the unique nature of lending to farm businesses. They have consistently worked with Steve to adjust payments in leaner years. The fact that the bank gets half of whatever Steve makes on his pullet operation doesn't likely hurt their willingness to continue working with him and securing surplus value from his labor and assets. Both Steve and Eric keep their personal checking at a separate bank from where they have their loans as they perceive this as protection against risk of asset seizure in the event of business failure.

Farmers, like everyone else, must also pay yearly federal, state and county property taxes. They have to keep up with the various itemized deductions that are associated with the farming operation: electricity, water, propane and pellets (to heat the houses), trucks and other equipment like tractors, fuel for equipment (gasoline), and interest payments on the farm with a 1099 form from the bank. At the end of the year, Steve gets itemized receipts by month from the water and propane company to help with taxes, but he must keep up with the monthly electricity bills himself. Because this is an agricultural community, many of their suppliers are aware of how a farm business is run and they design their bookkeeping with this in mind.

Steve and Eric do their taxes yearly with the help of a local accountant that costs about \$1000 per farm per year. Steve will meet with his accountant 2-3 times yearly. He generally meets with the accountant in September before the end of the 3rd quarter to

determine where he stands and to see if he needs to make an equipment purchase under IRS Section 179 that allows farmers to make a one-time depreciation allowance on their taxes and avoid part of their tax burden. He'll meet with the accountant again sometime in February or March in preparation for April filing and sometimes he'll have a meeting in the summer to assess the tax situation and begin thinking about how the farm business will approach the end of the tax year.

Steve runs his farm as a personal, family farm while Eric has his business structured as an LLC. Another farmer who I helped occasionally with chick dumps, Owen, has his farm in his wife's name, who is Native American, so that they are eligible for reduced interest rates and competitive grant programs through the USDA that are designed to encourage minority participation in farming. After my field work was complete, Steve ended up having the pullet farm put in his wife's name, and I will explain this further in the conclusion. Farmers have complete freedom in managing their business, or perhaps I should say, in managing their debt risk. BBC isn't interested in getting involved in this, as the contract arrangement allows them to outsource the risk of farm ownership onto the farmer. In fact, it would seem that BBC's interest here is in farmers maintaining a high debt load so that the farmer is more vulnerable financially and easier to control. With BBC operating a near-monopoly on chicken farming in the region, farmers have to comply with whatever BBC dictates or risk losing their chicken business entirely.

The Pathway of the Chicken:

Next, I will discuss the pathway of the broiler chicken. The broiler supply chain begins with a grandparent flock, a flock of chickens that is kept under strict biological

controls and breeding protocols in a maximum biosecurity corporate-owned breeding farm. These farms are either operated by outside vendors that have contracts with BBC to supply grandparent chicks, or a company that is a subsidiary of BBC. The BBC subsidiary that produces grandparent flock chicks sells these chicks to both BBC and other integrating firms.

Grandparent flock chicks arrive at a day old to pullet farms, where they are raised in sex-segregated houses for 22 weeks until they are nearly to sexual maturity. When the pullets are to this point in their lifecycle, they are moved from the pullet farm to a hen or laying farm, where they live in brightly lit, tidy houses with metal perches and brooders to lay their fertilized eggs. The fertilized eggs are collected 5 times a week and transported to the local BBC hatchery where they are incubated and hatched, then the newborn chicks are debeaked, and vaccinated before being transported at one-day old to broiler farms. (When the fertility of the breeding flock at the hen farm dips below 50% of it's peak, they are purchased by an outside hen rendering company, caught, slaughtered, and processed for pet food and canned chicken products, such as canned chicken meat or chicken noodle soup. After fertilized pullet flock eggs are hatched and the chicks are vaccinated and debeaked. They are transported to a broiler farm, which I described in the previous section.

At the appropriate point, the birds are then caught: pullets are moved to a hen farm and broilers are transported to the local BBC slaughterhouse to be killed and processed. Once the chickens are stunned, killed, de-feathered and eviscerated they are either sold to a chicken broker who sells them to other retail and wholesale outlets, or the

chicken meat is further processed into chicken nuggets, sandwich patties, pre-cooked breast meat strips, or other items and then distributed and sold.

Flows On, Off and Around the Farm:

There are a number of material, managerial, and political flows that circulate through and around the industrialized contract broiler farm. I don't wish to get into a highly detailed discussion about this, as theoretical discussions of these flows and their meanings and impacts are discussed throughout the next three chapters. However, it is worth briefly discussing in the methods section to get a sense of the scope and scale of what the farmer has to manage to successfully run their farm business.

First are the materials that are necessary for the smooth functioning of the poultry operation: chicken feed, water, shavings, medication, and electricity, generators, and heating and cooling equipment. The proper flow of all these materials are mostly managed by the farmer, even if the items (feed, medication, shavings) are provided by BBC. Farmers will have to advocate for themselves if BBC fails to provide in puts in a timely manner, or if they are of poor quality, such as the feed.

Next are managerial flows, both of BBC employees and their contracted representatives, and folks hired and managed by Steve and Eric. BBC employees include the service representatives who supervise and provide technical guidance throughout the grow out period, BBC veterinarian staff who come to the farm on an as needed basis or as implicit punishment, feed delivery drivers, and sometimes higher-level managers at the branch level. Contracted workers that BBC might hire to execute certain parts of the supply chain are contracted truck drivers who deliver feed or chicks, an outsourced vaccination service who works the pullets, the catch crew, and drivers who deliver

shavings for the houses. Folks hired by Eric and Steve, who they must manage, sometimes to their frustration, include construction crews to upgrade or repair built infrastructure, insurance adjusters, bankers who provide investment capital, hired help for the chicken operations, fuel delivery drivers, and equipment repair workers. Outside of these three categories, there are also government and political actors who sometimes demand the farmer's attention, mainly lobbyists and representatives of agricultural advocacy organizations like the Farm Bureau or the Arkansas Poultry Federation, or government regulators such as the NCRS.

Ethnography, the Body, and Data Collection:

Ethnography is an interesting research method because it uses the body of the researcher as a data collection instrument. The body becomes an object that is supposed to measure an objective truth, like a thermometer or a voice recorder. But human subjectivity and reflexivity make this much more complicated than running a t-test or doing content analysis. Using my body in this way gave me another source of data on this project, something I hadn't quite considered until I was actually doing the work.

Learning to stay safe and comfortable on the farm was my first task. This was important so that I could focus on doing the best ethnographic work and not be a liability for Steve and Eric. Given that agricultural work is one of the deadliest occupations in the United States, this was not an unimportant task. During the second day of field work I: "Cut my back on a nipple from the water line, didn't say anything to Eric about it. It tore a hole in my shirt on my back and I bled a little bit but it was more of a long scratch than a deep cut. I was embarrassed that I hadn't been more careful". Another time I cut my arm which came to the attention of Steve and Eric:

Steve noticed the big cut on my right arm and asked me how I got it. I told him I didn't know, and Eric said he thought it might have been on a cable. I remember yesterday Eric laughingly told Steve about me hitting my head on a heater and almost falling down on rebar. I was a lot more careful today and I didn't cut myself or hit my head on anything. They were intrigued about my arm cuts, we talked about them for a few minutes. I told them I cleaned them out and that I wasn't concerned about it. At another point in the day Steve said he didn't want me to get hurt, so maybe this is why they were concerned.

As I spent more time on the farm I learned how to avoid injuring myself, but I also did not engage in many tasks with the heavy machinery, or that required climbing a ladder or dealing with live electricity. I usually didn't do these kinds of tasks since I was a novice, and Steve or Eric would be able to perform them more efficiently and safely. There was usually something else I could do to help them with the task at hand, or to finish up our rounds in the house, which I would do instead to speed the work along.

Becoming accustomed to so many chickens took a long time to adjust to.

Although I have my field notes and recollections to draw upon I don't know if my words can adequately convey the sensory experience of the scale of the industrial-livestock operation. I can say "Try to imagine 36,000 chickens in one room, and yourself in it" but unless you've ever been around at least 1,000 chickens, how could you? When I first began the field work I would have auditory hallucinations of the sounds of the birds in the houses which kept me up at night. I also had dreams about the chickens periodically where being around them would cause some change in my embodiment, like making me menstruate early or falling down and being covered in them. Below I've included some

excerpts from my fieldnotes in an attempt to accurately share what I experienced:

Because the house was dark all I could see were the birds swarming around my feet and I felt terrified. They squawked loudly and without stopping, it was a humming rhythm punctuated by low squawks. Because the house was dark and I had a headlamp on, the birds swarmed toward my light. The smell of ammonia and waste was heavier and thicker in this house than the houses I entered yesterday; I was surrounded by chickens and could barely breathe....

Today my impression of the chickens being fed was stupefying. How can I describe it? It was overwhelming to my senses. The chickens are loud; I can hear the sound in my head as I'm typing these notes. As soon as we walked into the house the cacophony of chicken clucking seemed to vibrate my entire inner ear. It's not that the chickens are that loud; they aren't. I can talk to Eric over the sound of the chickens. It's that the sound is so dense. Since the chickens are bigger, they occupy a larger square footage on the house and they produce louder clucks. It feels like a sea of sound. Not only are the chickens loud, they are also physically dense and they crowded all around me as I walked through the houses today. They would stand on my boots and walk on feet and in between my legs, like a cat. They were kind of piling up around the parts of the feed lines close to the hoppers. Chickens were standing on top of chickens, with the top chickens picking out of the chain feeder and the bottom chickens eating the feed that spilled on the ground. The chickens felt so strange as they walked on my feet and swarmed my ankles. They felt soft and warm; they felt very fluid. I accidentally stepped on a couple of chicken's feet and they would squawk loudly at me, as if I meant to hurt them....

When we walked into the house they swarmed at my feet, more so than usual it seemed, and for the first time the swarming made me afraid and anxious. The sensation of them crowding my feet, to where I couldn't move, and feeling their feathers and faces rub against my bare lower legs was almost too much to handle. I couldn't believe that I wore shorts in the chicken houses; I thought to myself that I'd almost rather wear pants even though it's the middle of the summer. I thought of the movie "The Birds" and I laughed to myself, which helped to assuage some of the pain. I put my left hand against the wall and guided myself toward the middle of the house with my red light...

In addition to becoming accustomed to the sheer volume of the birds, I also had to make peace with the overwhelming smell of the chicken houses. This note from my first week of field work illustrates my initial reaction:

As I am writing these notes I smell the houses on me, I can't get away from the smell. It permeates everything: my skin, my clothes, my nostrils, my lungs, the car, my shoes, my socks, my hands, my hair, my ears. Everything. I can't stop smelling it. The smell is seared into my mind and my senses and I don't know if I will ever forget what it is. My lungs feel heavy, like my breathing is impaired after being in the houses for the last three days. My stomach turns if I think about the smell for too long, even if I can't actually smell it at that moment. I get faint whiffs: is it my hands? My vest? I can feel the ammonia burning my nose and eyes. I want to vacuum out my respiratory system. Throughout the day I kept coughing up phlegm in the houses but I didn't want to spit it on the floor and risk getting the chickens sick. It was SO FUCKING GROSS to have to swallow it. Thinking about it literally makes me nauseous....

Smell was not only something to endure on the farm, but it was also a useful tool to determine if there was something wrong with the birds or the pellet stoves, like this excerpt illustrates: "As we come in Steve tells Eric that the stoves on 1 and 2 aren't set up right because they are rattling. They smell funny to me." I was never able to master the use of smell to assess the chicken's state of being, but Steve and Eric relied on this sensory knowledge often. One afternoon I wrote in my notes: "At one of the broiler houses Eric said it smelled good—yuck!!" The next day I couldn't get this out of my mind, so I followed up with Eric about it: "I told Eric that it tickled me yesterday when he and Steve were saying that the houses smelled good, Eric said by smelling good he means smelling "correct"".

As the field work went on I became less sensitive to the smell, but at no point did I ever stop noticing it completely. Because I did my field work from summer to fall, the smell became even more intense as the seasons changed from warmer to cooler. As temperatures dropped the houses required more heat and less ventilation. Even in December, nearing the end of my field work I was still bothered by the smell as this excerpt attests: "The doghouse smells terrible, these big birds smell awful when they are dead. For some reason the smell is really getting to me today and it's all I can think about, the big, decaying birds in the buckets".

Perhaps I'm naïve or green for subjecting my personal experience of being in the field site to analysis. I certainly understand why cultural anthropologists don't do it.

However, the physical and material experience of being on a factory farm, particularly a confined animal feeding operation (CAFO), is of interest to many scholars and theorists who focus on contemporary livestock agriculture, especially because so few outsiders are

given this kind of unrestricted access. Being in the chicken houses, seeing, smelling and feeling the animals, breathing in the thick particulate-laden air, touching and carrying dead and injured birds, and becoming covered in the thick filth that coats every surface when 36,000 animals are in one place where their excrement accumulates below their paws is an important part of the farmer's labor process. The consistent physical experience of the work site was essential for understanding the labor process, which is only possible through the ethnographic method. Even though my reactions and written recollections to it are mine alone, I'm not the only person whose spent that kind of time in these spaces: the farmers, the hired hands, the catch and vaccine crews, the service reps, the chickens, the rats, the darkling beetles, and so on: they all experience it too. And unlike them, I got to walk away.

Farming is gross, no matter what the crop or animal is, whether it's a small or big operation. While animals are more disgusting than plants, there's nothing clean about raising crops and livestock. The fact that the phrase "clean food" is used in earnest as a marketing tool shows how out of touch most of us are with how our food is produced. Plants and animals get infestations, create metabolic waste, decay, smell bad, become gooey and repulsive. There's no avoiding it the second law of thermodynamics. The production of food on a massive, concentrated scale relieves many of us from the obligation to farm for our survival but this privilege is a double edged sword because we lack perspective.

To protect myself the best I could from the particulates in the chicken houses, I wore a paper mask with the most advanced filter on a disposable mask, the 3M 8233 N100 Particulate Respirator. I spoke with someone at 3-M about getting an appropriate

mask to protect from ammonia, which is present in the houses from the chicken urine. They told me that in order to filter the ammonia I would have to get a rubber mask with two large round replaceable filters. There was no way I was going to draw this kind of attention to myself, especially since Steve and Eric didn't wear masks at all, so I took the risk of exposure and wore the best paper mask on the market.

On the farm I had a uniform: a t-shirt, a dark red University of Arkansas

Razorbacks baseball hat, overalls, and ankle high Keen hiking boots with hiking socks. In
the summer I wore denim overalls that my aunt had hemmed to shorts length (très
fashionable) and when it got colder I wore brown pant length Carharts and a fleece hiking
jacket. I wore the same overalls every day and would put it in the wash immediately
when I got home (double soap and cold water—hot water would set the smell in the
fabric). I wore the same basic outfit every day for several reasons. First, my clothes
smelled so bad after each day that I didn't want a pile of dirty clothes to sit in the house,
so my farm clothes were going to be washed every day no matter what. Second, practical
overalls are not inexpensive. I had a limited field work budget and didn't want to too
much money on clothing when I had to pay for gas to get to and from the field site, plus
living expenses while in the field. Third, wearing the same thing every day meant
controlling that variable, and since my presence in the field was marked as a womanoutsider, I thought it best to keep it simple and consistent in my outer appearance.

I would be remiss to not discuss how being a woman doing ethnography in a male-dominated occupation impacted the research project. To some extent I can discuss my observations and emotions on this subject, but there is no basis of comparison to a male-bodied person doing the same research in the same type of setting. For the most

part, my interpretation is that my gender was an asset in the field. Because I was not a man, my mastery and understanding of farm work, mechanics, machine repair, and the like was not taken for a given, or something that I could be judged for in regards to the competent performance of my gender. My ignorance was taken for a given, which in this situation was helpful. This assumed ignorance allowed me to ask questions and to not participate in labor activities if I chose so.

However, being a female-bodied person certainly made me stick out, especially when Steve, Eric, and I were interacting with people from outside the farm. My presence would have to be explained, I could not simply hide in the background as an assumed farm hand. Sometimes Steve and Eric would introduce me as their friend, as a friend of a friend, their assistant, their friend who is studying the poultry industry, their friend who is writing a doctoral thesis on "the Big Bird Chicken Corporation", and my favorite which is someone who is "getting her PhD which stands for 'Poultry House Director'".

Sometimes I didn't feel like having to be explained and would stay in the chicken house or the truck, like one time when Steve and I went to the bank: "When we got there Steve went inside to get the check and I waited in the truck. Sometimes it's easier to not have to explain myself and in some way, I think Steve agrees."

What was most interesting about being a female-bodied person in this research setting was the suspicion I was treated with by other women. There were two instances during the field work where I felt afraid for my physical safety, and in both it was when I was confronted by angry women. The first time was when I was working on the broiler farm without Steve and Eric, and with their hired hand Mateo. This was the first day that I was staying on the broiler farm exclusively so that I could observe Mateo's labor

process. Mateo had agreed to participate in the research the day before, and had spent time with me over the prior 2 months when I would come to the farm with Steve and Eric. Mateo and I were finishing walking the broiler houses for dead when I saw his wife Linda walk towards us carrying their baby on her hip. The following field note excerpt tells the rest of the story:

We come out of the house and Linda walked toward us with her baby on her hip. I wave at her as she walks up the driveway but I can quickly sense by the look on her face and the rhythm of her walk that she is not happy. She walks up to me and says, "I don't like women hanging around my husband." I said that I am working, that I am not a threat. I try to diffuse the situation by talking about the baby, and I ask how old it is. She growls at Mateo, "How old is your daughter?" I try to explain to her that I've been out at the farm for a while and that I have a boyfriend but I eventually give up and I go sit in the shade by a feed hopper while they fight. They finally quit arguing and I say that I should probably just leave for the day. By this point I am terrified for my physical safety and also embarrassed to have been perceived as a sexual threat, which is a real faux pas in polite southern society. Mateo asks me if I want a ride in the truck but then Linda says there is no room for her in the truck so I offer to just walk. I get in my car and drive away, and I drive straight to Steve's. I am almost in tears at this point but I am just trying to keep my composure. When I got to the pullet farm Steve was looking at purple sheets. I told him that I got kicked off a farm and he asked me whose farm and I exclaimed his! He was pretty upset but I told him it was ok. Steve said it's not Linda's farm and he will take care of it. I tried to stress that it was Linda who did this and that Mateo had stood up for me and was really nice.

The next day Steve updated me with how he handled the situation: "Steve said he went to talk to Linda yesterday evening. He told Linda that his wife works with men, his daughter- in-law with men, his daughter with men, and his son-in-law with women, his son with women, and he works with women too and it's not her farm. He will kick her off the farm if she does it again, but Mateo can keep his job. Mateo is an employee and he is to interact with farm visitors, not her. Steve said if she is insecure in her relationship then that is her problem. Steve said he told her all this and then he needed her to say she understood or that she didn't have anything to say. She didn't say anything and he said "I need a fuckin' answer." and that was the only time he cussed. Finally, Linda said, "I have nothing to say." Steve was satisfied with this. I told Steve that I was really embarrassed and he said if it was ok with me that we would forget this and never talk about it again. I agreed with him, but I am having such a hard time. I feel incredibly ashamed."

The second time something like this happened was when I went at night to interview the owner of a hen farm. I was introduced to him by Leroy, his nephew and a hired hand on the broiler farm. Leroy took me that morning to meet his uncle, and he agreed to let me interview him that night. When I arrived at his home his girlfriend greeted me angrily and told me to never come back there again. When I suggested that I leave, the hen farmer insisted that I stay, and she sat and took notes while I conducted the interview. Because I was far outside of town at this man's home without cell service, I felt very, very afraid for my safety. That morning when I visited his farm I noticed a swastika drawn in dust on the back of a car window, so I was already nervous and I should have listened to my instincts. This experience left me shaken and I didn't conduct any more farmer interviews after that. Even now when I think about it, or listen to the

fear in my voice on that recorded interview, tears well up in my eyes and I'm afraid all over again. When I told an employee at one of my archival sites about this experience they laughed at me and said that I should have known better, and then offered me the use of a conference room space there should I want to conduct more interviews. I appreciated this offer but was taken aback at being blamed for my own victimization when I was just doing my job. Warren and Karner (2005) state in their qualitative methods textbook that women will most likely have to deal with threats of sexual assault, and men with threats of physical altercations during their field work, but this was not the case for me. What I find interesting is that it was women, and not men, who made me feel physically threatened. Since my presence made them feel intimidated.

