FARMER'S PROGRESS: THE TRIAL-AND-ERROR PATH TO A SUSTAINABLE AGRICULTURAL FUTURE

A THESIS

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ABSTRACT

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Alongside the growth in popularity of sustainable movements, the number of small farms continues to increase throughout the United States. Despite many obstacles, people from various backgrounds have transitioned to become small, sustainable farmers. However, few researchers have discussed the ways in which farmers transition and persist in sustainable farming. I interviewed 13 small sustainable farmers across the United States. Utilizing grounded theory as a method, I discuss ideologies, utopias, and other factors that influence the process by which small farmers transition to, and persist in, sustainable farming practices. Farmers of this study are inspired by individualized (rather than shared) utopian desires. While people's awareness can be inspired by utopian desires, I found that small sustainable farmers' awareness is sustained by past experiences, present circumstances, and future desires

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CHAPTER I

INTRODUCTION

BACKGROUND

Amidst the expansions of agriculture toward a corporate, globalized food system, the number of small farms throughout the United States has also grown (Lyson, Stevenson, and Welsh 2008; Sustainable Agriculture 2019). While the number of large farms within the United States has decreased as they continue to merge into even larger farms, more recent trends suggest that the number of small farmers has been increasing since the early 1990s (Sustainable Agriculture 2019; United States Department of Agriculture [USDA] 2016; Whitt, MacDonald, and Todd 2019). Although not always in a coordinated manner (Rudel et al. 2016), environmental and food advocates often call for small and sustainable farms (Schumacher 1973). In addition, small farms have typically been thought to more easily subscribe to implementation of sustainable techniques such as minimal machinery, diversified livestock crop systems, and organic, symbiotic practices (Gliessman and Rosemeyer 2010; Rudel et al. 2016; van der Ploeg 2018). Two distinct agricultural groups have become salient to social researchers: large farmers as participants in environmentally exploitative techniques and small farmers as advocates for sustainability (Burton 2004; Lowe et al. 1993; Potter and Burney 2002; Wilson and Rigg 2003). Although binary divisions of farmers can be misleading in certain respects

(van der Ploeg 2018), many small farmers do identify themselves as advocates of sustainable practices.

General trends in American society show a move from rural to urban environments and a preference of specialization, efficiency, and lighter physical work. Researchers have identified many structural barriers that disfavor small farmers and encourage large agribusiness (Calo 2018; Carolan 2011; Lawrence, Richards, and Lyons 2013; Shucksmith and Ronningen 2011). Several observers have also pointed to the arduous physical labor and extensive time commitment required by sustainable farming (Bruce and Som Castellano 2016). Nevertheless, a number of researchers have set out to explain the various factors that spur some farmers to transition to, and persist in, sustainable farming.

Most sustainable farming literature does not focus on farm size but the ways in which farmers practice sustainable agriculture including environmental care and economic resilience (Bruce 2019; Delind 2006; Lyson and Guptill 2004). However, the various definitions of sustainability (Pilgeram 2013) reveal an assortment of ways in which both small and sustainable agriculture has been studied. Some researchers have typologized groups transitioning to alternative forms of agriculture (Bruce 2019). Others have described the primary motivations for transition to organic practices, often associated with health, economic promise, or lifestyle goals (Cranfield, Henson, and Holliday 2009; Lamine 2011; Stock 2007). Several researchers have further called for extensions of research to examine the way in which farmers transition (Bruce 2019; Inwood 2013). Research on sustainable farming mostly examines ways in which farmers

persist. Resilience studies have examined the ways in which farmers navigate the constant obstacles associated with small, sustainable farming (Darnhofer et al. 2016; Dwiartama and Rosin 2014). Others have taken a structural approach in order to examine the policies and institutions that enhance or hinder small or sustainable farm persistence (Calo 2018; Grande 2011; Vallianatos 2012). Researchers have gained a better understanding of the obstacles that small, sustainable farmers must navigate in order to persevere, including the personal, familial, and social interactions (Mann and Besser 2017; Stock, Hossler, and Darby 2019; Wynne-Jones 2017).

As a potential framework to study prevailing social narratives, several researchers have examined the ways in which ideologies and utopias influence farmer mentalities. Food and agricultural ideologies legitimize and justify the realities of farmers (Rosin 2013; Youngberg and Demuth 2013). Some utopias legitimize ideology in the world of agriculture (Rosin 2013). Stock et al. (2019) suggest that small farmers stitch together the nostalgic practices of the past to future-oriented goals. They cast sustainable farmers as utopian experiments "in the field." Utilizing utopia as a method, "socio-ag" researchers have underlined the necessity of researchers' involvement in cultivation of food and farming utopias (Shucksmith 2018; Stock, Carolan, and Rosin 2015). In each of these efforts, researchers recognize the importance of continuous contributions by community members as they formulate these futures. However, no study, to my knowledge, investigates the way in which ideologies and utopias influence agency amongst small, sustainable farmers.

PROBLEM STATEMENT

Small and sustainable farming seemingly contradicts the predominant ways of agriculture, often promoted by activist groups. I aim to explore farmers who identify as both small and sustainable across a regional landscape in the United States. The purpose of the study is to understand the process through which small farmers navigate the transition to, and persistence in, sustainable farming practices. With this goal in mind, I specifically explore the way in which conceptual constructs, ideologies or utopias, might promote transition to and persistence in sustainable farming. In addition, I investigate the role of other factors that are influential in this process.

RATIONALE

There is an abundance of qualitative literature concerning niche farming communities (see Bruce 2019; Constance, Choi, and Lyke-Ho-Gland 2008; Cranfield et al. 2009; Stock 2007). Nevertheless, there is a need for in-depth research on the worldviews and motivations of small, sustainable farmers throughout the United States. This study addresses this gap in qualitative literature about small, sustainable farmers throughout the United States. I seek to investigate the cognitive and ideological processes that buttress farmers' transition to and persistence in sustainable agriculture. These findings may offer avenues to further generalize its findings.

While some existing literature has examined the epistemological foundations of farmers' lives, few studies explore the ways in which these influence deliberate action. In addition, prior research involving utopian and ideological frameworks (Rosin 2013; Stock et al. 2019; Youngberg and Demuth 2013) suggests that predominating mentalities

can function to unite common groups. I explore this notion both deductively and inductively in order to explore the relevance of these theories among a diverse group of farmers.

Lastly, the imminent environmental, agricultural, and food supply concerns have provoked the call by social researchers to engage in imaginative contemplation of the agriculture's future (Shucksmith 2018; Stock et al. 2015). These endeavors would have to include the perspective of the small sustainable farming communities (Levitas 2010; Shucksmith 2018). In further efforts to expound upon research goals for a more sustainably robust agricultural future, I also seek to adumbrate the agricultural goals of farmers to add to the academic literature and beyond.

RESEARCH QUESTIONS

Question 1: How do farmers incorporate the ideologies and utopias that influence the way in which they transition to and persist in sustainable farming?

Question 2: How do small farmers describe the actual process of transitioning to and persistence in sustainable farming?

STRUCTURE OF THESIS

With these goals, the remainder of the thesis recapitulates prior arguments, presents research findings, and discusses the results. Chapter 2 contains an in-depth literature review, culminating in two main research questions. Chapter 3 outlines the process through which I performed the research. This includes data collection and analysis methods, the sample, and types of data used throughout the study. Chapter 4 presents the results in relation to theoretical frameworks of the study. Finally, Chapter 5,

summarizes the main conclusions, addresses limitations, and discusses implications for future research.

CHAPTER II

LITERATURE REVIEW

The literature review begins with a review of the emerging trends toward small and sustainable farms in agriculture. I then examine the ways in which researchers define and explore sustainability in agriculture. I recount relevant literature as it pertains to transitions and persistence of small farmers in their sustainable agricultural pursuits. This is followed by a closer examination of the role of ideologies and utopias in "socio-ag" research. I conclude with a discussion of the theoretical framework of this study and the two main research questions.

LITERATURE REVIEW

The Evolution of Farming in the United States

Farming throughout the United States has changed immensely over the last century. In contrast to "conventional" farming of today, small farms with diverse crop and livestock rotations, utilizing minimal machinery, once predominated the farming landscape (Constance 2009). As industrialization spread to the agricultural sector in the late nineteenth century, neoliberal policies (Carolan 2011; Shucksmith and Ronningen 2011), new technological innovations, and competition as "the treadmill of production," favored consolidation of farms, efficiency of production, and specialization of products into what is considered today's "conventional" farming (Dimitri and Effland 2018; Gliessman and Rosemeyer 2010). Amidst poor agricultural counsel and increasing competition, many family farms gradually went bankrupt (Fitzgerald 2003). As a result,

fewer numbers of larger farms began to dominate the United States' countryside as they enveloped some small farms and the collapsing mid-sized farms (Lyson et al. 2008).

While the disappearance of farms led to the disintegration of many rural communities, concern about health effects of conventional agricultural chemicals began to rise (Gliessman and Rosemeyer 2010). During the 1960s and 1970s, farmers experiencing the pressures of "the treadmill of production," and other urban counterparts seeking a "return to the land," saw organic farming as an opportunity (Obach 2015:10). During this time, organic advocates began to spread the slogan of "Small is Beautiful" (Schumacher 1973), as a path of not only ecological harmony, but social wellbeing (Youngberg and Demuth 2013). The organic farms during this period, "were often small in scale, focused on direct markets, [and] aimed at revitalization of rural communities" (Gliessman and Rosemeyer 2010:57). As organic farming progressed in the 1980s, several public reports emerged about the deterioration of rural communities, both environmentally and socially, as a result of industrialized farming (Constance 2009). New initiatives began through grassroots movements advocating for political, structural, and social change in agriculture (Constance 2009). Notably, organics and sustainable became synonymous words in the world of farming (Youngberg and Demuth 2013). As these initiatives began to elicit more widespread support, public demand for organic products began to increase; however, the United States lacked any form of standardization to assure consumers about the quality of *organic* food they purchased. In 1990, the first bill was passed requiring standardization of organic production (Gliessman and Rosemeyer 2010). Through the 1990s, public demand for organic products surged,

and organic cropland quadrupled between 1991 and 2006 (Gliessman and Rosemeyer 2010; Maguire 2019). In addition, consumption demands for locally grown markets were gaining greater widespread support through avenues like community supported agriculture (Brown and Miller 2008).