My presence as a young woman with Steve and Eric, a woman who was not their wife or daughter, was also notable to folks in the community. One afternoon in the fall I was working with Eric and "he said that someone told his wife Maggie that he was having lunch with some woman. Eric laughed about this and said if he was going to do that he wouldn't go to the local diner". Steve told me that a few years earlier a cousin of his, a woman, had visited him in Sellerville and they had dinner at that very same diner, and someone had called his wife Shelley he was having an affair. In another rare instance where my gender was made explicit, Eric and I were talking with their heater salesman who remarked that I "was good looking and without missing a beat Eric said his wife didn't care. I don't know what to make of this interaction, I thought Eric had a pretty good comeback."

Sometimes men would hit on me when I was alone or with Steve and Eric in my dirty work clothes, which Steve attributed to the fact that I was working, and thus had

money to spend on a potential beau. Besides that, and the few instances I describe above, I was mostly left alone in terms of interaction or harassment relating to my gender and sexuality. However, this did not stop me from feeling self-conscious about it. I was an unmarried woman spending my days with two married men who weren't my husbands or relatives in a socially conservative rural southern town, doing a job that women typically didn't do. Despite being white like most of the people I interacted with, wearing appropriate (and non-sexually suggestive) work clothes, being born in Arkansas and having social ties there, I would always would be an outsider.

Reflections on a Method:

Ethnography also tells us something about ourselves—what we value, what we notice, what matters, what doesn't, and where our discomfort lies. It is a mirror, a reflection, yet a distortion at the same time. A funny observation from my notes is the detailed daily accounts of what Steve, Eric, and I ate. At the time I thought I might want to reflect on our interaction with the broader food system, but this information is useless, by my estimation, after coding the notes. Does it actually matter that Steve prefers white gravy and that Eric and Steve get their hash browns the same way at Waffle House? I think the more important conclusion that can be drawn is that I am obsessed with food. Perhaps this information will be useful to a food historian in a few hundred years, but for now it makes my husband and I laugh.

Further reflection of my field notes reveals what was important to me in making them: accuracy, detail, and the relationships between people in the field. Because I did not tape record, and wrote my notes after the workday was over, the notes don't include many verbatim quotes (although there are some that were important so I scribbled them

as quickly as I could). It amazes me to read other ethnographies, like Pachariat (2003), that have a significant amount of dialogue. I don't doubt these researchers were able to adequately capture that detail, I'm just disappointed that I was not able to do that. When typing my notes from jottings, if I wasn't 100% certain of something I didn't write about it. In these instances, I was able to ask Steve and Eric follow up questions about it the next day to ensure the accuracy of my notes.

I also reflected on what was important to Steve and Eric so that I would capture those things in my notes. The two things that came to the fore were conflict and the details of the labor process. In an earlier section of this chapter I describe the various flows on the farm, and the relationships that Steve and Eric must navigate in order to get what they need to successfully maintain their agricultural operation. These relationships are rife with conflict, which then is used to create broader interpretative meanings and schemata that Steve and Eric use to make sense of their social worlds. These will be discussed throughout the following chapters. There were many instances where Steve in particular asked me to look over my prior notes for evidence to use in navigating conflict, like some kind of court stenographer. For instance, he'd want to know what day did so-and-so say they'd do something or bring something by, or what did the service representative tell them to do last week?

Steve and Eric also had conflicts between each other, on an almost daily basis, most of which is attributable to the frustrations from continuously malfunctioning equipment, like the rusted over chain feeders or the water lines that always seemed to spring a leak when the replacement nipples were in the truck at the other farm. They seemed to trade off being in a bad mood like an old married couple, but they always

resolved their conflicts quickly which was a relief to me. I'll deconstruct how these seemingly insignificant conflicts actually serve an important function in the labor process in the last chapter. Regardless, I've got to give it to them: I can't imagine running a business with my parents, even though I love them so much.

Details of the labor process were also important to them: how certain mechanical problems were addressed, when they fed which house and how much, when the feed and pellets were delivered, who did what, and when did they do it. Overall, conflict between workers on the broiler farm, Steve, Eric, and everyone else they had to interact with, became a contest which reinforced everyone's lack of power. This was a contest of who worked the hardest, a contest in which each person could usually declare themselves as the rightful winner. Ironically, the ultimate goal was to "take it easy", which was to not do anything at all, but if others were perceived to be taking it easy this could be used to justify their moral inferiority. This will be discussed in much greater detail in chapter 5, when I examine the games played at work.

Methodological Limitations:

There are certainly methodological limitations to a study like this one. This study isn't a representative sample, it is a sample of one, and a self-selected sample at that.

There is obviously something remarkable about Steve and Eric, since they not only agreed to interviews (unlike most farmers) but also let me conduct field work for 6 months on their farms. My jottings and field notes are incomplete accounts since I was unable to perfectly capture every single interaction in exact detail. I couldn't take photos, audio recordings, or video.

This study would likely be impossible to replicate, but the findings can be judged as valid by other broiler farmers and workers in the industry for my accurate depiction of the day-to-day activities of running this type of farm. Another limitation is that I would have preferred to be in the field for longer, like Stuart (2016) who managed 3 years of field work in Los Angeles' skid row, but he was able to do this because at the time he was a PhD student at UCLA. Commuting from Oregon to Arkansas on a daily basis is impossible without a private jet and unlimited budget, both of which I am sorely lacking.

Perhaps the biggest limitation to this study is how attached I became to the field site and to Steve and Eric, especially Steve. I am the same age as Steve's daughter, and he came to think of me as another daughter very quickly. We would end our phone calls with "I love you" and he would always give me a big hug when I left the farm for the day, warning me to be careful because it was "crazy out there". When my time at the farm was nearing the end, I would cry myself to sleep knowing I was going to have to leave. Triangulating my field notes with my other sources, and taking a break from working with the data after leaving the field I believe has helped me to "take a step back" from it all. I did not take out any parts of the notes that would potentially be embarrassing to anyone, including myself. In the next few chapters as I delve into this data, my work should demonstrate my commitment to accuracy over flattery.

CHAPTER IV

MANAGEMENT

"The essence, then, of contract farming is control" (Davis 1980: 144)

"(Big Bird Chicken) took all the fun out of poultry farming." – Steve

In this chapter I will describe and interrogate the role of the integrating firm and management on the contract chicken farm. The central research question of this chapter is: how does BBC control farmer's labor and the use of the farmer's investments without a clear management-worker hierarchy, since contract broiler farmers are not BBC employees? To answers this question, I will first discuss the role of contracting in agriculture and the history of this organizational form, revealing contracting's roots in the very cause of southern impoverishment.

Then, I will compare some broiler contracts: a contract from 1953 between farmer Henry Balloun of Dardanelle, Arkansas, with Arkansas Valley Feed Mill Incorporated and a Tyson Foods broiler contract from 1981, both of which I found at the Shiloh Museum. I will be contrasting these contracts with Steve and Eric's pullet contract with Big Bird Chicken. This comparison will reveal how the contract has eroded farmer autonomy over time while increasing farmer's responsibility and investments and the degree of control integrators have over contract broiler farms.

Following this discussion, I will analyze the similarities between contract farming and outsourcing more generally, illustrating how contract farming is yet another tool to reduce worker security, compensation, and dignity while allowing firms to maximize the surplus value they are able to secure from labor power without the traditional obligations of the employee-employer contract.

From there I will detail the organizational structure of BBC both at the corporate and local branch level and the relationships Steve and Eric have with their service representatives, who are the clearest personification of BBC authority during the day-to-day maintenance of the farm. Finally, this chapter will conclude with an overarching discussion of how the research question is answered using evidence from the chapter. *The History and Function of Contracting:*

Recall that women were the early pioneers of "tending, raising, and nurturing" chickens, developing husbandry techniques through trial and error in collaboration with local Home Demonstration clubs (Gray 2014: 24). Despite laying the foundation for the commercialization of broilers, the introduction of contracts is what forced women out of the poultry business. Credit was denied to women, and they could not finance the newest technology and housing required for contracts, despite their labor remaining indispensable for the success of broiler farming (Gray 2017; Jones 2002). Men thus became the decision makers when it came to "growing broilers" (Gray 2014: 24).

African Americans were also denied the opportunity to participate in contract broiler farming in the Southeast. They were encouraged by the USDA to only raise yard flocks, which eventually were too small to be competitive with contract grow-out operations. In addition, Cooperative Extension service programming was racially segregated in the Jim Crow south: "Negro" demonstration agents were funded with less money and for fewer years overall compared to Cooperative Extension and Home Demonstration programs in Arkansas. Furthermore, southern African Americans were taught broiler curriculum by Negro Demonstration agents that was the same as white

school children in 4-H (Gisolfi 2017: 3). Given this history, it's no surprise that the vast majority of contract broiler farmers are white men today according to the USDA.

Despite intersectional privileges of gender, whiteness, and land ownership shaping the population of contract broiler farmers, their power was eventually eroded by the asymmetrical power relations embedded in the grow out contract, just like sharecroppers were in the not-so-distant past (Constance 2008). Contract growers faced, and continue to face, the same problems sharecroppers did: lack of control over and access to bookkeeping, onerous close supervision, falsified accounts, inaccurate wages, insurmountable debt loads, as well as being forbidden to have their own bird scales on the farm. Without the ability to weigh crops or livestock on their farm, sharecroppers and contract broiler farmers are reliant on the landlord or integrator to accurately weigh their crops or livestock, when it's in their interest to undercount since the farmer compensation is based on weight. Furthermore, there is a significant power imbalance because growers take on debt to finance grow out facilities, farmers have unequal bargaining power when individually negotiating with integrators, and they often end up working off the farm to keep their families and businesses solvent (Constance 2008; Heffernan 1984; Kirby 1987; Mooney 1983).

Overall the pattern in the southeast is that men took over for women in poultry farming, wealthier processors then overtook smaller poultry firms during the wave of horizontal integration in the middle of the twentieth century, which then combined with the credit system to begin overpowering farmers (Gray 2014: 40). As Jones (2006: 104) states, "Women's loss of autonomy prefigured the erosion of the independence that their

men folks, in turn, would experience when they began growing broilers on contract with corporations(s)."

It's nearly impossible to produce broiler chickens independently on a large scale today. Currently just 4 companies (Tyson Foods, Pilgrim's Pride, Sanderson Farms, and Perdue Farms) produce 51% of the chicken weight based on ready-to-cook pounds and 97% of US chickens are raised under contract (Nargi 2017; Tyson Foods 2017). The lack of independent auctions, which I discussed earlier, further fuels this trend, combined with the fact that there are no futures market for broilers or any farmed poultry (chickens, ducks, turkeys, etc). The only livestock futures markets in the United States are for cattle (live weight, cut weight, and dairy), and lean hogs (CME Group 2018). There are a few independent poultry growers, like Joel Salatin, profiled in Michael Pollan's (2006) best seller "The Omnivores Dilemma", but even Joel has difficulty with his broiler operation because he cannot find a USDA inspected slaughterhouse for his chickens. The costs associated with USDA compliance are so high, and the regulations so onerous, that small abattoirs can't compete in this regulatory environment.

Comparing Contracts Across Time:

I was lucky to find two broiler contracts in the archives of the Shiloh Museum of Ozark History in Springdale, AR. A comparison of these contracts reveals how the industry has changed over time, especially in regards to what contract broiler farmers agree to do. In this section I will compare three contracts: a 1951 contract between Henry Ballon and Arkansas Valley Feed Mill, an unsigned 1981 broiler contract from Tyson Foods, and Steve and Eric's current pullet contract from Big Bird Chicken.

The 1957 broiler contract is between Henry Ballon of Dardanelle, Arkansas, which is located in the Arkansas River Valley, and the Arkansas Valley Feed Mill (AVFM), which I found at the Shiloh Museum of Ozark History. Contracts between feed dealers or hatcheries were more common at this time: from 1935 to 1955 feed was 70-95% of the cost of producing chickens (Gisolfi 2017: 15). However, feed companies began getting out of the chicken business in the 1960s because of volatile price swings in the market (Boyd and Watts 1997: 201; Constance 2008: 19). This one-page, double spaced contract is for 1 year and only applies to Mr. Ballon's 3 houses in town. It is for 4 broods (i.e. flocks), totaling approximately 13,000 birds per flock for birds "of average quality with average weight". The contract specifies that AVFM will pick up the birds and determine their value, and that Mr. Ballon will furnish buildings, equipment, repair, maintenance, and care and labor on the flock. In the contract it states "The grower will furnish" and "The Arkansas Valley Feed Mill Inc., will furnish" and then there are 2 lines of blank space beside each one. This is so that the contract can be written to specify what each party will provide on a case-by-case basis. AVFM agrees to provide to Mr. Ballon: feed, medicine, litter, gas, electricity, and water. Mr. Ballon's pay is specified in the contract at \$65 per week and 50% of the profit above all expenses, including labor and AVFM is receives the other 50% of the profit. The contract is signed by Mr. Ballon and someone else whose name and position at AVFM is not listed.

The unsigned 1981 Tyson Broiler Grower contract is, by comparison, much more detailed and onerous for the farmer than Mr. Ballon's from just 24 years prior. The 1981 Tyson contract is 3 single-spaced pages. It specifies that Tyson (the "supplier") will provide chickens and feed, but gas, water, and electricity are now the "grower's"

responsibility. What else is new is the integrator's provision of "technical assistance". Gisolfi (2017: 54) documents the emergence of "technical assistance" in Upland Georgia in the 1950s as another avenue of eroding farmer's control. She states, "Upcountry farmers struggled to follow integrators' order, which often seemed unreasonable to those who had spent their lives on farms. Integrator demands struck Sanford Byers as exorbitant. "We have done spent our days in this chicken business," Byers remarked, adding that he knew better than the integrators."

While Tyson agreed to provide chickens, food, and technical assistance, the grower now had a longer list of requirements: houses, equipment, utilities, labor, houses that can accommodate a 60-foot-tall mechanical loader, and roads into the farm and around chicken houses that would accommodate tractor trailers. Should a grower fail to do this, they would be contractually obligated to "pay all tow charges incurred by Supplier due to inadequate roads". Furthermore, the contract stipulates that growers agree "to follow recommended management practices as outlined to him by a qualified representative of the supplier until said poultry is sold", but the contract does not specify what minimum qualifications said representative must possess. The grower also agrees to lift all the house equipment prior to, and to be present during, flock pickup.

In addition to these demands, the grower consents to granting Tyson access to their farm at any time. Also, only the company will market and weight the birds. They also commit to exclusively use company-provided feed, medication, herbicides, and insecticides. Should there be flock death for any reason: "fire, epidemic, or disease, or other unavoidable casualty" the contract is immediately terminated and the farmer will receive no pay for the flock. Furthermore, the contract can be "mutually" terminated at

any time, echoing Georgia broiler pioneer Jesse Jewell who, according to Gisolfi (2017: 49), claimed that farmers "were free to leave broiler growing anytime...Of course, this was not the case...Growers and their families were free to work or free to starve."

Payment details are also presented in the contract. Now, instead of getting a weekly paycheck and splitting the profit, contractee remuneration is determined by an unspecified wonky formula that can only be approximately deduced from this document, which I will attempt to succinctly parse. First, birds are divided into 3 weight classes, and growers are grouped with other flocks in their weight class that are caught and slaughtered the week of their pickup. From this grouping, an average cost for producing the flocks is calculated, minus the most and least costly flocks for the week. Base pay is then determined by adding 60% of the difference for growers under average, and deducting 60% for growers above average cost. There is a payment floor but no ceiling, and the minimum pay by weight is listed in the contract. On top of this, growers are charged a dime per chick, a dime per pound of feed by the hundredweight bag, "medication at cost" and they are docked for condemned weight unless the condemnation is a "plant error". Finally, growers receive a gas allowance based on flock placement size, with higher gas allowances in the winter months. Tyson agrees to pay growers within 10 working days following the week their chickens are slaughtered, which technically means that if a flock is slaughtered on a Monday, the farmer could be paid as late as 18 days later.

After acquiescing to these onerous demands, agreeing to forego compensation and accept job loss in the case of a freak accident, and settling for an opaque pay formula with no opportunity for independent audit for accuracy, the grower must then accept one

more insult: that "he understands that he is an independent Grower and not an employee of Supplier"; these contracts do not refer to Tyson as the buyer since they maintain ownership of the live birds throughout the growout process. Instead of buying birds from farmers, they supply them to be grown, and then maintain possession again. The contract then has blank spaces for the grower's signature, address, social security number, and phone number. This contract is co-signed by the "Serviceman", who provides their work and home phone numbers, despite the fact that the contract is between the grower and Tyson Foods. The contract does not have space for a notary seal or a signature by an attorney.

As the descriptions of these two contracts illustrate, in the span of less than 3 decades, contract broiler farmers lost a great deal of autonomy, pay, and material support. In comparison, there has not been much change in chicken contracts during the three decades between the 1981 Tyson contract and Steve and Eric's pullet contract with BBC from the mid 2010s. Like the 1981 contract, the farmer (now "producer") agrees to have accessible roads and to follow all house practices, which include lighting programs, feeding and watering, ventilation, and litter maintenance. The contract also lists specific requirements for water sources and flow volume, fan speeds, brooder heat capacity, insulation thickness, and specific type and spacing of lights, feeders, and drinkers, as well as other equipment requirements. This more recent contract also specifies that the producer is required to follow all applicable environmental and workplace safety laws. How convenient for BBC. Also, specific flock standards are also listed: a certain percentage of the flock must survive the grow out and the standard deviation of the flock weights must be within a certain range.

This more recent contract also anticipates producer's resistance of companymandated upgrades. Should a grower choose not to follow the rules, and the bulk of the
rules are about the houses and equipment within them, then a compliance plan will be
created in conjunction with management. If a producer refuses to cooperate they will be
given a negative rating within the branch, which will result in the termination of the
pullet contract. The contract only mentions house upgrades specifically when detailing
how a producer might go about shedding the negative rating, indicating that the bulk of
producer-integrator conflict. Overall, these more recent contracts increase mechanization
on the farm, the farmer's debt load, and the degree of control the integrating firm has
over their contractee's grow out operation.

During my fieldwork, Steve and Eric were presented a new pullet contract that would go into effect in January after I left the field which required significant upgrades to the pullet houses. From my conversations with Steve and Eric, I quickly gleaned that they perceived the upgrades as onerous. They thought that many of the new specifications were unnecessary to insure flock survival, such as new heating systems in the very unlikely chance that local temperatures dipped below 4°F, or requirements for new feeding and watering equipment when what they had was properly functioning.

Furthermore, Steve had projected that he could pay off the entire pullet operation loan with just one more year of growing flocks. Purchasing new upgrades would add years to his loan and decrease his profitability right as he was expecting it to increase. Steve estimated that in order to comply with the contract he would need to spend \$50,000 upgrading his 8-house pullet unit for only about a \$5000 a year raise. Throughout the

field work this estimate rose along Steve and Eric's ire, to \$80,000 then to \$120,00 not including the cost of labor.

At the time, I felt I was not able to independently verify these figures with the local poultry supply store or Big Bird Chicken. The conflict over the pullet house upgrades was *incredibly* heated and it was an ongoing issue throughout the fall and winter. Because there was so much animosity between Steve, Eric and BBC, I wanted remain unobtrusive in the field. My presence was already controversial and notable without snooping around outside the farm; according to Eric I was "the talk of the branch". Things got so bad that at one point Steve wanted me to help him organize a class action lawsuit for breach of contract with a handful of other local BBC farmers and also help him write a letter to the Big Bird Chicken corporate headquarters. By the end of September Steve became so stressed that he ended up in the state capital's hospital over an hour away with chest pains from skyrocketing blood pressure. I taught him how to meditate because it was the only thing I could think to do that would actually help him cope. Steve and Eric's relationship with Mike and BBC slowly unraveled as the January deadline to install the new equipment approached. Eventually, Steve and Eric ended up having their pullet contract revoked after I left the field because of their refusal to upgrade the houses. Overall, what upset Steve the most is that "The person who makes the decision doesn't come out and tell you".

Contracting and Outsourcing:

Contracting is very similar to another growing phenomenon in labor that benefits the company or corporation over workers: outsourcing. According to Davis-Blake and Broschak (2009: 322), "Outsourcing (is) the act of obtaining goods or services from

individuals or organizations outside of a firm's boundaries, when those goods or services could be created internally by a firm's own employees and managers". These authors argue that outsourcing's effects are most important for organizations, changing the nature of work on par with the industrial revolution and scientific management (2009: 322). Contract broiler farming is a type of outsourcing where a firm outsources a "portion of processes", in this case the husbandry of broiler chickens. What stands out to Davis-Blake and Broschak (2009) is how outsourced processes are managed via "written rules and agreements" and attending to information flows between the firm, and in my case, the farm.

However, I would argue that Davis-Blake and Broschak (2009) are incorrect in their assessment that the effects are more important for the firm than for the contractee. My data suggest that the effects of the contract relationship are unceasingly consequential for Steve and Eric. Integrators like BBC don't outsource chicken keeping and farm investment because contractee farmers are better at it than employees. Rather, BBC outsources because it is a strategic business decision, making labor and fixed investments flexible for the firm by transferring those responsibilities to contract farmers.

Contracting allows BBC to avoid the many risks inherent in raising animals and the ecological consequences of doing so on an industrial scale. BBC and other integrators use contracts to maximize the productivity of farm investments and inputs that they are not fiscally responsible for (Davis 1980: 143). The contract also absolves the firm of providing direct management which allows the integrator to only "pay for the product, not the labor time, and not the other associated costs of labor" (Wilson 1986: 55). Furthermore, this facilitates indirect control: "the control which contracting forces the

farmer to exercise over himself...The family farmer will force himself and the members of his family to do what the capitalist contractor cannot force his own time-wage employees to do: he will work harder and longer with little increase in pay to increase productivity and to cheapen the unit cost of his product" (Davis 1980: 143). Without managerial oversight and the protections afforded to an employee, like the right to unionize and healthcare, Davis (1980) and Mooney (1983) argue that the farmer will lengthen the working day, invest in new equipment, adopt new techniques, intensify production, and strictly monitor product quality.

However, there are some avenues for farmers to exercise autonomy under the contract arrangement, echoing Otis' (2017) findings from her ethnography of Chinese outsourced Wal Mart sales representatives. Otis (2017: 8) argues that outsourcing weakens control over these contracted sales reps, despite multiple managers with authority over them, because "can have the opposite effect by creating porousness in the system of control as responsibility for workers is diffused among supervisorial actors, often without a clear division of responsibilities or shared information". On the Wal Mart sales floor, the service reps Otis (2017: 26) observes create a culture of solidarity among their ranks, which "sustain(s) and expand(s) their own control of the service floor".

Something similar also happens on the contract broiler farm. The service representative is the clearest figure of BBC authority on the farm, yet they too are vulnerable since their livelihoods are also dependent on continued employment with BBC. While farmers have more invested in terms of their farm loans, BBC employees are also financially vulnerable since their wages support their material existence, such as home and car loans, kid's college tuitions, and their healthcare. Because Arkansas is a

right-to-work state, BBC employees can be fired without cause much in the same way that a farmer's contract can be swiftly revoked. While vulnerability to BBC is structured by the organizational position of actors in the local branch and their position in the broiler supply chain, the fear and anxiety it produces is universally felt by farmers, service reps, and other BBC employees across the organization especially because there are so few alternative employment and business opportunities in the community.

Often throughout my field work, Steve, Eric, and their service representative would gossip and commiserate about their poor treatment at the hands of Big Bird. They would agree that the feed and chick quality was subpar, that upper management was unprofessional, that everyone's pay was low and that things were better in other BBC branches. This excerpt from my field notes is a good illustration of this bonding: "They all started complaining about Big Bird Chicken. Steve told Mike the story about Eric's friend who was the branch manager in a different state. Then he got moved to Arkansas, and had told Eric that "the company will take care of it" when fuel prices went up in the winter. So Steve said he told Eric to tell the guy "the company will take care of it" when he got moved. Mike laughed about this."

This shared vulnerability, combined with the fact that service rep could not formally revoke contracts, a privilege only reserved for upper branch management, meant that the authority of the service rep was blurred. This echoes Gray's (2014: 116) finding that in the Pilgrim's Pride chicken processing plant in El Dorado, medical professionals minimized the injuries workers suffered on the line to avoid having to report them to OSHA, not out of disdain for the maimed employees but because "they work under the same fear and threat as other employees". Thus, the chicken industry is rife with a culture

of fear, sometimes turning worker against worker, and sometimes engendering solidarity across various positions within and relative to the firm.

Big Bird Chicken Organizational Structure:

Steve and Eric are contracted with the Sellerville branch of Big Bird's chicken division. This fully diversified, multi-national, publically traded corporation produces more than just chicken, they own several well-known meat brands, their employees number in the six figures, and they sell billions of dollars of animal flesh for human consumption every year both domestically and internationally. While the average consumer might think their sausage, lunch meat, and Cornish game hen are brought to market by different companies, they are most likely all subsidiaries of the 8 major firms that control the US beef, pork, and chicken markets.

BBC is organized as follows: they have a corporate home office in Chickenville (pseudonym), with various regional offices below that. I believe the regional offices are product specific, meaning that they only focus on one livestock commodity. Below the regional offices are the BBC branches. The Sellerville branch consists of upper management and office staff, a hatchery, feed mill, and processing plant, and employee truck drivers. The Sellerville hatchery also serves a few other BBC branches nearby. Sometimes the Sellerville branch will also hire truck drivers on a contract basis as needed. Upper management consists of a complex manager, a live production manager, a safety manager, and a breeder, broiler and feed mill manager, in addition to a HR manager. In addition, there is an HR staff, service representatives, and the employees and management of the slaughterhouse. A quote from Steve illustrates how information flows from corporate to the branch: "Steve began to tell me about the social organization of

information in the Big Bird Chicken corporate structure. He said the boss, who is the branch manager, gets an email from Chickenville. Then, there is a weekly meeting in the breeder department. Then, the breeder manager conveys the emails from Chickenville to the pullet and hen specialists, and those specialists then relate the information from the emails to the growers."

The "Producer" and the Service Representative:

For the most part "Steve doesn't think the service people have enough experience to tell him what to do. He talked about a young woman he knows who has a master's degree and then got 3 months of training through Big Bird and is now a service specialist. He said, "You can be smart and you can be educated, and there is a difference"." This echoes Vallas' (2001) scholarship on boundary work in paper manufacturing plant between engineers and manual workers. He finds that manual workers shore up their status in the workplace by touting the value of their local knowledge, particularly sensory, embodied knowledge that can only be earned through on-the-job experience. In contrast, higher status workers such as the college educated engineers in Vallas' plant rely on theoretical, abstract knowledge based on system processes which allow them to draw moral and cultural boundaries that define them as more open minded and hard working compared to manual workers. The result is that engineers and other higher status workers are able to secure more power and control in the work organization even though their efficacy is minimal compared to the gains resulting from improved equipment.

On the broiler farm, much of the gains in production, such as lowered feed conversion ratios, shorter grow out cycles, and higher livability, can be attributed to improved chick cross breeding and more reliable equipment in the houses rather than

service rep expertise. Like the manual workers at the paper plant, Steve and Eric consistently held their sensory, experiential knowledge of growing chickens in esteem relative to the BBC service reps and "experts", such as the branch vet. They were often asked to complete tasks they felt were unnecessary for maintaining flock health, like replacing all the cables on the feed line, repairing small light leaks, or keeping records of the house temperature at three points in the day. By refusing to do these things they could then use as evidence of their superior expertise.

Steve and Eric's overall experience with the Sellerville branch was poor, except for their relationship with Mason, their broiler service representative. Steve, Eric, and I much preferred to be around Mason, rather than Mike the pullet rep, because Mason was usually happy and would joke and regale us with tales of his hunting adventures. That man sure does love to kill animals. The main complaint about Mason is that he would adjust the settings on the house equipment without telling anyone. After Eric discovered the lights turned down in a broiler house following a visit by Mason he exclaimed "They don't know shit about making money on this end. That's the problem out here, too many people messing with stuff!"

Steve and Eric's relationship with Mike, their pullet tech, was not as positive. Mike would often waste their time complaining in his slow drawl about his job, his wife, his daughter, his truck, his lack of success fishing, and the weather in an attempt to avoid returning to the branch office. The pullet farm had the misfortune of being the closest farm to the branch office, so it was "always first, always last" on Mike's route according to Eric. Once Steve even told Mike to go park his truck behind the houses further back from the road so that he could remain undetected by other BBC employees who might

drive by. The main issue Steve and Eric had with Mike is that he wasn't very understanding of their busy schedule. He didn't take into account that they also had a broiler farm and cattle operation. For example, one morning Mike popped by as we were feeding pullets and told Steve he needed to spray some chemicals. After he left, Steve exclaimed, "What does he want me to do, feed fuckin' chickens or spray? Mike thinks everything has to be done on his time, immediately!" Sometimes Mike would call to talk about something he and Steve had discussed earlier in the day, wasting Steve's time, or he would make mistakes which would then become Steve and Eric's problem. One afternoon Mike called to remind us to fill the feed scales since the feed was being delivered late, because Mike had forgotten to place the order on time. After Steve got off the phone he muttered to me, "Your inadequate management does not dictate an emergency for me. You do more and more for less and less and less for them. Guess that's the corporate America way."

Overall, when Steve and Eric had to adjust their schedules because of the chickens, they placed the blame squarely on the service rep and did not implicate BBC for causing the inconvenience or arbitrarily demanding their time. Mike only asked them to do things that if left undone would cause him to lose his job. He only wanted Steve and Eric to do as he had to do: to follow the orders from above, even if they didn't make sense or seemed arbitrary. As a BBC employee, Mike had no internal conflicts blindly following BBC's orders, while Steve and Eric's subjectivity as independent farmers caused them to question Mike's demands and only follow orders if they could rationalize it for themselves. However, overall outcome is that the larger structural conflicts between upper corporate and branch management, and farmers and service reps is avoided. These

organizational structural inequalities become interpersonal issues instead, and those with the real power are let off the hook.

The relationship between Steve, Eric, and BBC upper management wasn't much better. Steve told me that the complex manager Evan was "a real asshole and that's why he has the job". Owen said, "the branch doesn't work with you and Evan doesn't care". Eric's assessment of Evan wasn't much better; when Eric told me about Evan giving out chicken at the high school football game he joked about taking a sleeping bag to the stadium since BBC wouldn't give them a raise and then said "Everyone said Evan was nice, but he isn't nice at all". Perhaps this is why the Sellerville branch had such a hard time hiring senior staff. Managers were often fired or demoted for petty reasons, such as bringing a supply chain discrepancy to the attention of the complex manager. There were constant shake ups of the senior branch staff while I was in the field, leading to organizational instability. It's no wonder that this organizational culture affected service representatives, some (Mike) more than others (Mason), and that this negativity also rolled downhill to the farm.

According to Larry Cole (2001), a psychologist who has written two guide books on the grower-employee relationship, the complex sends a message to the grower via their interaction with the service rep. I reflected on this claim and came to the following conclusions: Sellerville does not care about or take into consideration the chickens' or the farmer's daily routines, nor do they respect the farmer's time or expertise. Furthermore, they care more about their cash flow and the organization of personnel's farm businesses than growers who aren't employed by BBC. This was evidenced by better quality chick placement for senior managers who also owned farms compared to Steve and Eric's

chick placement. Also, while Mason would accept responsibility on the farm, Mike wouldn't, which left Steve and Eric feeling like they were on their own. The overarching message is that Steve and Eric got is the grower is not important, and this made their work unnecessarily less pleasant.

Contracting and the Control of Farmer Labor:

Big Bird Chicken, without hiring direct managers to supervise farmers, is nonetheless able to exert control over the day-to-day operation of the farm. They accomplish this control through the design of the BBC organization and the placement of its branches in rural communities where there is a docile labor force. They also wield their political power in local, state, and national politics. Furthermore, as one of the 4 major chicken firms in the United States, BBC has monopoly power in the broiler marketplace, which makes the threat of the loss of contract that much more powerful. If the contract is revoked, there are no other integrators to work with. Finally, power and authority are expressed on the farm by more mundane activities and requirements executed by the service representative.

Because BBC's authority is decentralized, Steve and Eric don't clash with the actual corporate bosses in Chickenville. Their frustrations, along with the conflict within the ranks of the branch employees, fuels inter-branch conflict between farmers and the employees. In some ways, this functions to distract the farmers and employees, or at least occupy more of their mental space, so that they do not collectively turn their ire up the supply chain to the corporate headquarters. Service reps and other local branch staff bear the brunt of the farmer's frustrations despite the fact that the authoritarian management style, which values profitability above all else, comes straight from Chickenville.

Furthermore, the isolated nature of farming generally precludes forming organizational alliances, although Steve did float the idea of coordinating a class action lawsuit against BBC for breach of contract. Historical precedent, combined with the threat of loss of contract and the lack of bargaining rights as contractors in a right-to-work state, result in few to no attempts of Arkansas contract broiler farmers to organize in a meaningful way. For instance, in Riffle's (2008: 121) history of Tyson Food's labor relationships, he documents that when growers in Scott County attempted to organize a meeting of contract poultry growers at the courthouse in 1962, "Tyson trucks lined the road...Tyson men, observing everyone who arrived for the meeting, wrote down all of the car license plate numbers. As the meeting came to order, a Tyson truck with no muffler raced its engine, intentionally drowning out the voices inside the small country courtroom".

BBC and other poultry integrators have purposely located their operations in rural places, often in Sunbelt states with right-to-work laws that sharply curtail unionization and worker collective bargaining (Boyd and Watts 1997; Constance 2008, 2009; Gray 2014). Most communities where these firms are located have few employment opportunities outside of the primary and tertiary industries associated with the broiler commodity chain. Integrators take advantage of rural people's desire to remain in the countryside, not only farmers but processing plant and branch employees as well (Gray 2014; Harrison 2012).

Additionally, integrating firms rely on their political and monopoly power to obtain worker and farmer acquiescence. The major broiler firms have consistently resisted legislation that would empower their workers and contractees, that would make

them accountable for some of the ecological harm associated with large-scale broiler husbandry, slaughter, and processing, or that would diminish some of their monopoly power through the meaningful enforcement of federal anti-trust legislation. Arkansas poultry firms in particular enjoyed a lax regulatory environment during the Clinton years, the legacy of which is still felt today (Riffle 2008).

In terms of integrator's monopoly power, years of consolidation have shrunk the number of integrating firms in rural communities. Farmers with broiler grow out facilities cannot simply grow for any integrating firm. There is a "specific spatial pattern to the vertical integration system", "production density", which is the geographic concentration necessary for the economy of scale for the firm, usually requiring that all grow out operations be located within a 25 mile radius to the feed mill, hatchery, and processing plant (Constance 2009) Thus, the concentration of these regional monopsonies combined with the spatial demands of production density make the threat contract loss even more powerful, which then drives down compensation and wages across the community (Constance et al 2013).

On the farm, power and authority are expressed in more mundane ways, but their effects are no less pernicious and disempowering for the farmer. First, service representatives can enter the farm at any time and are not required to alert the farmer to an impending visit. This panoptic-like surveillance has the effect of farmer's self-disciplining their work and remaining on the farm more often than not. For example, Leroy told me that one day he only went to Wal Mart for an hour, and during that time Mason stopped by, which made him look bad. In another instance "Steve began to discuss how they had trouble finding help they trusted. He recounted that he and Eric had

gone on a 4-day hunting trip and when they returned there was "not a feed line that would run". "Samantha, Shelley, James" and someone else were supposed to take care of the houses. Steve said he didn't think anyone ever checked a house. When they returned the motors on the feed lines wouldn't kick out. Steve said they could have lost their contract if a service man had showed up."

Despite the fact that service reps can visit the farm at any time, they tend to follow a weekly schedule and unless there are problems with the flock, they do not pay the farm a visit every day. Steve and Eric can predict what day and time Mason will visit the broiler farm based on his behavior early in the week. Mike is a little more difficult to predict since he likes to hide out on the pullet farm to avoid going to the branch office. Both Mike and Mason will tell Steve and Eric in advance if they are going on vacation or taking the holidays off, which in a sense gives them the day off too. The frequency of farm visits and the intensity of the rep's scrutiny when filling out the purple sheet is shaped by the stage in the growout cycle or the presence or absence of problems with the flock or the houses. Finally, since both the pullet and broiler farm are far off the road, Mike and Mason's trucks can be spotted on the horizon, so Steve and Eric are rarely caught off guard.

Steve and Eric will sometimes try to co-opt the authority of the service rep to serve their own purposes, like drawing their attention away from a potential problem that would warrant a write-up on the purple sheet. The most obvious thing they would do is distract the service reps with conversation, which is not difficult. Both Mason and Mike could spin yarns for hours about hunting and fishing, or complain about yet another disappointing season of Arkansas Razorback's football. Another way to co-opt the rep is

to purposely not be on the farm when they visit so that they will cut their visit short and perhaps even forget to leave the purple sheet behind. Also, both Steve and Eric would subtly inquire about how the rep's week was going, ask them when their next vacation was, and try to figure out when they could reasonably expect the next visit. When Steve and Eric knew that a rep visit was impossible for the day, they could wait to repair house equipment or relax in the house since there was no need to appear busy. In the absence of the potential experience of the surveillance authority of the rep, they too could approximate a day "off". Steve and Eric would also commiserate with Mason and Mike about problems with BBC upper management so that Mason and Mike would look out for them when big problems erupted instead of throwing them under the bus. Finally, Steve kept a commercial ice maker on his farm and a commercial dumpster that he shared with everyone, especially making a point to tell Mike and Mason that they could come get a cooler of ice anytime for their hunting and fishing trips. Steve and Eric's attempts to coopt the authority of the service rep, and subtly guide their behaviors to their benefit, were usually successful. What's notable is that in commiserating about the BBC branch staff with the service rep, Steve and Eric were able to hear the up-to-date Sellerville office gossip. This information was often useful on a business level, like knowing who got the better chick placements that week or if an enemy was likely being promoted to senior management.

Besides using the specter of the unscheduled service rep visit, and actual service rep farm visits as a management tool, BBC also deploys the threat of "animal welfare audits" to elicit seemingly unnecessary record-keeping and as a method of disciplining farmers for other problems relating to the conditions of their chicken houses. After a few

months on the farm, Mason stopped by the broiler farm one afternoon to inform Eric and I that he needed the animal welfare sheets. Later that afternoon, "I asked Steve if he planned to fill out the animal welfare sheets. He said they are just a way for the company to know where he is, when and then get him in trouble if he isn't where he needs to be at the right time. Steve left this "right place at right time" unexplained; there is no specific, correct answer to this. He said that the sheets to up to 20 weeks and that he's had the birds for 22 weeks and he can't do it if he doesn't have a sheet. He said the company eventually gets real lackadaisical about checking this kind of stuff, and so he seemed to expect that it would be phased out eventually."

The sheets list out per day two visits to each house with spaces for data on the house conditions and water flow. If we were to visit each broiler house twice a day and record this information, that effort would take at least 3 hours a day. The function of the animal welfare sheet, therefore, is to encourage the farmer's presence in houses more often. The daily mortality sheet is also a disciplinary mechanism to force farmers to walk for dead every day, self-report their performance, which is then judged by the service rep. This information can be the basis for more stringent surveillance of house conditions by the service rep, docking pay, and even the loss of a contract.

Finally, the service rep fills out a "purple sheet" during each farm visit, marking down areas to address, the feed schedule, other relevant information for the farmer's labor process and an assessment of the farmer's performance. These sheets are made on carbon paper, with a copy for the farmer, service rep and their direct supervisor. If a farmer doesn't comply with the purple sheet they can have their pay docked, their flock delivery pushed back, or even the contract revoked, even if there is cause for the farmer

to not act on these requests. One day: "Steve and I sat in the truck for awhile and talked. He told me a story about how "Big Bird Chicken doesn't understand". He said he had a cow calving, and the calf was coming out the wrong way. He had to get a chain and pull the calf out. This happened early in the morning, and at the time Big Bird Chicken said he had to feed the pullets at 7 am. Steve said the cow was worth \$1,000 and the calf worth \$300, and he had to go deal with the cow before he could feed the pullets. He said the service specialist was there at the time and kept insisting that the pullets had to be fed at 7 am, which Steve wasn't able to do that morning. Steve told the specialist, "Go ahead and write me up", and the specialist did write Steve up. Steve ended this story by saying, "Big Bird Chicken doesn't understand"".