While large farms merged into rather monopolistic larger farms, since the 1990s, the number of small farms (Whitt et al. 2019) and organic farms have continued to grow. Although not necessarily perceived as sustainable, because of their small size (Rudel et al. 2016), initiatives for sustainability have called for more ecologically intensive agriculture on less acreage of land (Netting 1993). More recent studies from the USDA reveal that the number of small farmers has increased between 2012 and 2017 (Sustainable Agriculture 2019). Today, small farms account for nearly 90 percent of farmers, and 48 percent of US farmland (Whitt et al. 2019). Trends toward two distinct lines of agriculture continue to emerge: one toward larger agribusinesses, favoring a globalized market, heavy use of machinery, and specialization of practice, and another toward smaller homestead farms, engaged in direct to consumer markets (Bailey, Jenson, and Ransom 2014), use of minimal machinery, diversification of products, and (supposedly) environmentally sustainable practices.

As farming has evolved in this way, social theorists have conceptualized two distinct trends. Terms such as *productivism* (Lowe et al. 1993) and *depeasantization* (van der Ploeg 2008) describe the agricultural practices of corporate farming. In contrast, *post-productivism* (Wilson and Rigg 2003) and *repeasantization* (van der Ploeg 2008) describe the small, often sustainable farmer. The term "multifunctional" has also been

used to describe the evolving state of agriculture that includes territorialism of productivist and post-productivist farming regions (Potter and Burney 2002; Wilson and Rigg 2003). Van der Ploeg (2018) suggests that repeasantization, or the reemergence of small more sustainable farms, is now contending with depeasantization, or the push toward industrial farming.

Other scholars have criticized these assumptions, pointing out examples of farm regions that often embody characteristics of both or neither to various degrees (Wilson and Rigg 2003). The above theories are also said to be unable to describe farmers' agency (Burton and Wilson 2006). Although the general perception of small farms as sustainable practices led me to this project, both the project itself, and the review of relevant literature pointed to the greater complexities at work among the self-identified group of small, sustainable farmers.

Ambiguities of the Notions of Small and Sustainable

A common definition of sustainability remains widely debated amongst researchers and the general public (Pilgeram 2013). Many believe that organics equate to agricultural sustainability, while others doubt the premise. Constance et al. (2008:209) describe the conventionalization of organics, or "the process by which organic agriculture increasingly takes on the characteristics of mainstream industrial agriculture." As the demand for organics has increased faster than production can compensate (Constance 2009), the number of farms producing organics has also increased (USDA 2017). The increase in demand has led to the industrialization of organic production in which producers solely aim to meet minimum organic certification requirements, and they do

not necessarily practice other aspects of environmental sustainability. Although organic farming is not necessarily considered sustainable by itself, most studies on sustainable farming insist that organic practices are an important facet of sustainability.

Issues related to agriculture, development, and livelihood all constitute aspects to be included under the umbrella of sustainability (Blay-Palmer 2010). Other common definitions advance beyond the environmental efforts and encompass the entire food system. This ranges from ecological farming principles, to establishing food systems that promote social justice, to incorporation of long-term agroecosystem sustainability (Gliessman and Rosemeyer 2010). Many argue that small farms do not predict sustainability. Although consumer demand for organics (Constance 2009), local food, and sustainably sourced food has risen, much of the growing sector of small farms still generates less than \$10,000 in annual revenue per farm (Dimitri and Effland 2018). While this is often practical because those farmers rely on off-farm sources of income, this reality refutes the notion of economic stability of small farms as a livelihood.

Some studies have examined the importance of sustainability to farmers. Lockie and Halpin (2005) found that farmers' concern for environmental care and health safety are equally likely among small and large farmers. Rudel et al. (2016) have found that small farms are less amenable to sustainable practices than mixed livestock and crop ecosystems. Indeed, many small farms even participate in environmental exploitation. Despite wide debate on the "small as sustainable" notion, various farmers across the United States still identify as both, and few studies stipulate that farmers identify as small and sustainable in their sample. Still, many researchers support the premise that small

farms are also sustainable (Constance 2009; Shucksmith and Ronningen 2011; van der Ploeg 2008). Thus, further explorations of those who identify as "small and sustainable" farmers could add to qualitative social research on this phenomenon.

Transitions to and Persistence in Sustainable Farming

Because of inconsistencies in the definitions of sustainability, I discuss several aspects that have been shown to influence a transition to sustainable farming, not necessarily small-size farming. Various terms that have become associated with sustainable food include organic, local, alternative, and transformative (Blay-Palmer 2010). Many movements have largely advocated the importance of small sustainable farms with local markets in order to reach various facets of sustainability (Lyson and Guptill 2004; Netting 1993; Robinson and Farmer 2017; Thilmany McFadden and Sureshwaran 2011). Lyson and Guptill (2004) suggest that the decline of rural communities and economies have enticed mid and small-sized farmers to transition to sustainable farming amidst commoditization of agriculture. Several researchers describe the motivations that influence adoption of organic farming. Stock (2007:89) enumerates the primary motivations to farm organically as: "educational attainment, their familial farming history, especially organic farming, and attitudes toward health." Furthermore, he suggests that organic farmers often adopt a moral stance, involving care for the soil, healthy food, and flourishing communities. Though not necessarily small, Lamine (2011) suggests that services and policies in favor of collaborative support and legitimation of organic agriculture amongst the public sphere enhance "robust" transitions from conventional to organics. Other studies suggest that both organic and nonorganic farmers

agree with the prototype of "the good farmer," but organic farmers express a higher degree of concern for environmental, community and health wellbeing (Lockie and Halpin 2005). Similarly, Obach (2015) posits that organic transition, once primarily motivated for spiritual goals, is increasingly dependent on the logic of science, shaping the ways in which modern day farmers transition and persist. Cranfield et al. (2009) found organic farmers were primarily motivated to transition to organics for health, safety and environmental concerns, but economic profit was an underlying motivation. This contrasts with other research in which many farmers were found to only adopt organic certification if they perceived it as an economic advantage (Farmer et al. 2014). Constance et al. (2008) indicate some fully believed that organic certification meets the strictest standards of organic production, while others do not perceive organic certification as necessarily sustainable. This could influence whether or not they choose to receive organic certification.

Several researchers investigate the way in which transition and persistence occurs in forms of alternative organic agriculture. Inwood and Sharp (2012) found that farmers are more likely to adapt and innovate sustainably if they have an heir for continuation of farm succession. Bruce (2019) has developed a typology that outlines the way in which three types of farmers in a rural urban interface of Ohio enter into and persist in alternative forms of agriculture. Consistent with prior literature in organics, "Greenhorn farmers" or those who are at least two generations removed from a farm (Bruce 2019:33), and "Returning farmers," those who left the farm at a younger age and have now returned, have similar motivations: food system change, health and wellbeing desires, and

lifestyle goals (Bruce 2019:34). "Legacy farmers," or those who never left the farm but transitioned to alternative agriculture, are motivated to farm full time, sustain financial and health wellbeing, and maintain lifestyle goals (Bruce 2019:34).

In agricultural practices, agency has been studied on both micro and macro scales. In many studies, the social constructs that inform individuals have been examined in relation to agency. Stock and Forney (2014) describe farmer identity as shaped by the reflective self, dependent on social interactions. They suggest that farmer autonomy is a part of their identity; it helps navigate the ephemeral nature of the food system and agricultural conditions. Burton and Wilson (2006) suggest that structure and agency interact to move the agricultural interface forward. Strikingly, post-productivism, as a grassroots movement, often promotes individual farm identities that reside, to at least some degree, in a productivist orientation. In global efforts for environmentally sustainable agriculture, the micro-productivist identities of farmers work against macro-post-productivist structures. Furthermore, a compilation of educational initiatives stressing the local and global urgency of climate mitigation efforts for farmers as well as economic benefits of sustainable farming have been shown to encourage transitions by existing farmers (Haden et al. 2012; see Glossary for greater description of terms).

The qualitative literature of small farms practicing sustainability often examines niche farm communities (see Bruce 2019; Constance et al. 2008; Cranfield et al. 2009; Stock 2007). In conjunction, several researchers suggest that relatively few studies have investigated the way in which new farmers transition to sustainable farming (Bruce 2019; Inwood 2013). These researchers have demonstrated the relevance of micro and macro

forces that influence sustainable farmers. However, these studies are limited in their ability to assess the degree to which social initiatives influence individual farmer agency in the process of transition to and persistence in sustainable agriculture, especially among small farmers. Ideological and utopian frameworks, previously adopted by socio-ag researchers, offer a potential way in which to explore such social influences.

Agricultural Ideologies and Utopias

Several scholars have adopted ideological and utopian theoretical frameworks to explore the way in which societal constructs of knowledge influence farmer perceptions and farmer praxis. Various frameworks shape the way in which ideologies and utopias can be examined in relation to food and agriculture. In general, ideologies are ideas that cloud reality, created by dominant groups in order to maintain social control (Ricouer 1986). Although various definitions of utopia as a concept have also been debated, Ricoeur's (1986:16) introduction to the concept perhaps best articulates its essence: "a place which exists in no real place." Mannheim (1936) describes utopia as a fundamentally realizable vision of the future which shatters the current order.

Rosin (2013) adopts the suggested framework by Ricoeur (1986), that ideologies can only be judged through the assumptions of utopias. He argues that the utopian goal "to feed the world" has provided the moral justification for productivist ideology among New Zealand farmers. Because these capitalist principles remain morally justified, the farmers seek quantity over quality. Similarly, others suggest that neoliberal ideologies encourage farmers to utilize individualist strategies in order to maintain securities. Few farmers seek security through change in policy (Lawrence et al. 2013). In addition,

sustainable agriculture is often associated with ideologies largely against conventional farms (Pilgeram 2013). While these ideologies often sustain organic farmers, they have perhaps fostered a divide between conventional and organic farmers, limiting the possibilities of collaborative initiatives between both conventional and alternative agriculture (Youngberg and Demuth 2013). Geels (2011) suggests people transition to more environmentally sustainable practices when initiatives originate in prior ideologies and cultural understandings. Among agricultural activists, localist food ideologies are also often promoted as more socially just and ecologically sustainable options, despite the evidence of incongruent realities (Hess 2009; Hinrichs 2013). For example, local food initiatives often cater to middle-upper class consumers, omitting local and sustainable options for lower class groups (Born and Purcell 2006). This fails to meet classifications of sustainable outcomes for all. Similarly, sustainable agriculture is often tied to various ideological positions that refute capitalism and industrialization (Pilgeram 2013), but there remains debate over the predominant motivations for financial gains amongst sustainable farmers (see Emery 2015; van der Ploeg 2018; Wynne-Jones 2017). Often suggested as an alternative food movement (Bruce 2019), Goldstone (2001) argues that ideology plays a key component of any revolutionary movement. Despite wide representation of food ideologies and their functions in the literature, few have examined the way in which ideologies influence the process of transition to small, sustainable farms.

The function of utopias can also vary, sometimes working in tandem with corporate interests, seemingly detrimental to sustainable food outcomes (see Rosin 2013).

However, several researchers outline the utility of utopias as a method to visualize a hardly concrete concept: sustainable food futures. According to Blay-Palmer (2010), the inconsistent articulations of sustainability paralyze progress. As science and reality continually change (Hinrichs 2010), flexible food utopias with no certain endpoint, might allow progress toward socially just food systems, healthy ecological relationships, and economic security. Stock et al. (2019) demonstrate the way in which small farmers exist by future oriented experiments. Dowler et al. (2010) demonstrate possibilities of reconnections through direct food to consumer markets. They found that producers and consumers maintain food utopian ideals, namely, by remaining aware and ensuing action for the human and environmental needs around them. Stock et al. (2015) further echo this sentiment relying heavily on Levitas' (2010) notion of utopia. In this sense, not a distinct solution to food challenges but informed imaginations of the possible food futures beyond the confines of current reality serve as an analytical tool that can become a practice. Food utopias can articulate a philosophy of hope that breaks the mold of stagnant food ideology. Similarly, Stock et al. (2015) point to the utopian imageries adopted by farm visionaries that have influenced the way in which many farms operate today. Stock et al. (2015) cite, as evidence, "nature farming" or farming in congruence with the ecological processes of nature (Howard 1940). Stock et al. (2015) also discuss the idea of "plain members and citizens" of the land (Leopold 1949), a viewpoint according to which humans coexist in community with the more than human constituents of their farmland. Recently, Shucksmith (2018) has developed a utopian vision of the good countryside and continues the conversation about the way in which both social

scientists and community members might formulate rural utopias that inform transformation.

Utopian and ideological frameworks have been used to examine the epistemological and ontological orientations of all types of farmers. As illustrated, small sustainable farmers are often projected as agents of change amongst grassroots movements (Constance 2009; Gliessman and Rosemeyer 2010; Netting 1993), but the role of ideologies and utopias as frameworks for this kind of agency remains under explored.

THEORETICAL FRAMEWORK

Ideology and Utopia

Dating back to the origins of sociology, social theorists have discussed ideologies and utopias. Many theorists classify ideology and utopia as derivatives of the sociology of knowledge. Mannheim (1936) describes a central claim to the sociology of knowledge: individual thought is not merely explained by the individual but by the society in which they live. He suggests "knowledge is from the very beginning a co-operative process of group life, in which everyone unfolds his knowledge within the framework of a common fate, a common activity, and the overcoming of common difficulties" (Mannheim 1936:26). Hence, the controversy concerns comparing an ideology or utopia to reality.

To begin with, Marx and Engels (1970) describe ideology as false concepts or biased description of reality. In their argument, ideology occasionally serves the ruling class by enabling a distortion of reality amongst the masses. Ricoeur (1986) describes Marx and Engels' alternative to ideology as praxis rather than science. Praxis, not easily

defined, represents the way in which people do things in their quest to live (Ricoeur 1986). Mannheim (1936) concludes that ideological mentalities are often constructed by ruling groups of society, creating a collective unconsciousness in which the majority is unable to imagine viewpoints outside of current societal situations. This obscures reality while maintaining the status quo. In contrast, utopian views are often conveyed by subordinated groups, with visions to "transform a given condition of society" (Mannheim 1936:36). The utopian mentality can also be guided by a kind of collective unconsciousness that masks conditions of reality with wishful thinking. Building upon Mannheim's descriptions of reality, Ricoeur (1986:8) describes the flaw of reality as praxis: "unless social life has symbolic structure, there is no way to understand how we live, do things, and project these activities in ideas, no way to understand how reality can become an idea or how real life can produce illusions." Ben-Rafael (2003) elaborates on this by suggesting that ideologies cannot be deemed irrationalities because people prescribing them do so under the influence of their own beliefs.

In an effort to bridge ideology and utopia, Ricoeur (1986) echoes Mannheim; both terms share a non-congruence to reality. Where ideology distorts the current reality, utopia is transcends it. As mentioned prior, Rosin (2013) borrows this framework to explore ideologies and utopias of farmers in New Zealand. Ricoeur (1986:172) concludes that the only way to study ideology "is to assume a utopia, declare it, and judge an ideology on this basis. Because the absolute onlooker is impossible, then it is someone within the process itself who takes the responsibility for judgement." Although different, Ricoeur's conclusions somewhat mimic the original formulations of Mannheim (1936).

Rather than chasing logical truth, researchers should search for approximate truths in relation to cultural setting and circumstance. Ricoeur's theory has not gone without criticism (Ben-Rafael 2003). The problem of absolute reality in conceptualizations of ideology (Eagleton 1991) and utopia (Ricoeur 1986) cannot be avoided.

Ruth Levitas (2010) describes utopia as method rather than a concept. Building on Ernst Bloch's (1986) argument that utopian impulses originate in human deprivations or desires, Levitas (2010) argues that utopias allow us to think about alternative futures with informed judgement. These are necessarily plural because there is no one utopia that can encapsulate all future ideals. Levitas (2010) recognizes the way in which utopia as method may deviate from traditions of sociology. She argues, "[I]f we avoid [modeling of future alternatives] we cede the ground to those with far less understanding of social practices" (Levitas 2010:543). A necessary and still unresolved question emerges: who participates in construction of the vision? (Habermas 1984) Perhaps in ways akin to both Mannheim's and Ricoeur's conclusions, utopia as a concept and a method must be perceived in some form of subjectivity in order to make fruitful research possible. According to the sociology of knowledge, the closest formulation of absolute reality is still a formulation by which meaning is constructed through a social lens. A subjective formulation may seem contrary to sociology as a science. However, acknowledging that true objectivity is unachievable, explorations would necessarily involve constant researcher reflexivity (Willig 2013) and a philosophical stance situated in the dynamic and relational revelation of truth.

Like the above scholars, I do not claim complete objectivity; I endeavor to mitigate these problems by informed subjectivity through constant reflexivity and a constructionist philosophical paradigm (Savin-Baden and Howell Major 2013). I build upon the descriptions of ideology and utopia as outlined by Mannheim (1936) and Ricoeur (1986): ideologies are most often directed toward the past, they are used to legitimize what is, and they are often the messages of dominant groups. Despite the common pejorative connotations, I recognize that ideologies can serve a positive function of preserving the identity of groups (Lagoarde-Segot and Paranque 2018). Utopias can also serve a similar function in which people unite, not to preserve, but to shatter the dominant orders of the current circumstance (Mannheim 1936). These are fundamentally achievable goals, "always in the process of being realized," most often from ascending groups of society (Ricoeur 1986:273).

I have already outlined various studies that have adopted ideology and utopia as a conceptual theoretical framework as well as a method. As a theoretical framework, researchers have pointed to various ideological and utopian concepts that might influence farmers. Although some of the studies could arguably fall under the umbrella of sustainable farming, none of the previous analyses, to my knowledge, have investigated ideologies and utopias of small and sustainable farmers throughout the United States. Further, the way in which ideologies and utopias have influenced the transition to farming is also underdeveloped. In addition, as social scientists (among others) call for utopias as a method to envision the future, those who engage in the construction of utopias remain obscure (Habermas 1984). Levitas (2010) has encouraged social

researchers to engage in the formulation of utopian futures. I agree with the idea that community members should be informants of their own community goals (Levitas 2010; Shucksmith 2018). I intend to adumbrate the utopian ideals of my participants in order explain the evolving goals of sustainable agriculture, some of which have already been mentioned in agricultural literature (Shucksmith 2018; Stephenson 2018; Stock et al. 2015).