Overall, BBC manages to execute a management strategy without relying on direct management on the contract chicken farm, instead taking advantage of political, organizational, economic, spatial, and biological characteristics of the broiler commodity chain which combine with the unique structural position of the indebted farmer who is completely reliant on the renewal of the BBC contract to maintain their farm business. This allows BBC maximize their ability to secure surplus value and generate profit from farmer's labor power and fixed investments with minimum investment in fixed costs and personnel. This creates rural communities that are disempowered to address the economic and ecological harm wright by industrialized livestock agriculture, workers and farmers unable to advocate for themselves, and the continued draining of wealth from the countryside via extractive economies just like the days of sharecropping (Constance 2009; Daniel 1981; Davis 1980; Gray 2014; Kirby 1983). Sellerville, and communities like it across the southeast become internal colonies or peripheries, which Davis (1980):

134) argues is not accidental, rather "they have been shaped and maintained through decades of dependency and exploitation".

Overall, this study of contract farming is an important contribution to the sociology of labor, especially given the proliferation of new organizational forms that facilitate the purchase of precise amounts of labor power from members of the reserve army of labor without the obligation to provide the traditional benefits of employment. Driving for Uber, becoming an adjunct professor, freelancing, or entering into a broiler growing contract share important similarities in what these jobs lack: the guarantee of a living wage, health insurance, predictable schedules, and the opportunity to work a fulltime work week. How do avenues for exploitation and resistance vary across different types of subcontracting jobs? Are there any consistent mechanisms across organizations, occupations, and different types of subcontracting that could be a universal lever to effectively organize for more autonomy and power in these already fragmented workplaces? Furthermore, how does management function when power relations are ambiguous in the contracting-contractee relationship? As this chapter demonstrates, BBC as the subcontracting organization engages in very little direct coercive control in managing the labor process of the contract farmer. Instead, they are able to exploit the unique characteristics that make this rural southern community and its citizens reliant on the branch for their livelihood

CHAPTER V

DESKILLING AND THE WORK OF CHICKEN FARMING

"Honey, it's just corporate America, that's all I can say."—Steve

In this chapter, I will analyze the practice of contract farming broiler chickens under monopoly conditions using the Braverman Theory of the Degradation to Work Under Capitalism to make sense of the labor process broiler farmers execute as they raise their flocks. First, I will explore contract farming in the context of southern labor and agricultural history. Then I will discuss the history of cultural narratives regarding that farmer's skill levels or lack thereof, demonstrating, that stereotypes of farmer ignorance persist today. This will be followed by an exploration of the broiler farmer's class position in web of production, and I will argue that labor process theory, which has traditionally been used in studies of unionized, industrial workplaces is an appropriate theoretical tool for this case study. Then, I will present evidence showing how the labor process of contract broiler farming is degraded and deskilled, contextualizing my findings in the literature. Finally, I will explain how BBC benefits from the deskilling of contract farmers and the reasons why farmers accept the degradation for their work.

Caught in the Middle:

In many ways, we can only make sense of something through understanding its relationship to other things, and the contemporary contract broiler farmer is no exception. There is a distinct American myth of the lone farmer, the penultimate independent producer, a bulwark against urbanization and capitalism, whose hard work coupled with ingenuity make or break his business: his business alone (Kimmel 2011). But American agriculture has never been like this, not in the past and certainly not now (Fitzgerald

2003; Kirby 1983). For broiler farmers, whose operations are capital intensive, whose labor arrangements are derived from southern sharecropping, and whose class positions are anything but straightforward, an understanding of their relative position is essential.

Broiler farmers are only one small component of an increasingly "tightly coordinated and institutionally dense commodity system" that is rapidly globalizing (Constance 2008: 19). Despite their relatively small presence overall in the broiler supply chain, the labor and output of the broiler farmer affects and is effected by all parts of this productive network (Boyd and Watts 1997). At BBC there are over 30 company employees for each contract broiler farmer. BBC oversees the breeding and hatching of broilers, feed mills, processing and further processing plants, flock servicing, live production and consumer product research, marketing, domestic and export sales, as well as business operations geared toward day-to-day organizational maintenance and business expansion. Outside of inter-firm activities, BBC must also coordinate purchasing and delivery of parent flock stock from outside breeding companies (chicks raised on a pullet farm), rendering, outsourced flock maintenance such as pullet vaccination, incorporating technological innovation (equipment, biotechnology, breeding, Extension, etc.), as well as managing important political relationships on the local, state, and federal levels which ensure the continued successful functioning of the firm. Thus, from the perspective of BBC, the contract broiler farmer occupies a small niche relative to the entire organization.

On the other hand, from the perspective of the farmer, *all* of the BBC operations described above have some impact on their lived experience of contract farming. realities as contract farmers. Changes in demand, chick placement, chick breeding, equipment

requirements, export flows, animal science, and further processing, to name a few, can all affect the contract broiler farmer's labor process and the profitability of their grow-out operation. Because today's major poultry corporations have consolidated their market share over the last few decades via vertical and horizontal integration, contract poultry farmers often have no other options for firms to contract with other than the one present in their community, especially because geographic "production density" is necessary for successful economies of scale (Boyd and Watts 1997; Constance et al 2013). These monopoly and monopsony conditions lead to "asymmetrical power relationships between the contractors and contractees in the production arena", according to Constance (2008). This power asymmetry shatters the myth that contract broiler farmers are "independent producers".

These power imbalances are not a new phenomenon in contract broiler production, rather they are woven into its sharecropping roots, which was discussed in the previous chapter. The end of sharecropping during the 1930s forced the 'modernization' of the south, creating a pool of surplus workers with no ties to the land and only their labor power to secure the means of self-reproduction. It created a southern proletariat. Following this, labor shortages during WWII combined with the hefty AAA payments landlords continued to receive paved the way for southern agriculture to become capital-intensive. AAA payments funded the purchase of ever greater quantities of machinery, which continued to reduce demand for on-farm human labor. Thus, after the end of the Second World War, mechanization and the Southern enclosure combined, leading Daniel (1981: 247) to argue that "the South has at last succumbed to the forces of capitalism" through the destruction of peasant agriculture. This combined with high rates

of rural poverty, row crop problems, and a dearth of other profitable uses for farmland, made contract broiler farming attractive in the mid-twentieth century to those who managed to survive the turmoil of the Great Depression and WWII despite its limitations.

Overall, contract broiler farming has it's roots in sharecropping, which emerged following the end of slavery after the Civil War. Sharecropping maintained the Southern status quo but at a grave cost; the extractive and exploitative social relations it engendered negatively affect the South's economic development to this day. Since class mobility is so restricted from slavery to sharecropping to contract farming, southern agriculture continues to be defined by dispossession (Daniel 1981: 241)

Beyond the historical baggage of contract farming, these farmers are also at an organizational and historical disadvantage relative to integrating firms. While the product of their labor (and the chicken's labor) is *the* integral input in a vast commodity chain, they occupy a small and marginalized role within it. The historical antecedents of contract broiler farming are rooted in degrading labor arrangements (sharecropping) which were swept away in a broad sweep of federal policymaking (AAA payments) that dispossessed many rural southerners from land-based means of subsistence, proletarianizing them and turning them from skilled self-sufficient producer to deskilled consumers. Thus, before even beginning to take into account a more structural analysis of the contract broiler farmer's class position, it is evident that this occupation is defined by disempowerment.

How can the class position of a contract broiler farmer be understood? It's complicated. They are technically owners of *some* of the means of production: land, farm machinery, grow-out barns, but they don't own *all* of the means of production necessary

for their work, most importantly, the broiler chickens themselves. They are not employees of the integrator, rather, they are contractors. They receive none of the benefits of employment, such as vacation, sick days, bargaining rights, or retirement savings plans. But the integrator still dictates what to do and when to do it, much like a traditional employee. Many theorists have taken up this specific question as it relates to contract farmers, and the overall consensus in the literature is that while it is not straightforward, the class position of contract broiler farmers is more proletarian than bourgeoisie (Davis 1980; Mooney 1983; Wilson 1986). This literature will be explored in further detail in the next section, but the general point is that because the class position of the contract broiler farmer is more proletarian, we can then investigate their labor process like an industrial manual worker with labor process theory.

Using labor process theory to analyze contract broiler production, I argue in this chapter that the work of contract broiler farming is mostly, although not totally, deskilled. Conception and execution are separated. Broiler farmers are left out of key decision making, they have a little autonomy, and their knowledge is appropriated by other "experts" in the commodity chain. Their day-to-day labor process becomes the responsibility of the service representative, the employee that is the farmer's most direct link to the firm. Overall the work of today's contract broiler farmer is routinized and simplified (Braverman 1998). Also, the farmer's labor is cheaper today than ever before because the price paid to contract growers for their birds has declined precipitously since contract broiler farming was introduced. The science and knowledge from the farm that was the the foundation of this industry and is now appropriated by agricultural corporations and scientific experts upon whom the farmer depends for their success.

Broiler farmers do not share their knowledge with the integrators, rather they take orders and try to remain in the good graces of their service representatives if they want to stay in business.

Stereotypes of Farmer Skill:

For much of U.S. history, farmers have been characterized by non-agriculturalists as inefficient, backward, wedded to tradition, and unmotivated to improve their lot in life. Since the majority of people in the United States were farmers prior to the Civil War, those who had managed to find another way of making a living were seen as successful, while those on the land were not. For instance, Fitzgerald (2003: 20) states that after the farm crisis of 1921 (which resulted from overproduction during WWI) that "some felt that farmers as a class were not smart or capable and concluded that farming had gotten too complex for such people to manage." This farm crisis, combined with collapsing prices for commodity crops whose supply exceeded demand (like cotton, which was overproduced because of greedy cropper landlords, not ignorant farmers, as discussed in chapter 1) and stereotypes about the backwardness of the American farmer, led to efforts in the 1920s and 30s to improve farming by making agriculture more industrial, and organizing it along the same lines as factory work.

Farms at the turn of the century were slowly turned into factories with increased capitalization, mechanization, which allowed them to shed labor, and with the increased application of science. The creation of science and the application of it on the farm was to be achieved via the agricultural expert, the agricultural economist, the agricultural engineer, and the USDA Cooperative Extension and Home Demonstration agents, as I discussed in chapter one. Thus, "In exhorting the farmer to "think of his farm as a

business unit", the expert was telling farmers something negative and something positive. Farmers should not think of their farms as just the place where they lived, or as a temporary job until something better came long, or as their fate...They should think of their farms as places of business, perhaps as factories...It was fine for a farmer to enjoy the work, to appreciate the country air, and to have an emotional attachment to the land, just so long as this didn't interfere with the business of farming" (Fitzgerald 2003: 50).

Looking down on farmers as backward and primitive is not just a relic of the past. Steve and Eric were sometimes pitied or stigmatized for being farmers, despite the fact that they were running a seven-figure business that was necessary for human survival. One day at the local diner the following occurred: "The young woman waitress asked what we do and Steve said we were farmers. She said, "bless your heart". An old man sitting alone then began to tell a joke about a man who bought hammers for a dollar and then sold them for fifty cents. The punch line is: "Well, it sure beats farming". Steve and Eric didn't really laugh at this." Later that afternoon, "Owen and Eric talked about the man joking about farming at the diner this morning; Eric said the man had "insulted his profession". Eric said, "They're just jealous. That's all it is. They really wish they had the life." Owen chimed in, "Hell, I do have to check my houses every day but if I want to go fishing at 2 pm, by god I can go do it." Eric said that you don't have to have a college degree or a license to become a farmer. Eric said anyone can become a farmer and that "they think it's an easy job". Eric and Owen said with farming you have to get into a routine, it's just nice and steady. Can't burn yourself out by working too much, you have to be steady about it."

Thus, despite the fact that farming is stereotyped as an easy job because its lack of

educational requirements, Eric and Owen can conclude that it is skilled because they have to learn to manage their time and effort, even if that time management leads to more fishing trips than the average Joe.

In a comparative analysis of two service workplaces where the same tasks are considered skilled in one organization and deskilled in another, Wu and Otis (2018) find that "unskilled workers do not appear in the workplace already deficient, but become so through through organizational processes". Thus, "skill" is not some static preexisting worker attribute, but rather a political process for power in the workplace. Within the Sellerville BBC branch, I would argue that upper management and some farm supervisory workers (service reps) also do this organizational work to ideologically cast their jobs as skilled and the work of contract broiler farmers as deskilled.

There are a number of overarching reasons that contract farmers may be treated as deskilled by other branch employees besides the historical baggage I described in the beginning of this section. First is their relation to the organization: unlike the reps and managers, most contract farmers do not have college degrees. Secondly, the farmer's relative position in the supply chain, compared to the power of senior management, could be a justification to conclude the work isn't skilled since they lack power within the organization. In addition, the physical nature of the work and the dirtiness associated with it are often attributed to blue collar work, which is stereotyped as deskilled compared to white collar work.

I thought it was ironic that the service reps often treated farmers like unskilled workers when the farmers actually had more farm skill and expertise than the reps! While the service reps did have college degrees, these were usually not agriculture-related, and

most of the reps did not grow up on farms. What the reps do have as an advantage is a position within the organization that grants them access to power, power that the farmer will never have. The reps, as "professionals", more often than not actually stand in the way of the farmer's successful completion of their work, Steve succinctly conveyed this point one afternoon as we relaxed on the back porch, stating that, "We are the idiots that work for Big Bird Chicken while they sit up in the office and figure out how to screw us over!"

The Broiler Farmer's Class Position:

Farming has always been tricky for scholars of class to make sense of because their class status is not straightforward and the work of farming is not consistent across time or space (Fitzgerald 1993). Often, the treatment of farming focuses on something else, such as Marx's focus on ground rent in Capital vol. 3, or his enduring fascination with agricultural science. Sometimes, variation in farming realities are glossed over and the occupation is romanticized. For instance, Braverman (1998: 76) posits that "the worker combined, in mind and body, the concepts and physical dexterities of the specialty: technique, understood in this way, is, as has often been observed, the predecessor and progenitor of science. The most important and widespread of all crafts was, and throughout the world remains to this day, that of a farmer".

By virtue of their ownership of land and some means of production, the general tendency has been to think of broiler farmers as petty bourgeoisie or capitalist. However, this glosses over the nuances of the contracting arrangement. Some theorists have made contract farming their starting point for class analysis, and this scholarship is of great utility for my project.

For Davis (1980: 137), the contract farmer is a "propertied laborer", since "Marx did not regard possession of the means of production as absolute protection against capitalist exploitation", their ownership of land becomes another avenue for disempowerment. Davis (1980: 135) explains his reasoning thusly: the continued existence of the family farm is not some indicator of the failure of capitalist development or the continued existence of pre-capitalist production but rather is "the basis for capitalist development". The continued ownership of farm land and existence of the family farm, in the case of contract broiler farmers, does not shield them from exploitation. This is because the foundation of capitalism is *not* the ownership of the means of production but the appropriation of surplus value in the labor process, where all social relations are constructed (Davis 1980: 137).

Davis (1980) and Wilson (1986) find the most appropriate parallel to the class position of contract farmers in Marx's analysis of piece-wages. For contract broiler farmers, their piece wage is paid in the form of price per pound (for broilers) or price per square foot of growout shed (pullets). Pullet and broiler farmers are also paid performance wages, such as bonuses for better feed conversion ratios (FCR), new technology in the grow-out sheds, and/or pullet livability, thus this pay mirrors piece wages. Davis (1980: 140) states, "through piece-wages the capitalist attempts to buy labor in the same way in which he buys raw materials—as a specified quantity of work, completed and embodied in the product." Thus, although it appears that the capitalist is buying a finished product, broilers or pullets, they are not. Instead, the chicken becomes the mechanism by which surplus value is appropriated from the farm by the integrator through the piece wage paid to the contract farmer.

Contract farming is when the contracting firm only owns *part* of the on-farm resources and shares decision making with the farmer. Production is conducted under pre-made agreements, farmers are paid at a unit price and provide their labor and effective property to production, while the firm provides inputs, controls most production decisions, and owns the final product. This allows the firm to have control of both onand off-farm processes (Davis 1980: 142). These contours of contract farming are what facilitates the farmer's exploitation and parallel it more closely to the industrial wagelaborer. Because of this, "contracting removes from the farmer's exclusive control the decisions, resources, and tasks that have traditionally been part of his role as independent entrepreneur" and cedes this authority to the integrator (Davis 1980: 142; Wilson 1986). This allows the firm to maximize the productivity of their investments and the farmer's investments and intensify the production process, without having to resort to traditional tactics of worker control (Davis 1980: 143). The farmer, in a sense, manages themselves much more intensely than the firm would. They will "work harder and longer with little increase in pay to increase productivity and to cheapen the unit cost of his product" (Davis 1980: 143). Thus, the contracting firm can acquire the labor of the farmer below its true cost, mirroring the exact struggle of the proletariat worker under capitalist labor conditions. Private property doesn't protect these farmers from exploitation, and in fact its existence in this case is good for capital.

In addition to Davis' (1980) examination of the class location of contract farmers, Mooney (1983) also develops new theoretical terrain in his examination of Midwestern agriculture, using Harry Braverman and Eric Olin Wright to look at indicators of class location in 5 unique agricultural relationships: tenancy, indebtedness, contract

production, off-farm work, and hired labor. For the purposes of this project, indebtedness, contract production, and hired labor are most relevant. According to Mooney, contract production could be considered somewhere between petty bourgeoisie and proletariat. He argues that it is not fully proletarianized so long as the farmers own the land. The use of hired manual labor, which is used where I conducted ethnography, moves farmers closer to a bourgeoisie class position, but their indebtedness, by which interest payments are a vehicle for appropriating surplus value is proletarianizing. Mooney (1983: 576) takes Wright's conception of contradictory class locations one step further in this analysis with his new concept "the contradictory combination of contradictory class locations". He calls this "the new petty bourgeoisie", wherein class locations are not mutually exclusive, but are rather interactive. Mooney (1983: 577) argues that the new petty bourgeoisie "may actually be a tendency of advanced capitalism".

As these scholars demonstrate, the class position of the contract broiler farmer isn't straightforward. The contours of their asset ownership and organization of their labor make their class positions opaque. They exhibit characteristics of proletariats, petty bourgeoisie, and even sometimes capitalists. However, given the nature of the exploitation of their labor and indebtedness, and that more often than not the peculiarities of this occupation pave the way for them to be taken advantage of (and their surplus value appropriated), It's more useful to consider contract broiler farmers as proletarianesque so that their experiences can be analyzed using labor process theories, which can reveal the subtleties of how exploitation occurs even when an occupation doesn't exactly fit into the working class. That said, these theorists also highlight why it is important to look for the exceptions to the rule, especially since the landed-ness of the contract farmer

creates yet another avenue for capitalist exploitation. These subtle differences from the "working class" cannot be disregarded, since they may even intensify exploitation rather than buffer it.

The Labor Process: Degraded and Deskilled:

Work, for humans, is the "conscious and purposive" altering of natural materials to improve their usefulness (Braverman 1998: 32). By using our imaginations, we transform materials into something we saw in our minds before action ever began. It is this imagining that differentiates human work and the action of animals, but also can lead to the separation of thought and action. Thus, the "intelligent and purposive character" of human labor can become alienated from the worker when conception is no longer the responsibility of the worker but rather the owners and managers of capital (Braverman 1998: 38-39). With the labor process separated from the workers executing it, knowledge of the process can be sequestered by management and owners, allowing them significant, if not complete, control over it. This deskills the working class and leaves them vulnerable to exploitation since they do not possess the knowledge of their work as in earlier stages of capitalist development. This "renders the worker inadequate to carry through any complete production process" (Braverman 1998: 51). In addition to shifting power to the owners and managers of capital, it also cheapens labor by breaking it into ever smaller, and less complex, parts.

Is broiler farming deskilled? If so, why do contract broiler farmers agree to do it? These are the questions I will explore in the next sections of this chapter. I will detail the relevant literature on agricultural deskilling and then connect this with data from my ethnography to answer these research questions.