Constructionism

I adopt a constructionist philosophical paradigm for this research project. Thus, I view reality not entirely external from individual conceptions (Savin-Baden and Howell Major 2013). Social constructionism suggests that individuals understand meaning through social constructs of their society (Berger and Luckmann 1966). The only way in which realities can be viewed is through co-constructions of knowledge because knowledge is always in some capacity interpreted through a lens created by society. Absolute reality free from judgement in ideological and utopian frameworks is impossible to achieve (Mannheim 1936; Ricoeur 1986) because social reality is never separated from individual's experiences of reality. As Savin-Baden and Howell Major (2013:62) suggest, "signs and systems play an important part in the social construction of reality as individuals make and experience meaning together." This orientation allows me to engage with individual farmers as we co-construct understanding of the knowledge that informs their realities. Thus, the representations of knowledge in this project are my interpretation of the co-constructed understandings between participants and me (Savin-Baden and Howell Major 2013). I understand the described realities during the interviews to be the realities of the participant. I explore processes of transition to and persistence in sustainable farming through these conversations.

As I engage with participants, we co-construct knowledge, by negotiation and interpretation (Kvale 1996) of multiple socially constructed realities (Berger and Luckmann 1966). During the interviews, I try to clarify the way in which participants experience reality while mindfully limiting the way in which my articulations might influence their response. I utilize a grounded theory method, drawing heavily from Charmaz (2006: 178): "we can view grounded theories as products of emergent processes that occur through interaction. Researchers construct their respective products from the fabric of the interactions, both witnessed and lived." In this light, I recognize that this representation of research is ultimately inseparable from my own interpretations as the researcher. Glaser (2002) criticizes the constructivist approach of Charmaz, asserting that it is an excuse to avoid the problem of researcher bias. In his view, formulations of constant comparison (Glaser and Strauss 1967) automatically reveal subjective biases. Charmaz (2006) answers that frequent reflexivity throughout the research process is still necessary. In my turn, I utilize both constant comparison (Charmaz 2006; Glaser and Strauss 1967) and frequent researcher reflexivity (Charmaz 2006). I further work to mitigate biased interpretations by implementing a constructionist (as opposed to constructivist) position. In this vein, my writing is highly narrative in nature, revealing the co-constructed realities between participants and the researcher while also creating a space for discussion (Hendry 2010).

CHAPTER III

DATA AND METHODS

This chapter outlines the methods adopted throughout the research process. The first section describes the data used in the study. The second section outlines the sampling and recruitment procedures. The next sections describe the data collection, data analysis techniques, characteristics of participants. Each section offers a brief rationale for methodological choices; however, methodological implications are further outlined in the fifth chapter. The chapter ends with a researcher reflexivity statement.

DATA

The data for this study was primarily drawn from phone interviews with farmers. This includes any relevant information gathered during these interviews from the participants about the way in which they transitioned to and persist in farming. Several participants sent me additional information about their farm before, during, or after the interview. These were included as data only as points of reference in our discussions. This data was all volunteered. These include farm photos, websites with information about their farm and educational information created by the farmer (such as YouTube videos, pamphlets, or newsletter pieces). Finally, memos I kept throughout the data collection process and analysis phase were used in later recollections, to help identify gaps in the data and to mitigate researcher bias. To protect participant anonymity, any data presented in this thesis will only include code names.

SAMPLE

Purposive and snowball sampling were utilized in order to reach small, sustainable farmers throughout the United States (Neuman 2011). Notably, recruitment began during the middle of March 2020, under the heightened lockdowns of the coronavirus pandemic. Out of ethical concern for farmers and in congruence with my Texas Woman's University Institutional Review Board (TWU IRB) approval (see Appendix A), I opted to expand my original sample of only North Texas farmers, to include farmers throughout the United States. This further allowed me to explore the experiences of a diverse group of small farmers in pursuit of a similar goal: sustainability. Still, I am not seeking to generalize my conclusions to the greater population of small, sustainable farmers.

All participants were required to identify as small, sustainable farmers who have transitioned to environmentally sustainable practices. While I recognized various farmers would have various definitions of sustainability (Pilgeram 2013), I chose to allow farmers to self-describe their practices as environmentally sustainable and small. Because organic certification is not always perceived as cost effective for many small farmers and often times not necessarily sustainable (Constance et al. 2008; Farmer et al. 2014), I did not ask whether participants have organic certification as a requirement to participate or not. However, each participant was asked if they utilize organic practices in some capacity. Participants were not required to operate with organics in their entirety in order to qualify for interviews.

I did not directly recruit participants in an attempt to mitigate perceptions of obligatory participation. Participants were recruited on a volunteer basis with the help of several sustainable farming organizations nationwide. I contacted organizations across the United States, and they relayed information to members about an opportunity to participate in a study about small, sustainable farms (see Appendix C). They publicized the announcement on their Facebook pages, membership email blasts, or newsletters. Those interested from the initial recruitment contacted me, and snowball sampling (Neuman 2011) was utilized as many participants volunteered to pass along study information to their farming peers. I outlined goals of the study and potential risks. I also discussed my methods to mitigate risks prior to the study in an email, in the TWU approved IRB consent form, and at the beginning of the phone interview. Participants were required to review the TWU approved IRB consent form (see Appendix D) and return a signed electronic copy before their interview occurred.

Characteristics of Participant Sample

A total of 13 farmers were interviewed for this study. Although each identified as a small, sustainable farmer, many of them come from and currently live in a variety of circumstances. Participants live on farms throughout the United States on different landscape terrains and in various climates. Most farmers live in rural locations; however, the degree of rurality varies from farmer to farmer. Several farmers live hours from a major city, while others live on the outskirts of urban areas. Only one couple describe their location as urban. The farms are located in Texas, Missouri, Kansas, California, Wisconsin, and New Jersey. Most of the farmers of this study moved to farms from an

urban or a suburban location after being at least two generations removed from a farm. Consistent with prior literature, all but one rely on some form of off-farm income (Bruce 2019). Each farmer described plans to continue farm development, expanding upon the variety of their farm, the amount of production, or the services offered from their farm. Farmers of this study have farmed anywhere from two years to their entire lifetime.

Out of the 13 participants, 11 identify as White, one identifies as Latinx, and another identifies as East Asian and White. Ages vary between 34 and 79 with the median age at 43. Everyone has above high school education: two have some college, one attended a trade school, seven have bachelor's degrees, and three have master's degrees. Of the 13 farmers, 8 identify as women. Each of these women either operate or cooperate their farm, rejecting adherence to conventional gendered roles on the farm (Trauger et al. 2010). As a farmer in retirement, Helen wants to break even each year with her expenses, and Cara largely relies on her husband's off farm income as she works to increase farm productivity and homeschool her children (see also Pilgeram and Amos 2015). Teresa operates her farm while working multiple off farm jobs in addition to relying on her husband's income. Table 1 further outlines their demographic characteristics.

 Table 1. Participant Demographic Information

Participant	Gender	Race	Age	Years of farming	State	Highest Level of Education	Main operator of farm	Size	Off farm income
Helen	Female	White	79		МО	Bachelor's degree	Helen	20 acres	yes
Alex	Non-binary	Latinx	34	3	CA	Bachelor's degree	Shared 3 people	half an acre	yes
Michelle	Female	White	45	10	мо	Master's degree	Shared husband and wife	10 acres	yes
Jacob	Male	White	46	10	мо	Master's degree	Shared husband and wife	10 acres	yes
Stephanie	Female	White	66	11	wı	Bachelor's degree	Shared husband and wife	80 acres	yes
Cara	Female	White/East Indian	35	10	WI	Bachelor's degree	Cara	85 acres	yes
Branden	Male	White	38	whole life	KS	Associates of science	Shared with father	9000 acres	no
Teresa	Female	White	43	5	wı	Bachelor's degree	Teresa	5 acres	yes
Lauren	Female	White	51	11	wı	Master's degree	Shared with husband	20 acres	yes
Cindy	Female	White	34	2 to 16 years	NJ	Trade School	Shared with husband	9 acres	yes
Gary	Male	White	35	2 to whole life	NJ	Bachelor's degree	Shared with wife	9 acres	yes
Alisa	Female	White	40	5	wı	Bachelor's degree	Shared with husband	500 acres	yes
Henry	Male	White	60	15	тх	Some college	Shared sort of	50 acres	Yes

DATA COLLECTION

To include farmers throughout the United States working in different climates and amongst different communities, I conducted 11 semi-structured, in-depth phone interviews with 13 farmers (Brinkmann 2014; Opdenakker 2006). Interviews were conducted with two husband and wife couples who co-operate their farm. These were group interviews with the couple and me. Individual interviews were conducted with nine participants who either operate or co-operate their farms. All interviews lasted between 50 and 90 minutes. I reminded each participant they could skip any interview question or leave at any time. In the TWU consent form, participants were asked for permission to record the interview. I also asked to record the interview at the beginning of each phone call. Each participant consented to recording. All interviews were recorded with a wireless recording device and transcribed with denaturalized transcription (Oliver, Serovich, and Mason 2005) after completion of the interview.

I developed an interview schedule with 22 questions (see Appendix B). The first six questions were quick response, demographic questions, about age, race, gender, and farm location. The following 16 questions were generated with the intent to receive descriptive (Brinkmann 2014), open-end responses (Charmaz 2006). As I saw fit, I probed for further descriptions and clarification in order to generate mutual understanding (Charmaz 2006; Kvale and Brinkmann 2009). I asked participants questions like, "could you describe your farm for me;" "could you describe the way you practice sustainability on your farm?" and "could you describe how you began to practice

small, sustainable farming?" I also included questions to probe for ideological influences such as, "tell me about how society has impacted your choice to become a sustainable farmer." In addition, I explored potential utopian visions by asking the farmers to describe the future reality of farming and their hopes for the future of farming.