Agricultural Deskilling:

What is skill? Skill is when conception and execution are combined. We gain skill through practice and planning. In order to be skilled, workers must control all aspects of the work: the "scientific, design, and operational prerogatives of modern engineering" (Braverman 1998: 307). Skilling is when we "become masters of industry" (Braverman 1998: 308). We can only become skilled through *doing*. Work controlled by the worker is the way to avoid becoming deskilled. Attewell (1990: 444) discusses major theoretical approaches to skill, concluding that "ethnomethodology tells us that there is much finer texture to what people actually do in the workplace than is commonly realized". The ethnomethodological perspectives takes from its starting point that "all human activity, even the most mundane, is quite complex" (Attewell 1990: 430). This mirrors my ethnographic findings that this occupation was incredibly complicated, requiring a wide range of skill, expertise, and knowledge, and despite being in the field for 6 months I did not leave the field with enough know-how to maintain a poultry grow out on my own.

Generally, skill is thought of as traditional craft work, and the breaking up of craftwork is what Braverman (1998: 307) describes as the destruction of skill. He describes the process of deskilling as having its roots in Taylorsim and the shift to factory production. The general contours of this process are as follows: the basis of deskilling is the deliberate separation of management and workers. Management, then, is in charge of knowledge, of the craft. Craft (which was the domain of the worker) becomes science, and science requires capital, which laborers have no access to. Then, this leads to the separation of conception and execution, the former the responsibility of management, and the latter the responsibility of labor. The knowledge derived from science, which is now

in the domain of management, becomes the basis for the control of the laboring class.

The irony, of course, is that while science seems to come from management, it actually is derived from craftwork and the innovations of the working class (Braverman 1998: 59-85).

Unlike factory workers, farmers are not in conflict per se with technology, and in many cases they welcome these "innovations" (Fitzgerald 1993). There are areas of their work that might be deskilled, but are subsequently becoming reskilled with the addition of new technologies, techniques, and biological inputs, like specially formulated feed and vaccinations. Also, despite all of the technological change that agriculture has seen over millennia, there are many important aspects of the work that haven't changed, such as the importance of soil quality, rainfall, weather patterns, consumer demand and so on, which continue to require reasoning skills to successfully navigate. Despite these important differences in agricultural versus factory work, Fitzgerald (1993: 325) argues that "the concept of deskilling, as a heuristic device for understanding work, can be reasonably extended to work sites off the shop floor". In the next section, I will analyze scholarship on agriculture deskilling, highlighting what is distinct about it so that I can combine the theoretical tools from both the deskilling and agriculture deskilling literatures to analyze my own ethnographic data.

What makes deskilling in agriculture unique? Agricultural deskilling happens when there is rapid change, often associated with the introduction of a new technology, which then leads to information gaps (Fitzgerald 1993; Stone 2004, 2007). As a result of this rapid change, skills become all or nothing: old and new skills can't be combined, and old skills become irrelevant (Fitzgerald 1993). Most often, technology (broadly speaking)

becomes the mechanism by which farmers are deskilled, which can't be understood without the experts who create and/or provide it (Fitzgerald 1993; Vandeman 1995). Authority is then delegated to the technology providing entity at the expense of the farmer's mastery of it. The new technology, a product sold by outsiders to the farmer, "increases (the) information content" of the technology (Vandeman 1995: 53). Thus, farmers become dependent on the expert outsider for both product and information. The result is the commodification of certain products and services that were once the purview of the farmer, such as pesticides, seeds, or livestock feed.

On the broiler farm, this includes equipment, livestock, and chemical inputs. An example from my notes illustrates how these inputs are deskilling: "When we got to the doghouse Steve said yesterday he ran deworming medicine and today he is running BMD, which is a medicine for their stomachs, and he is also running a medicine for their legs. Mike told him to run the leg medicine if he sees the birds hopping around. Steve thought that Mike should run the medicine and Steve remarked, "Guess I'll just do Mike's job for him." BMD is bacitracin methylene disalicylate. Steve said he didn't know if it really works or not, but "they say it does". Additionally, representations of farmer masculinity sometimes are used to manipulate farmers to buy-in to new technologies, against their own self interest (Bell et al 2015 26). The irony, of course, is that farmer's knowledge is made obsolete while the knowledge they lost becomes necessary to those doing the deskilling.

Another avenue of agricultural deskilling is the loss of the ability to engage in experimentation on the farm. For Stone (2004, 2007), skilling in agriculture is a 2-part process: environmental learning and coping with incomplete information through social

learning. Environmental learning occurs when there is payoff information from the environment. Payoff information from the environment can include a higher livability percentage or a smaller feed conversion ratio for a flock that a farmer can attribute to a certain intervention, such as a new lighting program or better quality feed. Environmental learning increases when farmers can learn from their own farms and other farms, and then interpret what they see (Stone 2004: 130). The second aspect of skilling is coping with incomplete information, an unavoidable part of all human life, but especially relevant for agriculturalists who must deal with so many (often unseen) variables affecting their agricultural performance, like laying flock health or the quality of chick debeaking. To cope with incomplete information, farmers turn to social learning. Stone concludes that deskilling occurs when the balance between environmental and social learning is disrupted.

Agricultural skilling is a hybrid process of both environmental and social learning, but when farmers can only rely on social learning, they are deskilled. In this way, agriculture differs significantly from factory work since farmers are also responsible for overall production strategies and they also learn about their work from their fellow farmers, unlike factory workers who receive training from management and are largely divorced from larger production issues (Stone 2007: 73). Thus, Stone (2007) argues that technology makes environmental learning vulnerable but it's not the same as mechanization and breaking up work into ever smaller parts, as Braverman (1998) describes. On the broiler farm, farmers are discouraged from experimentation by BBC, since they are supposed to follow company instructions. However, there is still room for *some* experimentation and learning as it relates to the execution of the labor process on

the farm, albeit less experimentation than there would be if there were no company guidelines for handling the flock.

Environmental learning becomes difficult to impossible when it becomes too costly to do as an individual farmer or when the results of it are inaccurate. This impossibility occurs because the effects of technology can be inconsistent, introduced technology can become unrecognizable (such as in the case of GMO seeds), or when there is an accelerated rate of technological change (Fitzgerald 1993; Stone 2007). When these things occur, farmers can't accurately evaluate technology, and thus move toward social learning which is often inaccurate and suffers from bias, like confirmation bias or stereotypes. Overall, then, deskilling in agriculture is the *disruption of an ongoing process of skilling* (Stone 2004). The result isn't the transfer of skill from worker to management, but the loss of skill completely (Stone 2004: 132).

In addition to these key differences in agricultural deskilling, the relationship between a farmer and the agent(s) of deskilling is not a management-labor relationship like on the factory floor. Farmers continue to maintain some autonomy, unlike factory workers. Also, there usually aren't overt antagonisms between farmers and the agribusinesses who provide deskilling technologies (Fitzgerald 1993: 326). Fitzgerald (1993: 326) argues that "the apparent lack of conflict between farmers and agribusiness suggests, if not commiseration, then at least an acquiescence among farmers who are presented with "labor-saving" devices". Thus, the users of the technology (farmers) aren't often in conflict like they are in a factory setting. The new technology is often desired and/or helpful to farmers (Fitzgerald 1993 326, Stone 2004). However, even if

farmers welcome new, potentially deskilling technology, this does not make the it any less deskilling.

For Fitzgerald (1993), experience, judgment, observation, and apprenticeship is what is lost through agricultural deskilling. These losses persist despite the fact that technology "appears to simply change the way a job is accomplished, but not the reality of the job itself or even the worker that does it" (Fitzgerald 1993: 325). However, the introduction of technology is not as coercive on the farm as it is on the shop floor; farmers have the choice whether or not to use the new technology and can opt-out (Fitzgerald 1993: 327). Even with the incorporation of deskilling technology, the mental labor of the farmer remains more important than their physical labor. They still need the skill that is degraded (Fitzgerald 1993; Stone 2007). Thus, the consequences of agricultural deskilling share both similarities and differences from those on the shop floor.

Additionally, the commodity the farmer produces can itself be a mechanism of deskilling. Scholars have explored how GMO cotton and hybrid corn deskill farmers (Fitzgerald 1993; Stone 2004, 2007). In addition to the equipment, facility, and chemical inputs that are deskilling in broiler farming, that the broiler chicken itself deskills the farmer. Farmers have no input on breeding processes, breed selection, which traits are selected for, nor do they provide any feedback to BBC about the nuances of breed performance besides mortality counts. The goals of BBC and the farmers are different when it comes to the chickens. For instance, brown feathered chickens often have better health and livability, which farmers prefer, but BBC breeds white feathered birds since their remnants are less likely to be visually detected on the processing line by USDA

inspectors. In the case of hybrid corn, the inability to visually identify strains and determine which varieties are best for certain conditions deskill corn farmers, who are then reliant on seed companies for this information (Fitzgerald 1993). The corporate promotion of GMO cotton seeds in India, combined with a lack of information from external sources and a reliance solely on social learning, explains their widespread adoption despite deep skepticism about claims of increased GMO yields in broader Indian culture (Stone 2007). Livestock can also deskill: The chicken becomes an agent of deskilling on the contract farm, by becoming a machine that controls the farmers rate of work (Vandeman 1995: 55).

Beyond the produced commodity, agricultural inputs such as tractors and pesticides have also been analyzed for their contribution to agricultural deskilling because of the transfer of expertise from farmer to those selling these inputs, as well as the labor reducing consequences of their introduction (Bell, Hullinger, and Brislen. 2015; Fitzgerald 2003; Vandeman 1995). The sellers of these items often seem like collaborators to farmers, but they are actually agents of deskilling, monopolizing both the product and information necessary to use it properly (Bell et al 2015; Vandeman 1995: 53).

Deskilling in agriculture matters for a variety of reasons. It matters for farmers in the same way it does for any kind of worker: their work is degraded and thus the power they have over the mastery of their work is lessened. A reliance on only social learning could lead to poor agricultural and ecological outcomes since this closes off the farmer as a source of innovation in the agricultural process. Additionally, deskilling "effectively alienate(s) the farmer from the land" (Bell et al 2015: 285). Deskilled farmers become

more dependent on inputs, such as pesticides or machinery, which generally aren't ecologically or economically sustainable (Bell et al 2015; Vandeman 1995). It limits farmer's choices of how to do their job: which inputs, techniques to use and which commodities to produce, potentially increasing the cost of doing business (Vandeman 1995: 58). In a more global sense, this overall loss of farmer skill, which isn't usurped by management but lost altogether, a terrifying prospect for humanity since we are dependent on food for our survival. What happens when there are no farmers left?

Deskilling also presents other challenges. Overall, it is indicative of a lack of class consciousness for farmers, who (generally) prefer to think of themselves as independent producers rather than members of a shared class (Fitzgerald 1993). Combined with the deskilling of the farmer is the deskilling of the food consumer, leading to a false consciousness rooted in commodity fetishism (Jaffe and Gertler 2006). The lack of farmer class consciousness combined with consumer deskilling seems as an almost insurmountable barrier to the liberation of agriculture from the throes of capitalist degradation since there is a high lack of awareness of what is being lost.

There are some important arguments against Braverman's deskilling thesis which are useful to explore in the context of this case study. Attewell (1987) argues that qualitative case studies demonstrate deskilling in individual occupation but quantitative studies in broader context do not. The chicken industry is a perfect example of this. There are thousands of experts now in the broiler supply chain: feed scientists, agricultural economists, animal behaviorists, breeding specialists and so on. There has been an expansion not only in the number of different specialty broiler occupations but the amount of people occupying them within the broiler supply chain. However, this does not

negate that broiler farming itself has been deskilled at the expense of the growth in these jobs. Furthermore, mechanization and automation aren't always deskilling, since feeding and watering equipment already deskilled repetitious labor on the broiler farm (Attewell 1984: 328).

In Stone (2007), Stephen Brush argues that the deskilling Stone attributes to GMO cotton isn't taking place. Instead, he argues that new technology is replacing old skills and that even community-developed technology could itself be deskilling. While this is true in the case of new skills that broiler farmers must attain to navigate new technology and organizational forms, the old skills of agriculture are still just as necessary for creating a good final product. These skills are being usurped not only by deskilling technology and other skilled workers in the supply chain, but also in the organizational form of contract farming itself. Overall, while there are important arguments and realities to address when determining whether not contract broiler farming is deskilled. In the next section I argue that the bulk of my ethnographic evidence demonstrates that deskilling is taking place in the contract broiler farming occupation but it isn't completely deskilled.

The Deskilling of Broiler Farming:

It's important to note before this discussion that based on my 6 months of fieldwork I can definitively conclude that the job of broiler farming is *incredibly* difficult and complex. Let us not fall into the stereotypical trap that Braverman (1998: 301) describes: that farm work is the least skilled, and that all work beyond that requires greater skill. Toward the end of my ethnographic work, the live-in broiler farm employee left and I was offered the job. I could have stayed behind and become a broiler farmer.

Despite how tempting this offer was to me (since I *loved* being at my field site), I quickly declined because even after 6 months of intense observation, two Master's degrees, and years of scholarly analysis of the occupation, I knew I didn't have the skills and knowledge to successfully do this job. *A deskilled job isn't necessarily a job lacking in skill*.

In this section, I will briefly describe the various tasks associated with broiler farming, detailing how these tasks are either deskilled, somewhat deskilled, or not deskilled. Then, I will discuss tasks that require new skills: tasks that are reskilling. I will then discuss barriers to skilling in contract broiler farming and explore why BBC wants farmers to be deskilled.

The majority of the tasks of broiler farming are deskilled or partially deskilled. These tasks are divided by the phases of the growth process. prep, chick delivery, raising the broilers, and the catch, which I detail in the previous methods chapter. To review, the prep consists of things that must be done before baby chicks are delivered, when the chicken houses are empty. The second set of tasks are related to chick arrival, which only happens when the day old chicks arrive. The next set of tasks, which take the most time and are the most important, are those associated with raising the chicks. The third set of tasks are part of the catch. This is when the birds are caught and either transported to the branch slaughterhouse in the case of broilers, or to a laying farm, in the case of pullets. The final set of tasks are the ongoing activities the broiler farmer must manage in regards to their farming business.

As soon as the flock is caught, the farmer must immediately begin prepping for the next one. Because BBC farmers only remove the litter (chicken waste) out of the

houses every two years, they have to perform various treatments on the litter between flocks to kill bacteria and parasites. Then, repairs must be accomplished that couldn't be performed with chicks in the house, litter re-spread, the house heated, and equipment set up so the one-day old chicks can easily access food and water. BBC dictates to the farmers what must be done by the time the chicks arrive, but it is up to the farmer to properly manage their timing in accomplishing all these tasks. Farmers receive no assistance from the company in doing so.

During the out time, farmers usually have to treat the litter, windrow it, level it out. and dress the litter. Then, pesticides are applied on the ground surface of the poultry house. Feeding and watering equipment are lowered, leveled, and repaired, half house curtains and fences installed, heating the houses and applying treatment (PLT) to reduce ammonia in the house.

Managing the timing of all these tasks is one area of work for broiler farmers that is not deskilled. However, BBC can get in the way of the farmer's best laid plans by delivering necessary products late, or not at all, such as top dressing, which then inserts uncertainty into the skilling process related to farmer's control of task timing. This excerpt from my field notes illustrates how the farmer's lack of control over delivery affects their labor process: "They are complaining about the pullet move. Mike scheduled shavings and PLT too early on Saturday. Steve and Eric need time to cake out and smooth the litter. They told Mike to do the PLT around 2-3 pm, and then the shavings later. Steve has hired the same crew for cake out as before and he will bring a spare tractor to the farm in case they have a truck problem. Steve told Mike he doesn't care when they come, they can wait in their trucks for all he cares. I ask who coordinates this,

Big Bird Chicken or them? Eric says Big Bird Chicken does it and Steve chimes in that "all they coordinate is the ass eatings". Mike will be on vacation so he "can't be here", Steve says in a sarcastic tone. Eric says if it were up to Big Bird Chicken, there would just be a big pile of shavings on the road".

While on the face of it, this would appear to just be forgetfulness, laziness, or cheapness on the part of the company, an understanding of how poultry farming has changed over time reveals that this is actually one way that farmers are deskilled. In the past, farmers managed litter maintenance themselves. If it was a drought year and a farmer's corn crop dried up, they could use ground corn stalks for shavings, or buy wood shavings from a nearby mill, or even use old hay that they didn't want to feed to their cattle. When farmers control the type of shavings they use, they can account for the time of year and cost variability between different shaving materials when making their decisions. They can even use shavings from the farm, reducing the need for outside inputs and fossil fuel consumption. If a farmer felt that their litter was of good consistency and shavings weren't needed, then they could opt to not put any down at all. Until 2013, Steve and Eric were allowed to make this choice for themselves, but in an effort to bolster consistency, company policy changed such that now the company makes this decision for pullet farms.

In regards to pest control, early poultry farmers pioneered various methods in conjunction with their local USDA Cooperative Extension Agents, relying not on corporate edicts, but self-led experiments with their own flocks to determine what worked best (Griffin-Hill 2012). Farmers today could theoretically experiment with other pest control methods, but since BBC pays for the chemicals and wants consistent

practices they are forbidden from doing so, as evidenced in the 1981 Tyson contract I analyzed previously. Often they don't even know what is in the pest control chemicals or their function, as this exchange between Eric and another broiler farmer illustrates: "Owen then asks Eric what's in PLT (poultry litter treatment) and he says he thinks it's citric acid. Owen asks what it does and Eric says it cuts down on ammonia". Farmers use the pesticides provided by the company without having any input on which products are used or understanding how they function chemically and are deskilled in terms of finding new or alternate methods.

The management of poultry houses with chemical additives is a development predicated on the formalization of agricultural sciences in universities and corporate campuses. This results in the farmer being separated from the scientific process, which is now the domain of the "expert". Braverman (1998: 107) argues that techniques of production transform from "that of skill, of craft, and later (they) assume an increasingly scientific character as knowledge of natural laws grows and displaces the scrappy knowledge and fixed tradition of craftsmanship". Knowledge of poultry husbandry is thus transformed into poultry science, ultimately deskilling the farmer and generating a new form of capital (knowledge/power, to draw on Foucault) in the accumulation process (Braverman 1998: 115). For example, one sunny and cold winter afternoon I was horrified when I realized that I was helping Steve and Eric mix cattle feed with chicken litter (waste) to feed to the cattle, but Eric reassured me that "it is ok to feed the cattle chicken litter because they did experiments at the University of Arkansas about it".

While there are prep tasks that are deskilled, many others are not deskilled.

Farmers must have intimate knowledge of equipment, houses, and task execution in order

to properly prepare the houses for chick arrival and to avoid developing larger problems after the chickens are on the farm. Skilled activities during the prep are related to technique and practice: farmers become skilled in prep tasks through doing them, deciding when to do them, and then improving upon them through repetition and experimentation. Where deskilling occurs in this stage of the grow out relates to the by outsiders to the farm and material inputs. This stems from the transition from craft to science, from worker control to management control. Farmers have no input or control over pesticides, required house equipment, PLT, or top dressing. They are not allowed to experiment with different inputs, which effectively quashes environmental learning. In these tasks, they become detail workers, using whatever inputs they are given, and using them when told, mirroring the worker-management relationship. Inputs are rarely, if ever, manufactured or developed by farmers themselves. Inputs may change rapidly depending on their cost effectiveness for the BBC branch, or based on the most cutting edge science, or even because BBC absorbed a particular firm that manufactures it. The prep is a mix of skilled and deskilled tasks, with the more deskilled tasks related to actual input products (technology) that facilitate the transfer of expertise away from the farmer to other experts in the supply chain.

The second phase is chick arrival which is completely deskilled. The timing of chick arrival is determined by BBC; farmers have no say when this happens despite the fact that they are the best judge of the optimal time for placement. For BBC, the timing of chick placement is a logistical and management puzzle to best optimize the deployment of personnel and equipment. Furthermore, farmers have no input on chick breed selection. Farmers are not able to select breeds, control hatching conditions, or breed their

own chickens. The careful selection of chicks and hybrid breeding of chicks is what used to distinguish the most successful broiler farmers at the turn of the century, but this is no longer the case. (Sawyer 1971; Strausberg 1995).