DATA ANALYSIS

My primary interest was the way in which action as a transition to and persistence in small, sustainable farming occurs across a diverse array of small, sustainable farmers. I utilized an ideology and utopia theoretical framework. With this framework in mind, I analyzed data by grounded theory method and constant comparison in order to develop theory perhaps influenced but not limited by an ideological and utopian frameworks (Charmaz 2006; Glaser and Strauss 1967). I began analysis before interviews took place to help locate an appropriate sample (Saldaña 2014). I continued to analyze throughout the data collection process in order to locate any gaps of understanding (Charmaz 2006). I performed initial coding of all interviews using process coding with gerunds (Saldaña 2014). During the initial code and after initial codes were developed, I used constant comparative methods (Charmaz 2006; Glaser and Strauss 1967) in order to develop distinctions within and between participant transcripts and other data. Initial codes were then grouped under common groups to initiate focused coding (Charmaz 2006), and I read through transcripts a second time in NVIVO, in which focused codes were highlighted. A final round of coding was then performed as I developed theoretical codes and eventual theory (Charmaz 2006; Glaser and Strauss 1967). I then performed a more

substantive review of literature in order to compare theoretical codes to existing literature (Charmaz 2006; Saldaña 2014; Savin-Baden and Howell Major 2013).

RESEARCHER REFLEXIVITY

In my efforts to practice reflexivity throughout the process of this study, I draw from Willig's (2013) two types: personal and epistemological reflexivity. Savin-Badin and Howell Major (2013:77) describe personal reflexivity as, "a process where researcher values, experiences and beliefs shape the research. A consideration of how the research has in turn shaped the researcher is critical." As the researcher of this study, I highly value efforts to mitigate the effects of environmental degradation. In addition, I tend to favor the scientific promulgation of small farms in which organic practices, diversification and soil health is prioritized. Throughout the interview process, I thoroughly enjoyed engaging with participants, and I quite often felt inspired by their work. These values certainly compelled me to pick this research topic; however, I have worked to minimize the influence of my values throughout the research process.

In order to not let these beliefs sway my presentation, I drew from critiques of other researchers and criticisms described by participants about the sustainable farming community. In recruitment of participants, although they were required to identify as sustainable practitioners, I refrained from critiques on their ways of practice. I also constructed open ended interview questions. When seeking clarification, I carefully rearticulated using words and phrases from participants. In further efforts to reduce the influence of my values, I have written this thesis in a manner not to suggest that one way of farming is better than another, but rather to describe the process by which farmers

practice sustainability based on their definitions of it. I simply document their process to transition and persist as they each describe. I include various definitions of sustainability within the literature in order to create context of the different practices farmers of this study engage.

It should be noted, that participants may have described their realities differently to me than they would others (May 1998). Because they knew I was a researcher, this may have impacted our discussions. Throughout the process, several participants were hesitant to answer questions within a certain context because they felt those answers were not appropriate for my study. In efforts to reassure applicability of all answers, I began to explain prior to interviews that there were no right or wrong answers to questions. I also reassured participants any answer was relevant if they expressed reserve.

Epistemological reflexivity can be defined as, "exploring how the researcher's belief system has shaped research design as well as the interpretation of findings" (Savin-Baden and Howell Major 2013:77). The research design for this study likely reflects my values and ethical concerns as a researcher. First, my decision to adopt a theoretical framework alongside grounded theory method reflects my desires for veracity: the authentic representation of participants (Savin-Baden and Howell Major 2013). While I explored the utility of ideological and utopian frameworks, I further felt the necessity to include other influential factors in order to authentically represent the experiences of transition and persistence amongst participants. I also value the voice of my participants, and do not wish to misrepresent them or assert a superior understanding of their world. My desire to engage with rather than conduct research on participants reflects my

decision to adopt a constructionist paradigm. Furthermore, my presentation of results is guided by these values for research. I often include direct quotes from participants. While I present my interpretations, my analysis is strictly limited to the realities described by participants. Because of this, I write in the first person to stress that the presentations in this research are ultimately my interpretations of the constructions I co-created with participants (Savin-Baden and Howell Major 2013).

CHAPTER IV

FINDINGS

The first section of this chapter contains data that describes the sustainable characteristics of the participants. This is presented first in order to contextualize the varieties and similarities amongst participants related to these factors. In the second section, I present results in relation to ideological and utopian frameworks. The last section contains my reformulations of theory. I present data with reference to multiple factors that influence the process by which farmers deliberately transition to and persist in sustainable farming.

WHAT CONSTITUTES "SMALL AND SUSTAINABLE" FARMING?

Farmers were asked to participate if they identify as small, sustainable farmers. While each farmer identifies as both small and practicing environmental sustainability, their descriptions of small and sustainable vary. On 9 farms, 11 farmers operate on land between half an acre and 80 acres. In contrast, on the other two farms of the study, Alisa farms on 500 acres of land, and Branden farms on 9,000 acres of land. While many scholars may argue that a family farming operation of 9,000 acres exceeds the limits of a small farm, I include Branden in the study for two main reasons. First, he identified as a small farmer prior to the interview. Second, he discusses his perceptions of a large farm relative to his operation:

[T]here's another situation like that, where somebody, a big corporation is able to come in and buy a bunch of farms because like a lot of this is taking place in Kansas, or in Brazil like there's an entire, you know, areas in Brazil like the size of Kansas, that are owned by one individual.

While 9,000 acres is a lot in comparison to other farmers of the study, he still perceives his farm as small and at risk from the much larger corporate entities. His circumstance, distinctly unique from others of the study, provides another way to consider transitions to sustainable farming.

Also consistent with widespread debate on definitions of sustainable agriculture (Pilgeram 2013), the gamut of sustainable practices runs amongst farmers along a continuum (Lockie and Halpin 2005). Every farmer practices some form of conservation agriculture (Coughenour and Chamala 2000), minimizing tillage with frequent crop rotations. Along this continuum, some press for ecological diversity, utilizing no machinery, and attempting to mimic natural ecosystems. These farmers tend to describe their intentions as working in harmony with nature. They do this by planting crops native to their region, implementing organic practices, adopting mixed crop-livestock systems (Rudel et al. 2016), and generating as little waste as possible.

Nearly every farmer values soil health and organic principles (Rudel et al. 2016); however, the level of organics varies. Farmers also practice along a continuum of organic practices (see Constance et al. 2008). Some rigidly follow the guidelines of organic certification while others do not. Some farmers work to pursue sustainability beyond organics, while others only implement organic practices on parts of their farm. For example, some do not buy organic chicken feed, or some have parts of their farm not yet transitioned entirely to organics.

Along the continuum of sustainable practices, some farmers produce and sell a mixture of livestock and crops. Some farmers have more specialized operations,

producing a smaller array of products. These farmers tend to focus revenue operations more toward forms of gardening or specific livestock. However, many of them still raise or produce products from their farm for personal or familial consumption. Still others are even more specialized with only a handful of products raised and sold. As the degree of ecological diversity varies from farmer to farmer, sources of revenue range from direct producer to consumer markets to middleman markets. In general, most farmers are in support as consumers and producers of local markets, despite the contention between researchers over the actual sustainability of local markets (see for alternatives to local ideology: Boyce 2013; Hinrichs 2013; see in support Dowler et al. 2010; Lawrence et al. 2013). Consistent with other research, the farms in which women are the primary operator only sell to direct markets (Trauger et al. 2010). However, other operations with those who identify as male, female, and non-binary, also only strictly engage with direct markets. Although during recruitment I only asked for participants to identify as practitioners of environmental sustainability, other aspects, such as economic security and social wellbeing are important facets of sustainability to these farmers. I will discuss these in greater depth in the coming sections.

CHANGES IN AWARENESS, CHANGES FOR THE FUTURE

Defining the "Transition"

Although participants can point to some defining moments of their life that influenced their transition, many of them describe the transition as an intricate process. Before further articulation of these processes, I explain the way in which transition is different in many circumstances. Without being questioned about influential childhood

experiences, each farmer recounts early childhood and life experiences as they explain the way in which they have become sustainable farmers. For some, the act of moving to a farm and beginning the cultivation of products was merely another step—albeit often a large one—in their journey. A similar metaphor can be used to describe those who already owned farms but transitioned to sustainable methods. The transition to sustainable farming is difficult to define because the transitions were always in the making, sometimes since childhood (see also Darnhofer et al. 2016). Many began to expand in their suburban backyard, experimenting with organic gardening techniques and raising chickens. Several began to market their goods before they moved to what they would consider a farm. The transition to sustainable farming in some ways varied quite substantially among the farmers, with various degrees of deliberation and rational planning (see also Lockie and Halpin 2005). At the same time, certain barriers also placed limitations on the ways in which farmers could transition. For the purposes of discussing the transitions I will refer to the transition as either the act of moving to a farm to practice sustainable farming or the act of converting farm practices to sustainable techniques.

The Process of Transition and Persistence: A Closer Look

Despite various backgrounds, farmers described a shift in awareness prior to transition to sustainable farming practices. To illustrate this process, I draw from three distinct participants. Among all participants of the study, Branden's transition to sustainable farming practices is unique because he farms in a community that openly rejects deviation from "conventional" practices. He is also unique because he is the only

farmer of the study who solely relies on farm income (and not alternative sources such as an off-farm job). He by far cultivates the largest amount of land at 9,000 acres, living in a town furthest from a large city. Branden was born and raised as a "conventional" farmer and began the sustainable farming process with access to thousands of acres of farmland. Raised in a family of farmers, he inherited part of his father's and grandfather's cropland. His knowledge of farming was largely shaped by information passed down from family and other members of the community purporting the notion that the land he inherited was only suited for cultivation of commodity crops. It was only when he was exposed to cover crops (in a YouTube video) that his understanding of the possible began to shift. Branden describes this experience:

I always liked, raising calves, more than I did, more than the farming aspect of it, but we don't have any grass and so we never had a cow calf operation or, or had cows because we didn't, we didn't have native grasses, to put them on. So anyway, I, I heard about cover crops in 2016... and in that, that moment a light bulb went off of in my brain, I'm like I can, like why can't I have my own cow/calf operation on cover crops? This is so stinking cool.

His desire to raise cattle suddenly became possible after this shift in awareness.

Originally, Branden began to attend conferences, read books, and watch educational videos in order to learn about implementation of cover crops. Branden notes that he was initially motivated solely to raise cows/calves:

Originally, I just got into it, to take care of cows because I thought that'd be cool to have my own cow calf operation. But then as I started, you know going to conferences and stuff and realizing how important all the soil health principles are, [soil health became more important].

Notably, Branden's initial determination to transition to more sustainable farming practices was not influenced by desires for sustainability; however, his awareness

continued to shift as he learned about and experienced other benefits of soil health. He continued to attend conferences and learn about the detriments associated with heavy tillage, pesticide use, and monocrop systems. In addition, he began to release his own cover crop educational videos, sometimes introducing novel, organic farming experiments. He justifies this persistence differently from his initial transition:

I see the benefits of building up your soil and making your soil healthier [...] And I know farmers here don't care about it but like, to me, if we don't change, as a nation, like so many things need to change to be a benefit for everybody like to be like, let's say I was a farmer in Iowa. Like, I do have a right to raise crops and to be profitable and do all this stuff. But do I have the right to do that at a detriment to the health of the people that are drinking the water that is affected by the way I'm farming? [referring to synthetic fertilizer runoff in drinking water] And so, like, that's the stuff like that, like, you know, really makes me want to like to like, you know... If I can teach and encourage and inspire to change, the better off the entire nation will be, you know in the long run.

Branden's continuation as a sustainable farmer is now also fueled by understandings beyond the sole desire to operate a cow/calf business. These include his passion for soil health and concern for community members affected by his decisions.

Similar to Branden, Stephanie also describes becoming aware of new realities through the process of transition and persistence in her sustainable farming endeavors. However, Stephanie's experience prior to farming is markedly different from Branden's. Like most of the others in the study, Stephanie relied on outside income. A retired computer programmer, she and her husband originally moved to the countryside with no intentions to farm. Rather, their move was initially influenced by several visions for their retirement life, one of which was a healthy lifestyle. Stephanie describes her realization of the health hazards associated with city living prior to their move to the country:

And then one day we were coming back from the lake and I saw this brown haze in the distance right over [the major city in which she lived]. Like Denver in a bowl all the pollution settles there. Well [the major city in which she lived] has all these lakes and was probably lower than other places. There's no [large lake] for the air to blow that away. It just sits there. And I'm like well no wonder why I'm sick all the time.

Once she associated city living with her constant illnesses, she favored retirement in the country more heavily. Stephanie also mentioned her desire to be near nature, to be isolated, and to be constantly working on projects. Only after moving to the country did she begin to imagine farming sustainably. She describes another moment of coming to awareness:

I was walking around the property on a gloomy November and I was kind of down... And then I saw this bittersweet plant, you know, and how bright they are. And when I was going to college up north, the same thing happened to me on a November day, that I was wandering around feeling all depressed and the bittersweet just cheered me up and gave me hope. And that there's greatness and beauty in all this bloom, so stop focusing on the gloom, you know.

In this moment of realization, Stephanie began to cultivate new desires that involved sustainable farming. In conjunction with her health goals, organic cultivation of crops resonated as a healthy option that would bring her joy in plant production. However, the possibility that she could farm sustainably also relied on the material condition of living in the country. Since she began producing crops, she has experimented with various markets including Community Supported Agriculture, grocery stores, and restaurants. She even transformed one of her fruits into an organic alcoholic beverage, sold in stores across the state. As certain avenues and ways of practice prove beneficial or otherwise, she continues to cultivate novel future endeavors. She plans to host more "pick it yourself" farm experiences and engage in other forms of organic education. From her

move to the country, to starting cultivation of crops, to exploring various markets,

Stephanie's farm continues to evolve. Many of her decisions are encouraged by shifting
understandings that recalibrate her direction as a sustainable farmer.

Teresa exemplifies another group of sustainable farmers in the study. Like Stephanie, she relies on outside sources of income; she and her husband work off farm jobs. Different from Stephanie and Branden, she moved from a suburb to the countryside with deliberate intentions to sustainably farm. Teresa's transition to farm sustainably was fueled by her desire for a healthy lifestyle for her and her family:

I have two daughters and they both came down with autoimmune diseases within the same year. And as a biologist I sort of searched the world for what could have possibly caused it, and, you know, I traced it back or just recognized that everything in our world is kind of toxic, and so it wasn't unavoidable. When I was younger... I could take care of my own self and make my own choices, but now it's making a choice for my family. And I wanted to do better than what we were able to do. So that sort of pushed us to where we came, where we ended up.

Although Teresa had always valued health safety for her family, her realization of the toxicity in suburban living influenced her change. She began to imagine living otherwise, informed by her familial health goals and her background as an environmental biologist. Once she and her family moved to their farm, they began to delve into "nature farming." She describes this way of farming:

I choose not to fight nature I chose to work within it. Just like I won't, I won't fight my goats back into the pen. I'll grab a handful of grain and I'll walk in there and they'll follow me, and I just, I go with the... I try not to fight. You know, so sustainable ag, regenerative ag is that. You're not, you're not fighting. You're not inputting. You're not putting a lot of pressure. You're just sort of manipulating what's, what's already there and what's already going on.

However, she attests that a lifestyle of nature farming is still filled with frequent obstacles. Present among all participants of the study, she notes difficulties with finances.

She also discusses little structural support through policy in her region. In addition, the daily agenda of sustainable farming offers its own challenges. However, unpredictability is perhaps part of a farmer's job description:

You know, farmers can solve problems. They're problem solvers. Every day, I mean you wake up and you think you're gonna, your day is gonna look one way and it changes in a second. If you go out to your barn yard and something's a mess. You know, it's just, that's the, that is the way farmers operate. They operate in chaos, and they manage it, and they figure it out and they solve problems.

The process by which Teresa transitioned to sustainable farming was influenced by her prior knowledge, shifts in understanding, and future oriented planning. She persists similarly. As daily obstacles come about, she reacts in congruence with her ideals for nature farming. A more pronounced example, she has made plans to enter a new market that offers opportunity for revenue and animal waste reduction:

I also am starting a tannery with two other women who also raised animals and small flocks and herds, in this area [...] And that is to tan sheep and goat hides for use. So, one thing you find when you start working with animals and agriculture is that there's a lot of waste which is why we, why I use my lard and try and use every part of the animal that I can. Another part that is, part of the waste stream is their skin. So we've... Two of us, three of us have come together to create a tannery to tan those hides in a natural way and mainstream tanning turning a rawhide into a sheep skin rug or a garment uses a lot of chromium, another heavy metal. So what we're doing is using more traditional methods. We're using brain smoke and oils with tissue to turn the raw animal skin into something usable.

Either as adaptations to daily tasks or innovations of larger projects, she becomes aware of her circumstance (such as animal waste) and shifts her practices accordingly toward future, often innovative, goals. While the experiences of transition and persistence of Branden, Stephanie, and Teresa are not identical, they each describe instances of a change in understanding. Along with prior knowledge, at a certain tipping point, their

awareness of their circumstance induced deliberate change toward utopian-like future goals. A similar process was observed among all participants.

Farmers' Vision of a Utopian Agricultural Future

Every farmer currently hopes for a farming future vastly different from the prevalent agriculture of today. In general, participants hope for a future where smaller, more sustainable farms prevail in order to benefit them, their families, the larger society and the environment in itself. Despite some differences, the farmers are united by hopes. Consistent with their original goals to transition into sustainable farming, their factual awareness educates their hopes for the future of agriculture. Participants articulate their informed desires for future food utopias:

You know, so something like [a community garden] would be really, really nice to have. And I've seen it like up in [college town], some of the places that I lived that there was, there was a community garden. A couple blocks away, maybe sometimes on the same block where I live. And, and people would utilize it. They would get like a, like one of the garden beds for themselves. Grow a bunch of stuff on it, but everyone would pick a garden bed and either you know, grow together, and there's all this fruit and food available for people to just pick you know. And share with each other. [Alex]

I would like to see large scale regenerative farms, with many facets. Instead of having monocultures of corn and beans that we're just feeding our livestock, I would rather see perennial fields and livestock moving around the landscape. I would like to see more people just taking responsibility for their, their own wellbeing. I would like to see fruit trees planted along city sidewalks, instead of maple trees or ornamentals. I would like to see a more, more thought about our landscape in our yards. I think, free growing grass and fertilizing that grass, mowing that grass is the silliest, silliest mistake we've made. [Teresa]

As farmers have persisted in their sustainable farming techniques, however, their "coming to awareness" of reality, has revealed the complexity of our current food and farming circumstances. Nearly all farmers of this study refute corporate models and

factory farms. However, many of them demonstrate understanding of the problems associated with the major narratives of sustainable food movements. A concern for these farmers, and reflected in the wider food literature, are issues associated with food price and food access. Pilgeram (2011) describes the problems of current sustainable farming that caters to the upper-middle white class. Several farmers admit that they sell their products at a much higher price, with the understanding that many cannot afford their food. Some reimagine a food future by a shift in values in order to solve this problem:

Michael Pollan's got a quote about expensive food in the idea that there's no, there's no such thing as cheap food, and that the expense is paid to the consumer in poor nutrition or to the environment extracted practices. That all food costs the same. It's just where did that cost get paid? Where are the expenses there? More sustainable practices will be put in place if subsidies and bailouts to enormous monocultures that produce are eliminated. [Gary]

We have to change mindsets, Hannah, that's what we have to do. [Helen]

If farmers started getting billboards out of like, you know, support of like, you know, being funded by or being supported by Allstate or AAA or something like that and had them in their fields. Maybe that could help them. I'm just brainstorming now. [Lauren]

These imaginations of food futures involve a widespread change in values and greater publicity of such values. Shattering current order, they can imagine that an agricultural utopia would involve more support of fresh produce, farmer appreciation and environmental care.