The final aspect of chick arrival is the dump. This is when day-old chicks are dumped from trays of 100 chicks onto the floor of the house. This is deskilled because farmers complete this process as modeled by the company without any individual modification. The drop can engender problems for the grow out operation in several ways. If a drop is split into different days, then the chickens will not be of a consistent size. Sometimes BBC would short a drop; once Steve and Eric had to hand count 30,000 chicks because the trays were supposed to each have 102 birds but they actually only had 93. We faced some significant challenges on the pullet farm when the company increased the chick placement by 25%. This selection from my field notes illustrates the consequences of the over placement: "It's hard to walk for dead because the birds are so overcrowded. There are 15,000 in the house, next time there will be 12,000. Steve is looking forward to the small birds. These birds are really aggressive and crowded. One has its head swollen, many with scabs or fresh blood. I wrote in my notes "this house is TOO F'ING CROWDED". Steve says that this is why mortality is so high. He says they are starving to death, that's why those 3 birds got their heads ripped off. Steve says that Big Bird Chicken would say that's his fault. I asked why they would put so many birds in here and he exclaimed, "That's what's good for the company!""

The frustration of being deskilled in regards to placement bubbled up in all kinds of ways. Steve told me he once had a 27-year-old field specialist who was taking 3 days to bring him baby chickens yet his neighbor was getting them in one day. He was upset

that the field specialist was taking so long to bring him his chicks, costing him money, so he asked the specialist about it. The specialist deflected Steve's request for an informative answer, telling him, "It is what it is". Steve said he explained to the specialist that that kind of answer was not acceptable to an "old timer like me". Steve said he was 2, or maybe even 3 times this guy's age; Steve said he told the specialist that he better have an answer the next time he came back to the farm, and "sure enough" he came back the next day and "had an answer".

The third phase is raising the chicks and keeping them comfortable, the most important part of poultry farming, and in many ways, the most straightforward. The main goal is to keep the animals healthy to optimize the feed-conversion ratio by effectively managing various material flows: light, water, heat, food, medication, and air. BBC provides farmers a chart that lists the appropriate flow measurements based on the age of the chick, season and outside temperature, but farmers must make daily decisions about how to best adjust and calibrate the house conditions based on numerous variables outside of their control, such as the humidity, wind patterns, daily temperature spreads, the unique characteristics of each grow out barn, and the chicks' age. Service representatives also visit the farm multiple times per week and have their own input, however, there is no replacing experiential skill with these guideline sheets. Farmers have to know not only what is going on in the moment, and how to adjust the house for that, but how to anticipate what may change, such as the weather, and the particular quirks of each broiler house. Thus, managing house conditions is an area where farmers are skilled, so it's no wonder that one afternoon as Eric and I were driving back to the pullet farm he

told me, "I could do this stuff all day, checking on houses. I don't mind fixing stuff, it's better than the monotonous stuff'.

In theory, automated broiler house equipment should simplify the broiler growout cycle and reduce the need for skilled labor, like calibrating the house for the weather and the stage of the growout cycle as well as reduce the need, and the need for unskilled, repetitive labor, like hand feeding and watering. Thus, automated equipment can be deskilling if it reduces a farmer's opportunity to engage in environmental learning even if it lessens the need for unskilled labor simultaneously. Besides farm machinery's general deskilling effect, the organizational authority that the contract formalizes also becomes a pathway to deskill farmers by usurping their decision making autonomy. BBC's continued demand for upgrades (i.e. new equipment) is deskilling since they do so without any input from farmers regarding their experiences or opinions about the various options, despite the fact that they are the ones who buy and use the new equipment! For instance, because Steve has been raising broilers for over twenty years, and for two different companies, he has experience using various types of feeding and watering systems, like nipple feeders, birdie cups, chain feeders, auger feeders, etc, and he's used several different brands. Not only does he have experience using different designs and brands, he assesses the pros and cons of new machinery by thinking through the difficulty and cost of maintaining and repairing the equipment, and how those costs have changed over time. One afternoon as Steve and I fixed a water leak he told me he didn't know why vent timers used to be \$20, but then "they" quit making them and now they're \$120. Furthermore, Steve takes into account the installation costs and potential problems that could arise during installation, such as needing more electrical wiring or how the weight

and placement of new fans could compromise the integrity of the house's foundation. In contrast, Eric doesn't have the knowledge his dad has, partially because he's younger and has less experience, but also because he has no basis of comparison. Overall, BBC's coerced upgrades hasten the process of mechanization and reduce farmer decision making, which curtails opportunities for environmental learning and results in deskilling.

On the other hand, attending to the daily maintenance and repair of the equipment is a domain where the farmers are skilled. However, broken equipment is an avenue to discipline and control the time and effort of the farmer by the service rep. If farmers do not address repairs before they are noticed by the service representative, the farmer can be punished, reinforcing the service rep-farmer hierarchy and eroding farmer's autonomy. If a repair task is repeatedly written on the purple sheet and left unaddressed, the contract can be revoked, even if the requested repair is arbitrary to impossible to fully complete, like repairing light leaks or keeping the feed bin pad clean. The majority of our time in the chicken houses was spent fixing equipment, like one morning, where everything seemed to be going wrong in a pullet house Eric exclaimed, "I'm tired of this shit! You touch anything around here and then it's broken!"

While repairing and maintaining equipment is one domain where farmers sustain and increase their skill, deskilling tendencies can arise through organizational discourses about equipment repair is arbitrary. One morning after I wrote some notes outside of a pullet house, "I walked into the house and they had just finished fixing the ropes on the front half of the house, so then we walked to the back. We found one broken rope, in a corner. Steve jokes, "This is a real problem", being sarcastic and then Eric begins to joke about animal welfare. Eric says he is going to call PETA". This illustrates how the

discourse of "animal welfare" is used to discipline farmers by reframing normal equipment wear and tear as negligence in need of immediate attention. Instead of being deployed by BBC to create a culture which prioritizes the ethical care of livestock, "animal welfare" is used to justify the service rep and BBC's attempts to control the farmer's labor process when there's no better explanation for a maintenance request. The use of the animal rights discourse is deskilling because it ends discussion and learning opportunities between the farmer and the reps and it's used to justify the movement of expertise to other parts of the supply chain. For instance, Steve and Eric used to be able to keep medication on their farm, but now they would lose their contract if they had it. Today, only the vet can supply medication, which Steve claims doesn't usually doesn't happen in a timely manner. According to Steve, the birds just get sicker as they wait for the expert to arrive.

I would argue that the feeding and watering of the chickens also is a domain of deskilling. While automation has replaced the deskilled, repetitious labor of feeding from 100 pound bags, hand watering, and individually medicating birds, there are limits to this automation technology. It is often unreliable and costly for a farmer to purchase, increasing their debt load and exposing them to greater risks from mechanical failure and financial insolvency. Farmers can't pick out what equipment they use. The Sellerville branch sets the house specifications in collaboration with the local poultry supply store. Should a farmer install equipment not to their specifications, they will likely not be given a contract. However, the farmers quickly become skilled on equipment repair for the feed and water equipment, which is necessary since this equipment breaks often.

Farmers are also deskilled in the feeding of the birds. Early broiler farmers hand

mixed their feed, coming up with optimal mixes of protein, vitamins, and minerals to give them a competitive edge (Gisolfi 2017; Sawyer 1971). Today farmers have no input on feed quality, often receiving sub-par feed that then affects their flocks' performance. The branch feed mill manager makes the feed decisions, with feed quality determined by more branch cash flow than anything else. One morning I tagged along with Steve to feed the pullets while Eric talked to the pullet manager and "he told they've been having problems getting feed out of the bins for the last couple of years. He said since corn got so high in 2011 Big Bird Chicken has been using DGE, which is dried distiller's grain, for chicken feed. Steve says all the good stuff has been taken out of the grain to make alcohol, so it's not as nutritious for the birds".

The grow out also requires managing flock health, which is partially deskilled since farmers have no input on chick breed and quality, or vaccine or medication selection. If their awareness or the ability to manage the flock become problems, farmers can only request that a veterinarian visit the farm. However, flock health does require skill since the farmers must understand what various indicators mean, such as smell and behavior. Skill in this domain is very helpful for addressing small problems before they become unmanageable, such as a cocyxidious outbreak. Squirer (2012) calls this type of skill augury, a knowledge developed via intimacy with animals.

Since pullets are kept alive longer than the broilers, they are vaccinated on the pullet farm during their adolescence by an outside service. Not only is the outsourcing of tasks like this deskilling to the farmer, it also exposes the farm to risks relating to flock livability since the outsourced chick service is not liable for the consequences of bird performance and increased mortality after they work the birds. This selection from my

fieldnotes demonstrates how deskilling negatively impacts both the chickens and the grower's performance: "I noticed a bird that was just sitting in the middle of the house and not moving toward the food. I picked it up and asked Eric what was wrong with it. Eric said that the vaccine guys came a few days before and that they were rough on the birds. Eric turned the bird over and showed me that it's foot was swollen up 2-3 times the normal size and bluish purple. He said they are rough on their wings and that they have a mortality spike in the days following the visit by the vaccine people. Eric said that the result is that the spike in mortality makes the farmer look bad and that Big Bird would never take responsibility for causing the spike. He said they especially wouldn't take the responsibility since it was the fault of the vaccine company, and not Big Bird directly".

The catch is the last distinct part of the labor process. This usually occurs over 1-3 days while flocks are collected to either be slaughtered (broilers) or moved to a laying farm (pullets). Farmers must raise the feed and water lines, and heaters, observe the catch, and then collect whatever dead chickens are left behind. The actual task of putting the birds into wire cages for transport is outsourced to a 3rd party. The outsourcing of this task might be considered deskilling, but since this is not a desirable task to carry out because it is repetitious, dangerous and dirty and has never been done by broiler farmers anyway, the outsourcing of it might more appropriately be considered a reprieve. Farmers are told what lines to raise and when: first feed lines are raised so that the slaughtered birds don't have feed in their stomachs, then the water lines a few hours later, and then right before the catch, the heaters (if they are in use). Farmers have no input on this schedule and can't go at their own pace. Often the line raising schedule is made with no concessions to a farmer's daily schedule (i.e. raising lines in the middle of the night at 2-3

hour intervals). When it comes to the catch, the farmer is reduced to a piece worker, someone who can move equipment and be at a specific place at a specific time to satisfy a schedule made by someone else with no consideration of their embodied needs.

Besides these tasks, contract broiler farmers must constantly attend to managing their farm business. This includes managing paychecks and cash flow out for various inputs, negotiating and managing debt payments, designing business plans, and paying taxes. This work is skilled for the farmer. They have to figure all of these things out on their own, determine how comfortable they are with taking on greater or lesser financial risks, all without any guidance from BBC. Farmers can find assistance from their lenders, the Farm Bureau, Extension Agents, and other farmers in their community, or even though the experiences of earlier generations of their families who are farmers themselves. While the ability to maintain being skilled in the domain of business management is a victory for contract broiler farmers who are facing occupational deskilling, this might not be as positive of an outcome as it seems. Bell, Hullinger, and Brislen (2015: 25) describe how farmers are deskilled at the expense of becoming the entrepreneurial farmer who focuses on financial management "while simultaneously fostering a disinvestment from the skill, stewardship, or legacy components of farmer identity". Thus, the businessman farmer does not represent a return to skilling when agricultural skill is lost at its expense.

Reskilling and deskilling happen simultaneously for contract broiler farmers.

According to Vandeman (1995) reskilling can occur when farmers begin to have more knowledge and control over an aspect of the labor process. Farmers are reskilled when they implement new technologies, which might be deskilling, but then learn new skills

when learning how to implement and maintain these new tools, like when Steve and Eric installed new pellet stoves on the broiler farm. Farmers are also reskilled in learning how to best navigate the BBC organization: which managers and departments have the most bearing on their work, who their allies and enemies are, where problems earlier in the supply chain originate that might cause them headache later. These are all new skills the contract broiler farmer must develop in order to remain successful.

However, there are still significant barriers to skilling. First, skilling isn't a cultural process anymore, as Stone (2004) describes. It becomes almost totally reliant on social learning. Farmers are punished from deviating from BBC instructions, whether accidentally or in a blatant attempt to experiment, which could be the basis for a lost contract. Thus, experimentation, which is the basis of agricultural skilling, is (mostly) forbidden. Also, innovation isn't directly rewarded. Farmers aren't guaranteed pay raises if they upgrade equipment, and they often find that these decisions are more political than technical in nature anyway. Finally, farmers often can't understand why a grow out goes the way that it goes, in terms of feed conversion and livability. There are too many variables in play, not enough precise understanding or reliable measurement of them, so they can't properly execute environmental learning when it comes to flock performance. *Consequences of Deskilling:*

Overall, several factors contribute to the deskilling of broiler farming. The introduction of outside inputs, non-farmer experts, increased corporate concentration, and changes in economies of scale all contribute to the degradation of farmer's skill. However, deskilling overall emerges from the organization of the contract arrangement, since it coalesces all of the above mentioned trends while also introducing more

pernicious deskilling mechanisms through the integrators usurping of farmer autonomy. BBC wants farmers to be deskilled, even if this desire isn't formalized in any type of corporate edict or philosophy. It benefits them. Deskilling reduces farmer autonomy and power, transferring it to BBC. Deskilling provides a mechanism for reducing farmer's pay since so much relative value is created outside of the farm, on grandparent flock farms, in laboratories, at the further processing plant, in the marketing department, and so on. Deskilling also reduces variability in the farmer's labor process and input into the grow out process, insuring uniformity in the final product and a smoothly functioning supply chain. Finally, deskilling shifts expertise and autonomy from the farm to firm employees and management, increasing their power.

Why do contract broiler farmers put up with this, especially when their collective financial investments in grow-out operations are roughly half of what the firm invests in broiler production (Constance et.al. 2013; Gisolfi 2017)? Why do they accept the deskilling of their labor process when what they do is so crucial in the broiler supply chain? I argue that contract broiler farmers consent to this deskilling for a variety of important reasons.

First, the contract arrangement allows them to maintain a lifestyle of perceived independence. They don't "go" to work, rather work and play blend seamlessly because they are spatially indistinct. The contract allows the farmers an occupational status that is esteemed in their community as one that is not typically considered wage labor. Second, entering into a contract arrangement allows them to maintain ownership of property. Property may have been inherited from family, and thus has a sentimental value despite the fact that owning it becomes the axis of their exploitation. Third, the contract gives

them a job and an opportunity to make a more consistent living than seasonal row crops or more speculative agricultural operations, such as organic berry farming or planting orchards.

In addition, they can accept this because despite all of the downsides of the organization of their work, there are also benefits. Personally I found the work of broiler farming often enjoyable, which Steve and Eric also experience. It's fun to be physically active, outside, exerting yourself in the sunshine, although there are certainly moments of misery when the temperatures are extremely hot or cold, or when the smells are overwhelming. Furthermore, Steve, Eric, and I could sometimes spend much of the work day engaging in leisure activities, such as watching TV, visiting with friends and family, drinking, and going out to eat, all activities that those in the typical 9-5 grind have to save for when they are off the clock. Finally, there is also a psychological wage associated with doing the work of feeding the world. When I explain my field work to people, I often say that farmers do it so that we don't have to, so that we can do anything else. As Steve said "Chicken doesn't come from Big Bird Chicken! It comes from people like me that grow chicken for Big Bird Chicken!"

CHAPTER VI

CONSENT TO DESKILLING AND WORKPLACE GAMES

"Just another day in paradise!"—Eric

In this chapter, I begin with a brief discussion of Burawoy's (1979) schemata of the labor process so that I can further interrogate Braverman's (1998) deskilling argument using Burawoy's concept of consent to deskilling. In making this comparison, I am able to take into account that deskilling is always a relative, ambiguous and incomplete process. Following this, I will demonstrate how contract broiler farmers consent to deskilling based on my observations in the field, discussing the various daily and longterm games Steve and Eric played at work that generate their consent, followed by a discussion of BBC's failure to create meaningful workplace games. Finally, I will conclude with a discussion of the overarching game that all laborers on the farm played: the game of working hard versus taking it easy. This meta-game allows workers to shore up work-based status while also undermining solidarity across the supply chain.

Consent in the Labor Process:

For Catton (1980: 121), agriculture "is the continual undoing of succession". To maintain a relatively simplified ecosystem, a necessity of industrialized (monoculture) agriculture, human labor must be applied to it. Otherwise, as Catton claims, it will return to wilderness. Agriculture produces more than food and fiber: it also produces class relations via the deliberate organization of human labor necessary to keep ecological succession at bay.

For Burawoy (1979: 14), human history is made through "transform(ing) nature into useful things", which he terms *modes of production*. A mode of production is simply the social organization of production. The class relations generated by the differences between those who create and appropriate the value useful things generated by the mode of production are the *relations of production*. The *labor process*, then, is the relations of production combined with mode of production. Burawoy (1979: 15) further explains: "In its practical aspect the *labor process* is a set of activities that transform raw materials into useful objects or fractions of useful objects with the assistance of instruments of production. This involves labor, the expenditure of effort, the translation of the capacity to work into actual work, of labor power into labor....The *relations of production* shape the form and development of the *labor process*, and the *labor process* in turn sets limits on the transformation of the *mode of production*." (italics added)

Contemporary labor processes are also shaped by the structural contours of the present moment: capitalism, neoliberalism, and monopolization. Under a capitalist system of production, workers are separated from the means of production, workers must then sell their labor power for a wage, and surplus value is created for capitalist via the sale of labor power (Braverman 1974: 36). Neoliberalism, the prevailing governing and corporate ideology of the moment, holds that strong private property rights and the maintenance of free trade and open markets are the best ways to achieve human wellbeing (Harvey 2005: 2). Finally, monopolization is the concentration of enterprises into large corporations via centralization and vertical integration (Burawoy 1979: 193). This, in turn, reduces the negative impacts of class struggle and competition that define earlier forms of more competitive capitalism, stabilizes markets and increases profits for monopoly firms, while the emergence of a strong state apparatus blunts class consciousness by encouraging individualistic forms of self-consciousness (Burawoy

1979). Capitalism, neoliberalism, and monopolization all shape farmer's classed experiences of the poultry farming labor process. Most importantly, these three macro social processes shape the micro, daily "transformation of nature into useful things" in such a way that produces "broiler farming".

Braverman and Burawoy have different conceptions of the coercive nature of the labor process under monopoly capitalism. In the preceding chapter I detail that for Braverman (1998), workers experience a strong and forceful control over their labor process by capitalists through deskilling, the standardization of wages, the destruction of other forms of work, and an increase in wages for fewer and fewer elite workers, all of which is achieved through management's greater coercive control of the labor process.

On the other hand, Burawoy understands the control of the labor process by management as subtler and more hegemonic in contrast to Braverman. He moves beyond the structural implications of the deskilling of the working class by management, instead thinking about how the conflict around exploitation and consent to it are organized through interaction in the workplace itself (Burawoy 1979). For Burawoy (1979: 27), "within the labor process the basis of consent lies in the organization of activities as though they presented the worker with real choices, however narrowly confined those choices might be. It is in the participation in the choosing that generates consent." Thus, Burawoy is departing from Marx and Braverman, who he claims only focus on coercion, by making space to think about how workers consent to deskilling, and thus, their exploitation. Instead of relying on deterministic, structural interpretations of workplace inequality he frames it instead as an interactional, organizational process that is ongoing and collectively determined.

In Burawoy's field site at Allied Corporation management gives an illusion of choice through a piece rate pay system (which workers then turn into a game), an internal labor market, and collective bargaining. Within these parameters, workers make choices about how much effort to expend, which tasks they will perform, and what wages they will accept. His central argument is that consent in the labor process occurs when workers make choices within the parameters set forth by their employers, and it is consent that helps us to understand how the labor process gets enacted at the level of practice. Given this theoretical framework, how do poultry corporations generate consent from contract farmers under an industrialized system of agriculture?

Braverman's focus on the labor process illuminates how deskilling diminishes the range of choices workers have at their disposal. The end point of this theorizing is the total destruction of skill, the reduction of workers to a machine, with no choices of how to do their jobs. However, as my case study illuminates, complete deskilling is elusive. Burawoy (1979: 94) also recognizes this tendency, and attributes it to "the expansion of choices within those ever narrower limits that constitutes a basis of consent and allows the degradation of work to pursue its course without continuing crisis". In making choices that are presented to them as a game through their work, all workers, contract broiler farmers, machinists, fast food workers, et cetera, consent to deskilling and their own exploitation.