Furthermore, farmers of this study are aware that a future in which these values are reinforced necessarily involves structural change. Some point to greater involvement of the government to affect policy change:

I think until there's a push from the federal government and how they, and how these farm bills, encouraged farm, you know the continuation of farming in this way [(referring to conventional ag)], I just, I'm not sure it will change. [Michelle]

Farms like us don't um... sell to everybody, you know we sell to a certain kind of customer because in general the food that we produce is more expensive than you can get it at the grocery store. It's almost subjectively higher-quality, tastier, just from a, from a flavor, if you will, perspective, but it's more expensive, and we make a lower profit than the big people, and I think in order for more small farmers to crop up, they need to be able to be profitable. The only way it's going to be profitable is if the country's addiction to cheap food is broken and the only way that's going to happen is if subsidies for crops are at a minimum reduced if not eliminated. [Gary]

You need to look at the, the wage workers making minimum wage, and you know that needs to be adjusted to account for how much more expensive food would become. It's just everything is so intertwined. [Cindy]

These farmers make suggestions for political and structural change needed to advance these values. As Michelle and Gary argue, the federal government needs to adopt policies that protect small and sustainable farming practices in various ways. Others, like Cindy, assert policies must either implement guaranteed access to sustainably sourced food or a higher minimum wage so that people can afford this food. Similar to Alex's proposition, promulgation of community and backyard gardens could bring fresh, healthy, and sustainably sourced produce.

In addition, farmers in this study point to the necessity of future collaboration between sustainable and conventional farmers. Many farmers assert that conventional farmers have grown up around diverse production practices. Their experience and knowledge combined with community support could strengthen efforts for a sustainable agricultural future:

[Many conventional farmers have] been on the farm long enough. They've heard the stories and there's a lot of older farmers in my community that love to come and talk to me about what I'm doing. And they always say, 'Oh yeah, that's how my dad used to do it.' And I, and I'm not afraid to ask them what they would do in my situation. And they usually have a really great, you know, great piece of advice. [Teresa]

I learned a lot more about organic and sustainable farming first, and then I came to appreciate conventional farming. And I have a large appreciation and acceptance of my neighbors who do things very differently than we do. And we, we're not the norm in any way shape or form. I like to think we think out of the box here and do things a lot differently than most. But we, we want people to understand that diversifying your farm is a good thing, and taking on what you can manage is an even better thing, because we see too many of our friends who are in their 50s and 60s and early 70s still farming hard, and having to add more land and/or responsibilities onto their day to make it worth a living. To actually get some type of a paycheck. [Lauren]

Their interactions inform their understanding of their conventional farming neighbors. As this occurs, they understand not only the necessity of collaboration but the potential such relationships might have. They suggest the future of agriculture should build upon community relations between different types of farmers in order to achieve greater sustainability.

As one farmer put it, "carrot and stick," their acute awareness of food and farming circumstances might limit their beliefs of the possible. Out of the 13 participants, 10 expressed their skepticism that widespread change could occur. As farmers have become aware of the difficulties of farming sustainably and the barriers stacked against their efforts, they maintain these doubts. They believe this in part because of their understanding that the general population lacks awareness of food systems. As many of them transitioned and continue to persist, they receive pushback from family members and friends. This is reflected by their perceptions of the way others view them. In response to my question: "how would you describe the obstacles you had when you

began sustainable farming?" Branden quickly replies, "my dad thought I had lost my mind." Many others describe similar responses:

There was no influence in my family [to farm]. In fact the opposite. They thought I was crazy. [Teresa]

[Her partner's] family are not real sure about [her sustainable farming]. [Helen]

I think my family thinks I am crazy. And I don't think that's a guess, that's pretty well founded... My parents and my sister and her family think I'm crazy. I think some of my friends think it's cool and would agree or think it makes sense the reasons why I farm, and some think it's kind of the, kind of like it's like, well that's, that's good for you, right, like, yeah, whatever you want to do, you know, that kind of thing. So, yeah, I think it varies, I think I mean I definitely have some friends that like will say, you know, I wish I had your lifestyle. Some people say I think you're crazy, but I'm glad I can buy eggs from you. [Cara]

They are also aware of the structural barriers that serve corporate interests, economic gains and product maximization over their own endeavors. These farmers may continue to hope, but awareness also grounds their projections for the future of agriculture. The coming section further explores the factors that inform their understanding of their situations and their consequent decisions.

BECOMING FARMERS: MATERIAL, SOCIAL, AND ECOCENTRIC CONDITIONS

Each farmer discussed desires as they progress toward sustainable farming. Their hopes for a better, alternative future influence their deliberate changes. These hopes are calibrated by their acute awareness of things; however, each farmer's awareness has been informed in different ways throughout their evolution to becoming their current farming self. The farmers discussed three main sources that inform their awareness: the material, the social, and ecocentric values. The processes by which these interact are highly

distinct for each individual. Nevertheless, they influence the way in which farmers transition to, and persist in, sustainable farming.

Material Conditions

Material conditions both enhance and hinder farmers' transition to and persistence in sustainable farming. I draw from conflict traditions (Collins 1994) to describe material conditions of reality. This is perhaps best defined as the circumstance in which each person lives. Many point to material conditions of their childhood as influential in their transition toward sustainable farming. Participants were influenced by place, time periods, and those with whom they interacted. Those who grew up on farms had direct interactions with the farmland, the work, and the network of other local farmers. Others did not spend a substantial amount of time outdoors; nor did they participate in farm-like activities until adulthood (see also Bruce 2019). As children, each farmer was surrounded by an assortment of "educational tools." This included magazines, TV shows, teachers, school systems, and exposure to the outdoors, animals, and gardens. Henry recalls reading an agricultural magazine as a child, in the 60s and 70s called *Grit*. Eventually, he decided he wanted to return to his family's farm:

When I got back up here and I knew I was going to do something, as far as, you know, living off grid and that sort of thing, I started reading it again more, you know, religiously.

The magazine of his childhood informed his decisions later in life about the way in which he would practice farming. Sustenance farming became associated with the good way of farming for Henry in part because of this exposure to things like the magazine.

Material circumstance sometimes enabled their transition in their adult life as well. For example, Michelle and Jacob describe the way in which they began their farm:

Michelle: I think one of the instrumental books that I have read was one from Joel Salatin that talked a lot about organic farming and rotating crops and how sustainable farming, how important that sustainable farming is. And so when we built this house that's kind of when, you know, we decided that, you know, we weren't going to use any fertilizer. We were going to try to make it as sustainable and organic as possible.

Hannah: Mm hmm. So did you buy that place with the intention of wanting to kind of start your own little homestead?

Jacob: No, I wouldn't say that. We just kind of liked it because it was kind of more private. But then it just was kind of an option to the fact that we had the land.

Michelle: But I mean, immediately we, I mean almost immediately we had chickens within six months, so I mean, we started that very quickly.

While educational material, such as Joel Salatin's book, informed Michelle, they express that they largely began their farm because of their material access to land.

Although some began with access to land, others had to plan and save for years before buying a farm. Cindy and Jacob did not initially have farmland. Their plans to move and implement "nature farming" were spurred by other material circumstances:

[Becoming a sustainable farmer] felt more accidental for me. I was trying really hard to keep my home and my family provided for without bringing in income from outside of my home.... That just kind of, for me was how it worked. And it's always kind of been there. It wasn't the birth of trying to be frugal or sustainable it was... it really just snowballed after we had children and especially during times when strings had to tighten. [Cindy]

For them, in order to meet material necessities, they decided to start farming and producing more of their own needs themselves. Others transitioned to sustainable farming more deliberately. Even Gary (Cindy's husband) recounts their transition as deliberate,

not merely from material circumstance. He said, "it wasn't accidental for me... For me it's, it's born out of idealism." While the way in which farmers actively chose to engage with sustainable agriculture varied, a conglomerate of educational tools and accessibility to necessary resources (both for farming and in support of sustainable practices) influenced their transition.

Many resources are necessary to begin and sustain a farm. However, farmers most frequently discuss finances as a limitation to their operations. In the words of Alisa, "finances would be the hardest thing when I started and are still the hardest thing." In addition to planning and saving for years prior to transition, many of the small farm families continue to work off-farm jobs for financial security and added benefits (such as health insurance), limiting the work they can perform on farm. Furthermore, farmers constantly must evolve and shift the way in which they practice in relation to the potential financial costs. This places limits on their agency as farmers. Closely related, time and material limitations of the land also influence the way in which farmers persist. When they began to farm sustainably, many deliberately chose to increase soil health, plant fruit and nut trees, and initiate livestock operations. This can take up to several years, delaying the amount of production for returnable capital amidst high startup fees and other financial necessities in the interim. Many farmers also experienced losses in livestock or produce as a result of weather, pests, or predators. Yet, many farmers continue to deliberately operate in this way despite the risks and added work, on and off farm.

In some cases, capital, as a material necessity, influenced the way in which farmers persist by encouraging diversification of farming practices and revenue streams. In order to help defray costs associated with sustainable farming, three farmers have implemented Airbnb farm stays. Several others earn income through paid speaking engagements about sustainable farming practices or other forms of education that could eventually involve capital returns. Table 2 contains a more substantive list of different revenue sources farmers have created that involve aspects of their farm. On a day-to-day basis, the farmers consistently innovate new strategies to protect their livestock and produce in congruence with sustainable farming practices. This involves frequently researching solutions and trying newly emerging techniques. Although not always desirable, many farmers express enjoyment from the diversity of work required of them:

I love the, like, well, today I need to go fix this part of the chicken house and this is like a new challenge like every time I have to solve somebody's problem right like that's, that's I think part of what I love about it, intellectually, about, I can, I can find a new way to solve this problem, and if it doesn't work I can try again right? Like it's a kind of ongoing design process and in such a variety of ways like designing the fix for the chicken fence is different from designing the fix for the pig fence and all that, but just working with my hands and all that. I like that variety. [Cara]

Whether through limitation or enhancement, material conditions influence the way in which they continue to persist.