In Burawoy's (1979) study of the labor process on the floor of a machine shop he found that consent is generated on the shop floor when workers played the game of making out, which entails machine operators working at faster than normally accepted in order to earn incentive pay. These games at work redistribute conflict from the worker-

management relationship to just workers, playing the game provides "relative satisfaction" since workers have to be at work anyway, all the while obscuring relations of production. Consent is also generated through Allied's internal labor market, which sets pay and training schedules according to the company's policies, instead of responding to broader trends in the external labor market, allowing them to keep wages low (Burawoy 1979: 95). Because workers have the opportunity to more easily advance within the Allied organization via the internal labor market, this minimizes conflict between workers and management and motivates workers to be more dedicated to the firm (Burawoy 1979: 107).

Daily and Long Term Games:

Games coordinate the interest of both workers and management (Burawoy 1979: 85). They must have an element of uncertainty, which can make them sometimes have a life of their own. Broiler farmers play a number of "games" at work. There are daily games and more long-term games that they play. They play games related to their work as broiler farmers with themselves, each other, service representatives and other BBC company personnel, the market, nature, government regulators, their families, and even games with law enforcement. For the purposes of this discussion on the labor process, I will be focusing on games they play with themselves, each other, and BBC personnel.

Daily games inject excitement into the day-to-day necessary labor expenditures on the farm. The first game, and the most important, is the game farmers play against the work day itself: trying to do things when they want and in the order they want to do them. In doing so, the farmers reject the labor discipline of the clock, subscribing to more natural and personal rhythms of time, which EP Thompson (1967: 60) refers to as "task-

orientation" which is "more humanly comprehensible" since "social intercourse and labor are intermingled...there is no great sense of conflict between labor and "passing the time of day." An excerpt from my field notes illustrates how I attempted to make sense of Steve's task-orientation: "At this point we were finished going through the pullet houses, so we got into the truck together and drove up to Steve's house. Steve said he and Eric were going to feed the cattle and that they were "done for the day". Steve said that later he would check the feed and walk the houses, so "done for the day" doesn't really mean done for the day, perhaps it means done with the unusual things for the day, and that the usual daily tasks didn't count toward being "done"?".

Because there are only a few things that must be done at certain times, especially as it relates to the prep, pickup and feeding, this game always has some uncertainty. Steve tries to not stress about his daily schedule, advising me to "Kill a snake on the porch, not in the yard". At the beginning of the field work Steve told me they like to relax after breakfast because they usually have to go to the bathroom, which is inconvenient out on the farm. If Steve, Eric, and I were at breakfast or lunch and we got a phone call from a farm visitor or the hired hand at the broiler farm, we would never rush out the door to address it, instead lollygagging over the sports section of the paper while drinking our coffee and shooting the breeze. We also spent many afternoons sitting on the porch or the back of a pickup truck, drinking cold beers, "listening to Razorback football radio" and joking around. Sometimes the time game would be played at my expense, like when I collected a half house of feed pans and water cups and Eric exclaimed to me that I was "kicking ass" and he'd been "goofing off".

Even though Steve and Eric were sometimes drinking and sitting around while

their wives were at work, they would usually have to work weekends and into the evening either on cattle, checking the broilers, or cutting hay in the cooler summer evenings, so they were able to pace themselves through these time-leisure games. I asked Eric what his weekends were like: "He said they usually didn't have much stuff to do but that Steve drug it out so they'd get done at 6pm. I asked what they did on Sundays. He said he'd get up early and check the houses and then get brunch. He said sometimes on Sunday he and Maggie (his wife) take a drive or go watch football with friends. He said he tries to get off the farm whenever he can. He said last Sunday they went to their friend's place to watch football".

However, Steve and Eric often disagreed about how to schedule their day, like when they argued over a boozy lunch at a Mexican restaurant. In the truck on the way back to the farm, Steve said "Eric just won't listen to me! I think because he's dyslexic he focuses too much on one little problem instead of thinking of the big picture. Like, he wants to spend all this time on injured cows instead of killing them. We don't have time—we have too many cows!"

Whenever Steve and Eric were told to do something at a specific time by BBC, and they didn't deem it necessary or logical, conflict would ensure, like when Steve got a call at 4:20 am because Mateo had forgotten to put a hose out for the catch crew. One morning: I walked into the pullet house on the right (#2) since I figured Steve was in there (the blue truck was by that door, the gray truck by the left door). I went in and Steve was fiddling with the feed hopper. He said that Mike had got onto them yesterday about feeding too late so they decided to get out early and get the birds fed. Steve was frustrated; he said that Mike told him to go feed the birds at 4 am. Steve said he said

"Hell no, I'm not going to feed at 4 am!" Steve said he was having a bad day because of everything that was going on and he said that Eric got stung by a bee and his hand was all swollen."

Time games can be successful or erupt in conflict. If the equipment is smoothly functioning, the feed and water flowing, Steve and Eric can feed the pullet houses, have breakfast by 9 am, and relax until noon. If there are multiple equipment problems, then the feed schedule gets delayed. Then, the day becomes a race against the clock, as the pullets get agitated and aggressive when they can hear other houses being fed while they are left out. If either Eric or Steve have things to do in town, like doctor's appointments or socializing, and the other stays behind, then conflict can erupt about sharing the workload.

Another game that Steve and Eric play is policing each others time, and the time of others, like outside vendors or BBC employees. One Saturday when we were prepping for a flock, "Eric started to complain about the clean out crew. He said they were "settin' over there talking about it rather than doing a goddamn thing about the litter". When I was alone with Steve or Eric, they would often critique each other's use of time, like when "Steve had Eric go over to the broiler and get the other spool of rope. Steve and I then went to the #8 rooster house. Steve said, "If it was me I would have already been in here" in reference to Eric and I just sitting on the truck and drinking beer while he was gone." Another time Eric and I watched Steve bounce by on the tractor, driving it up the road and Eric said, "He wants to be on that tractor. I don't know what he's gonna do but he's gonna be on that tractor! He's gonna smooth those houses but there's nothing to smooth."

Trying to get good marks on the "purple sheet" is another important daily game. This is a sheet that the service representative fills out after every farm visit, usually twice a week. The sheet allows the service rep to quickly assess the farm and house conditions, mark the mortality and bird weights, share the feed schedule with the farmer, and write up what the farmer will have to address before their next visit. Because the service representative will not have done their job if they give a farm perfect marks, according to Steve and Eric, the farm can never get a perfect report. Thus, the purple sheet is always a game since the service rep "can make trouble" if they want to or "take it easy on them". Sometimes the service rep and the farmer game the purple sheet system together, uniting against the Sellerville branch, like when "Mike wrote a note on a white paper so the branch office wouldn't know that he authorized extra feed."

Steve and Eric had a few strategies for improving their purple sheets. On the broiler farm, Steve and Eric would indulge Mike's drawn out conversations despite disliking his company and finding him repetitive. Eric said that "We chat if Mike wants to chat. If he's in a good mood, then we want to keep him in a good mood. He could always find a problem with these houses. They're 7 years old so there's always something wrong." After interviewing a contract hen farmer who had previously been engaged in litigation with another integrator, I suggested that Steve and Eric save the purple sheets in the event of a lawsuit, like this farmer had. Despite Steve being angry enough with BBC to threaten a lawsuit often, he never took my advice. Personally, I thought Eric had a good approach to the purple sheets: Steve said "he never looks at them".

A bad report on the purple sheet could fuel tensions between Steve and Eric, and Mike for weeks, like when Mike continuously found and reported light leaks, which could have caused Steve and Eric to loose their pullet contract. In another instance Mike wrote that they needed to replace all of the cables in a house, which made no sense to Steve. He complained bitterly to me as we ran the feed, "Why doesn't Mike go buy him, his daughter, and his wife a new set of tires?! It doesn't make sense until they're broken!" Sometimes Steve and Eric were written up for what they perceived as frivolous violations, like when "Steve said he got written up to fix the feed leak in #2 and he exclaimed, "It's a feed room!" he then pointed out a feed spill and said "That wouldn't happen if Big Bird Chicken was here. It can't happen"".

In other instances, the advice on the purple sheet was redundant or useless. Mason would often leave sheets with house specifications copied directly from the laminated settings sheets in the broiler houses, which was looked down upon by Leroy, a hired hand at the broiler farm. However, by re-stating the obvious Mason was fulfilling his duty to create a purple sheet during the farm visit without implicating the farm for having problems, needing upgrades or not following company guidelines. Sometimes Steve and Eric would get written up for things that were impossible to address, like a curtain that became leaky during a heavy, sudden rain shower. Steve said, "can't do much but pray about that", so we ignored it.

The last daily game is managing weather, natural, and technological challenges, such as rat infestations, rainstorms, quickly shifting temperatures, broken equipment, etc. This is a game with nature and machine, a game with no resolution, a game whose only certainty is its continuance. If the day's temperatures shifted significantly we would

check on the houses more often, adjusting heaters, vans, and ventilation. During the peaks of summer and winter we'd check the houses often because if the electricity went out the entire house could die very quickly. Even though all houses had backup generators, the farmers knew well enough from personal experience that machinery doesn't often work the way it's supposed to.

Rodents were a never-ending problem in the chicken houses. Steve said, "Every animal that easts from the ground will get parasites" and chickens eat from the ground. When we'd enter the pullet houses to feed, rats would scurry away as we turned on the lights, king snakes patrolled the perimeter of the houses to dine on the rats, and fire ants would congregate on dead chickens, sometimes crawling up my arm as I collected the dead. BBC required bait boxes and the dispersal of rat poison, although the rats would never stay away for long from the feed in the houses. If the farmers didn't do enough to prevent rodents from BBC's perspective, this could be cause to revoke the contract, but they didn't take these measures seriously because they knew how futile they were, like when Steve said he was going to ride his lawnmower and put out rat poison "to make Mike happy".

Dealing with equipment problems, which Steve dubbed "opportunities", was a stressful game. Steve and Eric didn't have brand-new poultry houses. Their equipment was old, and the birds are always hard on a house. Dealing with these equipment opportunities became a race against the clock when we were feeding and a contest to obscure the true nature of the equipment's quality from the service reps and other BBC personnel, who might examine it and determine that an upgrade was in order. Sometimes

we'd leave tools and pieces of equipment in the back of the truck or beside the houses so that it would "make it look like we've been doing something", according to Eric.

Sometimes dealing with "opportunities" created conflict between Steve and Eric, as this excerpt from my notes attests to: "Steve and I went to #6, where Eric was fixing the chain feeder. Steve asked if he needed a new trough. Eric didn't answer. Steve grabbed the broken trough and we walked out of the house together and drove back down to the doghouse. Steve found a piece and then cut a new piece, using the broken piece to measure it and cutting it with a saw that he brought out from the doghouse. Sparks flew as he cut it; he didn't wear any protective gear. Steve said that Eric wouldn't have any problems if he checked before, during and after. We went back into the house to help Eric and they didn't talk to each other. Eric was exasperated at a leaky water line. Steve turned off the water and said he would have to fix the bladder on it and that he would do that later. Steve said he told Eric to fix it the other day. Steve said that Eric would blame the problem on him (Steve) for being at Owen's farm."

Overall, these short term games work to coordinate the efforts of workers and management, which in this case could be between the farmers and BBC, or between the farmers and me, the farmers and their hired hand on the broiler farm, or even between each other since Steve was informally Eric's boss. Playing these games motivated us to work more efficiently, to cooperate and they engendered solidarity between Steve, Eric, and I. And yet as the game made our labor more efficient, it also became a vehicle for BBC to tacitly manage us and foster our compliance with the purple sheets. In playing the daily games, Steve, Eric, and I established a "common interest…in providing the conditions of its reproduction" because success in the game would benefit us collectively

(Burawoy 1979: 85). The benefits of playing the game were more explicit than their mechanisms of control and surplus value absorption. The games came to define a good day: smoothly functioning equipment, maximum leisure time, no noticeable rodents, and no service rep visits. However, when Steve or Eric perceived that one or the other was successful in these games while they were not, conflict would quickly ensure. The wronged party would stomp around, reply in curt, one-word answers, and eventually I would become their sounding board for the airing of their complaints.

BBC's Attempt at Game Creation: Long Term Games

There are also more long-term games on the contract broiler farm, although they are less successful than the short term games I describe above. One such game is boosting chick performance with new technology, such as brighter LED bulbs, new heating devices, et cetera without having to splurge on more extensive, and time consuming, facility upgrades. Another game is putting off upgrades to the grow out houses, trying to get at least one more flock or contract before having to sink more capital into the operation. Overall, these two games relate the biggest game of all: trying to maximize income and minimize investment, which is the game of capitalism itself. These games obscure how surplus value is appropriated from the contract broiler farmer is obscured. It is appropriated via the farmers controlling their own labor with more exactitude than a manager could a worker, by taking on capital investments and risks unattractive to the contracting company, and accepting monopolized underpayment for their efforts and investments.

Throughout my fieldwork, Steve and Eric didn't seriously play the chick performance game. They did add some brighter LED bulbs in the broiler houses, but

other than that they opted out. For chick performance, there was too much uncertainty to make playing the game worthwhile (Burawoy 1979: 88). Both the pullets and broilers had bonuses for feed conversion ratio and livability, but these bonuses did not motivate greater effort from Steve or Eric in the broiler operation. Broiler chick performance is reflected in pay through the tournament system, where all growers that have their chickens slaughtered that week are ranked against one another, or pullet farmers have their laying rates ranked against other pullet grower's flocks. These rankings are attached to bonuses or sanctions. This is BBCs attempt at a game, but this is a game that farmers do not play. Farmers can't play the tournament game since environmental learning is impossible. They can't understand why their performance varies, nor can they control it. They also can't understand the performance of the other growers they are ranked against. There are too many variables in play, too many that the farmer cannot control, plus little trust in the accuracy of BBCs measurements of feed weight and flock weight on the settlement sheet.

Maximizing the return on the investment in the grow out operation and avoiding costly repairs and upgrades is another game Steve and Eric play despite the unfair rules of the game. During my fieldwork Steve and Eric were facing pressure to finance significant upgrades on their pullet operation that they did not want, since the associated pay raise would not even cover the costs over a decade. Farmers often suspect that integrating firms wait until they are nearly done paying off their grow out loans to make these demands, thus maintaining a dependent and docile farm labor and asset pool. This excerpt from my field notes from a conversation with Steve illustrates his frustration with BBC's demands: "If they'd let him just do one more year then he could have it all paid

off. They knew that! He never got a registered letter from Big Bird Chicken until that son of a bitch came up, about 10 letters in total. He won't communicate with him except over registered letter. Steve says he has short man problem, small "an educated idiot"

When workers withdraw from the game because there is too much unpredictability between their effort and the reward, there is a legitimization crisis, like the chick performance game. When upgrades are too costly to maintain a positive cash flow, there is a system crisis and profits are threatened. If farmers feel that a service representative has it out for them, and will never give them a favorable purple sheet, then they don't want to play anymore because the result of the purple sheet is certain, which is a legitimization crisis as well. Legitimization crises can be resolved by making the game less certain again, which will motivate participation.

The Meta Game: Working Hard Vs Taking It Easy

The next game I will describe is a meta-game. This game is less concrete, but its reward is a superior sense of self. This is a two-part game: the first part is a contest to expend as little effort as possible. I call this "taking it easy". This is not only a game against the self, but a game against one another. Simultaneous with "taking it easy", another game is played between farmers, other workers on the farm, and BBC employees, and the general population to secure status as having worked the hardest and/or smartest relative to the other players: the game of working hard. Thus winning both of these games is a contradiction, since you can't simultaneously take it easy and work hard, but their paradoxical nature helps to ensure their continued enactment. These combined games of status seeking and personal reward are without end.

Steve and Eric often remarked to me that the other one wasn't working hard. Eric said Steve was "just messin' with the drill", or that "Steve is acting sore and tired, but all he did last week was ride the tractor." Steve said Eric "might as well get happy" when Eric was in a bad mood because Steve had been at the eye doctor and hadn't worked all day. As Eric and I cleaned pellet stoves he told me "Steve gets mad at Mateo for fuckin' off because he wants to be fuckin' off!" One day when I was taking a short break in the shade Steve asked me if I was "pulling the pin", which is an old row crop saying for leaving your implement in the field and driving home on your tractor.

One particular conflict over work time stands out: when Eric went to a birthday party on a Tuesday night: "I could tell that Steve was pissed off about Eric going to the birthday party, and I was going to ask him about it but he beat me to the punch. As we got to the first traffic light in Peterston, he exclaimed, "Pardon my language, but I can't believe he has a fuckin' birthday party on a Tuesday!" He screamed pretty loud and I can't recall ever seeing him this upset. Steve said that parties should be on the weekend. He said that Eric would need to be done around 5 to be at the party at 6. I asked how much work would he lose, and Steve said it started getting dark around 7, so 2 hours. Steve kept on about it, and so I said "This isn't about the 2 hours, is it?" and he said no. He said he was upset because Eric went to Newhurst this weekend and didn't get back until 6 pm on Sunday, and they could have been cutting hay all weekend. Eric said they were having brunch on Sunday and then would be back, Steve didn't think he would get back so late. Steve said Eric had it planned all week and didn't tell him until Friday. Steve was annoyed by this, and Steve said he would work for his dad and his dad died at 64 years old. Steve said he was happy to work so that his dad could take off. I asked

Steve what he did this weekend, and he said he didn't do any work, which I found funny.

He said he sat around on Saturday."

So even though both Steve and Eric got to take it easy this Tuesday evening, and neither of them worked over the weekend, Steve was able to mobilize his irritation about Eric's unavailability to position himself as morally superior. The conflict wasn't actually about quantity and effort of labor, it was about being understood as the busiest, the most committed. After venting to me about it in the truck, we met Eric at the mechanic and "Steve and Eric began to joke and laugh. I wasn't expecting Steve to have a complete change of mood. He didn't say anything to Eric about the birthday party. We all rode in the truck over to the newer coffee shop in Peterston for breakfast, about 20 minutes away, which surprised me since Steve was complaining about the time".

Steve and Eric considered the service reps, and all BBC employees, to be less hardworking than them, since they had paid vacations and weren't obligated to be on the job site as often as the farmers were. Steve especially made fun of Mike for taking vacation time because Mike seemed to conveniently be on vacation during some of the most stressful times on the pullet farm, like during flock pickup or a visit from the complex manager. Steve said that "Mike has been on vacation 3 times this week and it's Wednesday and he's been on vacation 8 to 10 of the 20 flocks of catching and delivering in the past 5 years." Steve said this new flock had 80 dead on arrival. I asked why he didn't call the branch. Steve replied in his whiny Mike impression, "But he was on vacation!" One afternoon I had the chance to ask Mike how he got his job at Big Bird; after telling me that he took the job for the benefits despite a pay cut, he admitted that: "he just wants to come to work and then camp on the weekends. He said gets 3 weeks of

vacation and 3 weeks of sick leave per year." During the course of my fieldwork Mike went on vacation 3 separate times, and Mason went on one vacation. Mason told Eric and I he went on a hunting trip during his vacation, but he didn't catch anything, which we teased him about. Mason's vacation didn't draw Steve's ire like Mike's vacations, but Mason's role on the broiler farm is must less involved than Mike's with the pullet operation.

Discussion:

By playing these short-term and meta games, Steve and Eric consent to the deskilling of their labor process. In playing games they make a choice which "allows the degradation of work to pursue its course without continuing crisis" (Braverman 1979: 94). However, deskilling doesn't only occur through playing these games. It is also facilitated through technological changes like the mechanization of feeding and watering, scientific poultry breeding and control of feed mixing by scientifically-trained professionals. Furthermore, the peculiar ways contract farming agreements dictate the contours of the labor process on the farm, which I describe in previous chapters, also result in deskilling since farmers have so little purview of the material and personnel flows that circulate through their farms. However, by rejecting Big Bird Chicken's long-term chick performance and house upgrade games, Steve and Eric take back control of part of their labor process and investment capital. However, opportunities to parlay this class consciousness into a broader solidarity with others who are exploited by BBC is thwarted by the meta game.

CHAPTER VII

CONCLUSION

"Some birds will sing for you"—Steve

This dissertation project is a multi-methods analysis of the social organization of broiler farming from its origins in recent history to the industrialized, tightly controlled broiler commodity chain that it is a central part of today. Using archival, interview, and ethnographic data, I detail the how broiler farming began, the emergence of contract farming in this livestock sector and its' enduring consequences, and then I analyzed the contract farming labor process using my ethnographic data. Overall, my case study illustrates the mechanisms by which rapid change occurred in food provisioning during in the twentieth century and the far-reaching consequences of these transformations of the farming occupation. Overall, this project contributes to the sociological literatures on subcontracting, contemporary agriculture, management and workplace conflict between higher and lower status workers, and the literature on deskilling and the capitalist labor process.

I began by explaining the industrialization of broiler supply, showing how the collective creation of the knowledge of chicken husbandry was usurped by contract farmers in conjunction with capitalist firms as broilers realized higher prices in the marketplace. The riskiness of the agricultural enterprise was lessened as technological and agronomic improvements coalesced, further contributing to the industrializing trend. Then, I detailed contract farming's roots in sharecropping and how it came about as the preferred model for the organization of broiler production. Contract farming allowed contractees to maintain a rural lifestyle, when there were few other alternatives for doing

so, despite eroding their autonomy on the farm. Following this, I tease out how farmers stay in this business and cope with its' volatility through their choices about how to execute the labor process, their maneuvers through the interpersonal relationships that structure the integrating organization, and the financing and production decisions that structure their overall farm business. Next, I demonstrate how surplus value is secured from both the labor and investments of contract farmers through the design of the broiler contract itself without integrating firms having to engage in much direct managerial supervision. From there, I scrutinize the day-to-day labor process of raising chicks to slaughter under contract, revealing how many of these tasks are deskilled. However, skill is not totally lost in the industrialization of broiler farming and there are even some opportunities for farmers to become reskilled. Finally, I conclude with a discussion of how consent to deskilling and the appropriation of surplus value is generated in this farming labor process through various games played throughout the work day, pointing out that these organic games are more successful than the integrator's attempts at a game through the broiler tournament finish system.

This micro-level research at one field site reveals more than the political struggles of individual actors as they negotiate with each other and the subsidiary organization that structures their work lives. There are larger, structural implications of these findings, especially for making sense of the overall organization of work and the food system in this historical moment. The treatment and exploitation of contract broiler farmers' fits into a broader pattern of wage stagnation, increasing work hours, the decline in worker benefits and workplace protections, and the assault on collective bargaining and worker unions, all trends that have increasingly accelerated as the neoliberal project has matured.

This has accumulated political and economic capital to the ever-fewer beneficiaries of it, such the owners and top corporate management of the Big Bird Corporation.

The geographic and economic concentration of food production, and the decline in the number of people directly employed in farming, means that most people do not have an understanding of how crops and livestock are raised to the point of consumption, how food is prepared, and the vast web of social and material relationships that go into it. The primacy of the consumer identity has deskilled the food consumer as knowledge is lost about the farming of food and its preparation in the home (Jaffe and Gertler 2006). Both the consumer and the worker in the food chain have been deskilled simultaneously, a mutually reinforcing trend. This accelerates the shift of food production and preparation activities outside of the home, where they are now performed by wage laborers in a variety of privately-owned and corporate workplaces. These include fast-food restaurants, grocery store deli counters, meal delivery services, or further processing plants in the broiler supply that manufacture pre-cooked, sliced chicken breast strips that can be consumed straight from the bag.

Additionally, the global spread of the broiler contract farming arrangement in other nations as well as general trends of increasing worldwide meat consumption are other macro-level implications of this work. Because contract farming and the organizational apparatuses that make it possible increase the throughput of livestock on an accelerated level, the spread of this organizational form results in a wider availability of meat locally, driving down its price, which hurts other local livestock sectors that are less modernized. As unit prices decline in markets flooded with industrially-produced food, subsistence and small producers are driven out of their livelihoods. As contract

farming globalizes its consequences are also moved about the globe: the abandonment of farming of as a livelihood strategy, rapid urbanization, the transformation of much of the population into wage laborers, and the industrialization of the food chain.

This study also reveals how the organization of occupations within and around BBC impacts and creates social stratification in the local community. In Sellerville, BBC not only organized their employees and contractees hierarchically relative to one another, but also the surrounding community's population around race, class, gender, citizenship, and ability relative their relationship to or within the organization. Because different groups of people did certain types of jobs for BBC, which differed in the content of authority, workplace safety, pay, cleanliness, timing of the work shift, job stability, advancement trajectories, and esteem accorded to the occupation, occupational status and identity-based status were intertwined. There was considerable social distance between people of different races and classes in Sellerville, which BBC not only depends on but plays a part in creating and maintaining to their benefit.

Beyond this, my project informs larger issues like the second agricultural revolution, agriculture in the context of capitalism, and the broader implications of the deskilling of agriculture. The ethnographic data illuminate how these definitive characteristics of the second agricultural revolution, mechanization, emphases on efficiency, and expansion of upstream and downstream activities from the farm change the practice of farming itself. The second agricultural revolution is a part of the larger process of capitalism's spread and intensification, which completely reorients contract farming around the end goal of producing profit and achieving a continued rate of growth for the integrator. These goals are different than traditional agrarian conceptions of

success that focused on a successful harvest, the preservation of soil and water quality to ensure long-term sustainability, and the self-sufficiency of the farm family. Finally, the deskilling of contract broiler farmers reveals a more catastrophic threat, namely that the loss of agrarian skill jeopardizes food sovereignty as skill and knowledge are fragmented and privatized, narrowing opportunities for farming to occur outside of the industrial food chain. What happens when there are only experts and no farmers? As I worked through the data, the deskilling of this occupation was brought into stark relief when I compared what Steve knows to what Eric knows. The loss of expertise in one generation is steep.

What is more difficult is articulating a broader, more definitive statement outside of the specific conclusions and answers to my research questions. Industrialized agriculture is exploitative for most of the people within its grasp. Because its inevitability and naturalness is taken for granted by the actors in the supply chain, which combines with the barriers to achieving true class consciousness that I detail throughout this dissertation, most actors lack the revolutionary imagination necessary to collectively transform it.

How can we re-imagine the experiences of farmers and animals in this agricultural space? What would it take for *all* of agriculture to serve the needs of the people and the planet instead of producing profit? Changes in the content and enforcement of beneficial legislation would be the most effective starting point, such as meaningful anti-trust legislation in the chicken industry and broader protections and rights for contract broiler growers. However, this political work has slowed to an almost standstill. The most significant piece of legislation that would have protected contract

farmers from integrator abuses was killed in a broad stroke with the by the Trump administration last year, after 9 years of of being bandied about Washington.

Broiler farming didn't have to come to this: industrialization was not an inevitable fate, as I described in the history and background chapter. It could have gone differently since the origins of broiler farming were in the development of collective and equitable husbandry practices of the Home Demonstration Club programs, whose stated goal was self-sufficiency. Right as these improvements in self-sufficiency were rapidly accruing through the USDA Cooperative Extension and Home Demonstration programs, which if left undisturbed would have led to more sustainable and independent lifestyles, the Southern Enclosure and the spread of contract farming changed the course of economic and rural development dramatically. Is there any way to get this way of life back, or is it lost forever? Furthermore, can we slow down, do less, and do it with more care when it comes to the production of our food? If so, how do we make that happen?

There is a cultural expectation in the US that food should be cheap, widely available regardless of season, pleasing to our palates, without demanding too much of our time to prepare or mental attention to its origins and the social relations embedded in it. If everyone was truly conscious of the exploitation in the food chain, one piece of which I explore in this case study of contract broiler farming, would that generate enough political will to force positive change? In his stand-up special at Madison Square Garden, Aziz Ansari jokes that while awareness of some of the more gruesome aspects of the chicken supply chain, like grinding male pullet chicks to death, generate strong negative emotional reactions, ultimately these emotions don't lead to changes in behavior because it's more difficult to reject the immediate pleasure of consuming the food. I would

imagine that awareness of the mistreatment and deskilling of farmers would have the same lack of effect on consumer choice.

After I left the field, the conflict over the pullet house upgrades did not abate between Steve, Eric, and Big Bird Chicken. There was some back-and-forth compromise regarding the upgrade equipment specifications, but then a new branch manager was hired who Steve had major conflict with years earlier, when the manager occupied a lower-level position in the branch. Because they already didn't get along and Steve was refusing to budge on the upgrades, which tainted all of his interactions with BBC, his pullet contract was revoked about a year after I left. I was paralyzed by this news, as I felt responsible for this loss, despite Steve assurances that it had nothing to do with me. Also following my departure, Eric purchased an additional BBC broiler farm, and signed a multi-year contract which was revoked before the end of the term for refusal to upgrade, just like Steve's pullet contract. BBC demanded upgrades that were so costly, it would have been cheaper for Eric to bulldoze the houses and start from scratch rather than retrofit the existing structures. He now uses that land for cattle grazing.

Eventually Steve figured out a way to get the pullet houses in production again, with minimal upgrades to the equipment, by putting the farm and the pullet contract in his wife Shelley's name. When Steve and I last spoke on the phone, he told me it's relaxing because he's no longer the boss and when the service rep or BBC try to tell him something, he defers to Shelley, which helps him avoid having an emotional reaction. Steve installed a new feeding system in the pullet houses, which works much better than their old chain feeders, so despite having to purchase it, his stress level and expenditure of labor on equipment repair are significantly reduced. Steve and Eric have also expanded

their cattle operation and are exploring other revenue streams. They've sold the broiler farm where I worked and have no plans to add onto their broiler operations. Eric has taken on more responsibility in the business, which has allowed Steve to take several out-of-state hunting trips which he could not do when they had the broiler and pullet farms.

I began this project thinking of stories: animals, the environment, masculinity, the destruction of a way of life, but found another story in my data instead: not about the consequences of the work, but the story of the work itself. The broader theoretical foci that I thought would be so useful in this project slowly faded away as I became immersed in the actual process of doing the work and making sense of it in the broader industrialized food chain it was a part of.

Overall, after conducting this field work, archival work, the interviews, and academic research, I am left with even more questions than answers and a desire to collect more data. I'd like to add to this project by conducting life history interviews with farmers who left or were forced out of contract farming, as well as conduct ethnography at BBC's corporate offices in Chickenville, a brilliant suggestion from the University of Arkansas labor historian I interviewed. That would be quite the follow up!

REFERENCES CITED

- Alison, Charles. 2016. "The Encyclopedia of Arkansas History & Culture: St Louis San Francisco Railway aka: Frisco" Retrieved August 1, 2018. (http://www.encyclopediaofarkansas.net/encyclopedia/entrydetail.aspx?entryID=5102)
- Attewell, Paul. 1987. "The Deskilling Controversy" Work and Occupations 14(3): 323-346.
- Attewell, Paul. 1990. "What Is Skill?" Work and Occupations 17(4): 422-448.
- Bell, Shannon, Alicia Hullinger, and Lilian Brislen. 2015. "Manipulated Masculinities: Agribusiness, Deskilling, and the Rise of the Businessman-Farmer in the United States" *Rural Sociology* 80(3): 285-313.
- Boyd, William and Michael Watts. 1997. "Agro-Industrial Just-In-Time: The chicken industry and postwar American capitalism" Pp. 192-225 in *Globalizing Food: Agrarian Questions and Global Restructuring*, edited by David Goodman and Michael Watts. New York: Routledge.
- Braverman, Harry. 1998. Labor and Monopoly Capitalism: The Degradation of Work in the Twentieth Century. New York: Monthly Review Press.
- Burawoy, Michael. 1979. Manufacturing Consent: Changes in the Labor Process Under Monopoly Capitalism. Chicago: The University of Chicago Press.
- Burawoy, Michael. 1998. "The Extended Case Method" Sociological Theory 16(1): 4-33.
- Caras, Roger. 1996. A Perfect Harmony: The Intertwining of Animals and Humans Throughout History. New York: Simon and Schuster.
- Cole, Larry. 2001. Teamwork in Poultry Production: Improved Grower and Employee Interpersonal Skills. Ames, IA: Iowa State University Press.
- CME Group. 2018. "Livestock Futures and Options" Retrieved August 1, 2018. (https://www.cmegroup.com/trading/agricultural/livestock.html)
- Constance, Doug. 2008. "The Southern Model of Broiler Production and Its Global Implications" *Culture & Agriculture* 31(1&2): 17-31.
- Constance, Doug, F. Martinez-Gomez, G. Aboites-Manrique, and A. Bonanno. 2013. "The Problems with Poultry Production and Processing" in *The Ethics and Economics of Agrifood Competition*, edited by Harvey James, Jr. Dordrecht, The Netherlands: Springer.

- Daniel, Pete. 1981. "The Transformation of the Rural South 1930 to the Present" *Agricultural History* 55(3): 231-248.
- Davis-Blake, Alison and Joseph P. Broschak. 2009. "Outsourcing and the Changing Nature of Work" *The Annual Review of Sociology* 35:321-40.
- Davis, John. 1980. "Capitalist Agricultural Development and the Exploitation of the Propertied Laborer" in *The Rural Sociology of the Advanced Societies: Critical Perspectives*, edited by Frederick Buttel and Howard Newby. Montclair, NJ: Allanheld, Osmun & Co. Publishers.
- Emerson, Robert, Rachel Fretz, and Linda Shaw. 2011. *Writing Ethnographic Fieldnotes,* 2^{nd} *ed.* Chicago, IL: University of Chicago Press.
- Fitzgerald, Deborah. 1993. "Farmers Deskilled: Hybrid Corn and Farmers' Work" *Technology and Culture* 34(2): 324-343.
- Fitzgerald, Deborah. Every Farm a Factory: The Industrial Ideal in American Agriculture. New Haven, CT: Yale University Press.
- Geertz, Clifford. 2005. "Deep play: notes on the Balinese cockfight" *Daedalus* 134(4): 56-86.
- Gisolfi, Monica R. 2017. *The Takeover: Chicken Farming and the Roots of American Agribusiness*. Athens, GA: The University of Georgia Press.
- Gray, LaGuana. 2013. "'Arkansas's First Boomtown': El Dorado and the Emergence of the Poultry Processing Industry" *The Arkansas Historical Quarterly*. 3: 197-221.
- Gray, LaGuana. 2014. We Just Keep Running the Line: Black Southern Women and the Poultry Processing Industry. Baton Rouge, LA: Louisiana State University Press.
- Harrison, Jill. 2012. Buoyancy on the Bayou: Shrimpers Face the Rising Tide of Globalization. Ithaca, NY: ILR Press.
- Harvey, David. 2005. A Brief History of Neoliberalism. Oxford: Oxford University Press.
- Horowitz, Roger. 2006. *Putting Meat on the American Table*. Baltimore: The Johns Hopkins University Press.
- Heffernan, William D. 2000. "Concentration of Ownership and Control in Agriculture" Pp. 61-75 in *Hungry for Profit: The Agribusiness Threat to Farmers, Food, and the Environment*, edited by Fred Magdoff, John Bellamy Foster and Frederick H. Buttell. New York: Monthly Review Press.

- Heffernan, William D. 1972. "Sociological Dimensions of Agriculture Structures in The United States" *Sociologia Ruralis*. 12(3/4): 481-99.
- Heffernan, William D. 1984. "Constraints in the U.S. Poultry Industry" *Research in Rural Sociology and Development*. 1:237-260.
- Hill, Elizabeth Griffin. 2012. A Splendid Piece of Work: 1912-2012: One Hundred Years of Arkansas's Home Demonstration and Extension Homemakers Clubs. Self-Published.
- Hopkins, EN to *Arkansas Fruit and Farms*. Undated. University of Arkansas Cooperative Extension Service Records (MC 1145), series 7, box 8, folder 8. Special Collections, University of Arkansas Libraries, Fayetteville.
- Jaffe, Joann and Michael Gertler. 2006. "Victual vicissitudes: Consumer deskilling and the (gendered) transformation of food systems" *Agriculture and Human Values*. 23: 143-162.
- Jones, LuAnn. 2002. *Mama Learned Us to Work: Farm Women in the New South*. Chapel Hill: The University of North Carolina Press.
- Jonna, R. Jamil and John Bellamy Foster. 2016. "Marx's Theory of Working-Class Precariousness And Its Relevance Today" *Alternative Roots*. 27: 21-45.
- Kirby, Jack Temple. 1986. *Rural Worlds Lost: The American South 1920-1960*. Baton Rouge, LA: Louisiana State University Press.
- Lauck, Jon. 1996. "American Agriculture and the Problem of Monopoly" *Agricultural History*. 70(2): 196-215.
- Lawler, Andrew. 2014. Why Did the Chicken Cross the World? The Epic Saga of the Bird That Powers Civilization. New York: Simon & Shuster.
- Lilley, Sasha. 2006. "Monthly Review Online: On Neoliberalism: An Interview With David Harvey" Retrieved on July 10, 2018. (https://mronline.org/2006/06/19/on-unineoliberalism-an-interview-with-david-harvey/)
- Mazoyer, Marcel and Laurence Roudart, 2006. A History of World Agriculture: From the Neolithic Age to the Current Crisis. New York: Monthly Review Press.
- Mooney, Patrick. 1983. "Toward a Class Analysis of Midwestern Agriculture" *Rural Sociology*. 48(4): 563-584.
- Nargi, Lela. 2017. "Civil Eats: Animal Welfare, Food and Farm Labor, Food Justice" Retrieved July 18, 2018. (https://civileats.com/2017/03/10/the-continuing-woes-of-contract-chicken-farmers/)

- Otis, Eileen. 2017. "Not By Design: Globalization and the Politics of Chaos and Control in the World's Largest Firm" *Unpublished manuscript*.
- Otis, Eileen and Tongyu Wu. 2018. "The Deficient Worker: Skills, Identity, & Inequality in Service Employment" *Sociological Perspectives*. 61(5): 787-808.
- Pachirat, Timothy. 2011. Every Twelve Seconds: Industrialized Slaughter and the Politics of Sight. New Haven, CT: Yale University Press.
- Pollan, Michael. 2006. *The Omnivores Dilemma: A Natural History of Four Meals*. New York: Penguin.
- Riffel, Brent. 2006. "The Feathered Kingdom: Tyson Foods and the Transformation of American Land, Labor, and Law, 1930-2005." PhD, University of Arkansas.
- Sawyer, Gordon. 1971. *The Agribusiness Poultry Industry: A History of Its Development*. New York: Exposition Press.
- Schwarz, Marvin. 1991. *Tyson: From Farm to Market*. Fayetteville, AR: University of Arkansas Press.
- Special News Service. Undated. "Mrs. Elliott Meets With Pea Ridge Club" Blanche Hanks Elliott Papers (MC1272), series 1, box 1, folder 1. Special Collections, University of Arkansas Libraries, Fayetteville.
- Striffler, Steve. 2005. Chicken: The Dangerous Transformation of America's Favorite Food. New Haven, CT: Yale University Press.
- Stone, Glenn Davis. 2004. "Biotechnology and the Political Ecology of Information in India" *Human Organization* 63(2): 127-140.
- Stone, Glenn Davis. 2007. "Agricultural Deskilling and the Spread of Genetically Modified Cotton in Warangal" *Current Anthropology*. 48(1): 67-103.
- Strausberg, Stephen. 1995. From Hills and Hollers: Rise of the Poultry Industry in Arkansas. Fayetteville, AR: Arkansas Agricultural Experiment Station.
- Squier, Susan Merrill. 2012. *Poultry Science, Chicken Culture: A Partial Alphabet*. New Brunswick, NJ: Rutgers University Press.
- Stuart, Forrest. 2016. *Down, Out, and Under Arrest: Policing and Everyday Life in Skid Row.* Chicago: University of Chicago Press.

- The Cooperative Extension Service. Undated. "The Cooperative Extension Service: A Statement of Philosophy and Belief" University of Arkansas Cooperative Extension Service Records (MC 1145), series 7, box 7, folder 6. Special Collections, University of Arkansas Libraries, Fayetteville.
- Tyson Foods. 2017. Investor Fact Book: Fiscal Year 2017. Retrieved on June 8, 2018. (http://s1.q4cdn.com/900108309/files/doc_downloads/2018/Tyson-Foods-FY17-Fact-Book-(rev-042518).pdf)
- Vandeman, Ann. 1995. "Management in a Bottle: Pesticides and the Deskilling of Agriculture" *Review of Radical Political Economics*. 27(3): 49-59.
- Warren, Carol and Tracy Karner. 2005. *Discovering Qualitative Methods: Field Research, Interviews, and Analysis*. Roxbury Press: Los Angeles, CA.
- Wilson, John. 1986. "The Political Economy of Contract Farming" *Review of Radical Political Economics*. 18(4) 47-70