Table 2. Various Sources of Income

Income Source	
1	Paid Speaking Engagements
2	Blogging Websites Related to Sustainable Farming
3	YouTube Educational Channels
4	Educational Farming or Recipe Books Sold for Profit
5	On Farm "You Pick" Days (Consumers pay a fee to pick produce themselves)
6	Community Supported Agriculture
7	Direct producer-to-consumer cooperatives
8	Produce and Meat Sales to Restaurants or Grocery Stores
9	On Farm Restaurants
10	Alcoholic and other beverage products produced and sold
11	Airbnb Farm stays
12	Farmer's Markets
13	Produce Stands
14	Organic Animal Hide Tannery

Social Conditions

In addition to interactions with the material conditions, the social dimension also influences farmers. I refer to the social as a cooperative process among actors (Mannheim 1936). Even social interactions are dependent upon material nature because they are dependent on the circumstance from which they evolve. Access to specific material conditions mentioned above in each farmer's childhood was necessarily influenced by the social meaning associated with each. Educational tools, such as magazines, TV shows, and school environments conveyed social values associated with the material conditions of the world. Cara remembers learning about the effects of greenhouse gases in school, watching *Captain Planet*, and deciding at a young age to buy an electric car. She

eventually did. Combating greenhouse gas emissions became synonymous with the right thing to do:

People were talking about greenhouse gases when I was a kid and re-watching *Captain Planet*, I think, you know, media aimed at kids that, you know, made those ideas clear. I'm very much the sort of person where like, if something seems like the right thing to do. I feel like I need to do it. Whether or not it's easy, or whether or not people think I'm insane. So, it's just kind of a matter of, you know, convictions that you know started in me when I was a kid.

Cara acknowledges that access to these TV shows that spread the message that greenhouse gases are bad influenced her values as an adult and ultimately as a farmer.

Like material circumstance, social interactions have enabled and disabled farmers' progress. Discussed in earlier sections of this thesis, many farmers were discouraged by family and friends prior to transition. Along with the material circumstances of capitalism, rhetorical capitalist support also resonates among farmers. Several describe their desire to enter new markets, where the demand for a certain product is high and the supply is low. In addition, many describe social outlooks that privilege capitalist mentalities as a hinderance for their efforts. Alisa discusses difficulties in receiving a loan to start their Airbnb farm stay:

We've talked to the bankers a few times for different things to try and, to try to get support of this... And we've basically been told they don't believe in what we're doing... but I think if we were to ask them for a loan to build a new parlor, or to buy a bunch more cows, so we can milk more cows, I don't think they would blink an eye before signing that.

Others note the disconnect present among the wider population as a hinderance to their efforts. They note that most consumers value the "cheaper" food option. Others suggest that concern for the way in which food is produced, distributed, and consumed is absent from the American population's concern:

I think, in general, people just don't pay attention. I think it has improved in the last, you know, 10, 15 years with more awareness, but I still think the majority of people are you know, don't have the time or energy or desire to think about the importance of how we grow our food. [Jacob]

They note that absence of these social values sometimes impedes a multitude of factors. First, the absence of these values prevents wider civic engagement for the implementation of policies that protect small, organic farmers. Simultaneously, they observe larger corporate farms gaining substantial advantages. These social values also impact consumption practices, in which they feel price value in addition to misleading advertisements is often prioritized over the quality of food:

You know, I don't have a \$100 million advertising budget, like Nabisco... Or, or, you know, Cargill or Bayer Crop Science, you know, I can't fight that fight. And that's probably the main reason that our people aren't aware of us other guys. [The public is] inundated by, you know, 'look how good this is,' you know, all these commercials about food and all these wonderful looking baby back ribs and all this other stuff and it's all coming from the same place which is, in my opinion, you know, factory farms are junk. So, yeah, you know that's what we're battling and it's, you know, we can't win that fight. [Henry]

The social landscape has tremendous impact on the way in which they can sell, the demand of their products, and some's perception of reasonable pricing. This also impacts their potential to farm fulltime.

Despite these social obstacles that impact their transition and persistence, especially among the community of other small, sustainable farmers, many are encouraged to continue their pursuits. Notably, many communities of sustainable farmers counter certain capitalist ethos. In contrast to the bankers, Alisa describes the support she received from a group of organic growers in her area when she wanted to open an Airbnb educative farm stay:

It's so different than like... Typically businesses, like, try to keep all their info to themselves and they don't want to share like, you might know my secrets, and then you'll put me out of business or whatever. Like, this line of thinking is, this group is just really supportive. Everybody has their own thing that they're doing. And everybody's supportive. So when we were going to open the farm stay, we really had no idea what we're doing. We're like, okay, how are we going to make this happen? Like, what do we need to do? We knew we needed to follow the rules. There were a couple women in the, in that group that had already done that on their own farm. And they were super helpful, like, this is what you need to contact at, at the division of Ag, this was what will happen, and you got to get a water pass. You got to do this. And they just, they just helped me through all of those steps to make sure that everything was covered. And, you know, I feel like you don't really get that in other businesses. It's kind of like sink or swim, on your own and I'm not gonna help you. I'm not gonna offer my advice or anything. So that's been really cool.

Others talk about similar experiences in which passing along knowledge of sustainable farming techniques takes place without concern over creating competition. In addition, many participate in bartering, in which economic exchange value becomes less important. While outside sources of income could influence the farmer's willingness to share, many still spend extensive amounts of volunteer time dedicated to the promulgation of sustainable practices. Maximization of production in many cases was secondary to efforts of widespread environmental sustainability and economic persistence of *all* farmers. As farmers of this study continue to socially engage with farmers and other members of their community, their awareness and ways of persisting become informed and influenced by these interactions. Frequently, as small farmers persist, they begin to engage in collaborative efforts for themselves, others and the nonhuman world.

In some way, every farmer continues to pursue sustainable practices, similar to the practices promulgated by the social groups with which they interact. Each farmer in this study participates in some sort of farming network. This ranges from Facebook

groups, to in-person local engagements, to national conferences. Some voluntarily serve on the boards of banks, assume leadership roles in nonprofit farming organizations, or participate in town hall meetings, mingling with a myriad of farmers and sustainable proponents. These social networks influence the way in which farmers understand certain practices as good, bad, or somewhere in between. For example, as mentioned prior, many farmers discuss intermingling with conventional farming neighbors. While many were originally motivated to thwart the efforts of environmentally exploitative farming, several report becoming aware of the difficulties faced by conventional farmers to transition as they began to intermingle with them. This influences many to support collaborative efforts with conventional farmers despite adamant disagreements over proper agricultural practices. In support of their own autonomy, many realize that their individualized freedoms can only be achieved through initiatives involving the larger community.

Ecocentric Values

The third important aspect described among farmers is less easily articulable. I utilize the overarching term, *ecocentric values*, drawing from the term ecocentrism, or the view that all things in nature, opposed to only humans, have innate equal value (Kopnina et al. 2018). Perhaps not entirely separated from material and social circumstances, this is also described as a part of their identity, existent in itself, among farmers. This discussion also begins with the childhood experiences of participants in which interactions with animals, crops, and the environment at large subsume inherent value. Cindy describes her childhood around animals:

I never excelled in school, and had a really hard time socially, and so I would just kind of fall back on where I was comfortable which was with animals and being

outside, interacting in a really intuitive way with creatures, and I just knew I always wanted to work with animals, and I really love being outside on the farm.

Beyond the objective and social interactions with her classmates and animals, Cindy describes her interactions with animals as "intuitive." Her childhood experiences affirm this understanding as she continues to interact with animals into her adult life as a farmer. Similarly, Helen remembers activities as a child that have influenced her decision to build her market garden in retirement:

It was after World War II. And they were planting what they called Victory Gardens... Okay, well I didn't know what a garden even was at six, and so [my grandmother] and my mom showed me a little plot of land in the far back of the yard, which was probably about 3 x 10 at the time I think... Not very big. And they said, [Helen], this will be your garden. Okay, and I was given some seeds, and I was shown how to work it and everything like that. And boy that's all it took. I was bit. So, ever since then, you know, I had a garden and enjoyed it. And it's just, I think part of my life.

Helen grew up in a time when planting gardens was encouraged and necessary in order to have access to produce. She had access to the material resources for gardening, and she also had people to show her the way in which to implement them. Socially, she was exposed to family members and a national movement that supported this activity. In becoming a "part of [her] life," gardening began to subsume valued meaning beyond just a mundane activity. This understanding perhaps did not develop at age 6, but she points to these childhood experiences as influential in her gardening pursuits as a 79-year-old. The act of gardening, in a sense, became a part of her identity.

In addition to childhood experiences, ecocentric values encouraged transitions to sustainable farming. When discussing with Alex why they chose to adopt sustainable farming practices, they¹ answer:

I think [it's] the best way in the sense of not damaging the earth. You know, I think that's the main reason. You know I don't want to be able to like take all the nutrients out of the dirt and not replenished it because if we don't, we don't take care of the land that we're working on, like are we expecting for it to give us another harvest the next year or the following five years or 10 years from now, like we kind of have to like give back to what's giving us.

Alex views their position as a give and take relationship with the Earth opposed to only take. Similar to Alex, other farmers describe mutual relationships with their land, crops, and animals. Most notably, many mention their distaste for factory farms because of the conditions by which animals are raised and slaughtered for human consumption. In addition, many describe the environmental degradation caused by such practices, worried by the threats this poses not just to humans, but to other species and abiotic constituents as well. Henry describes his concern about factory farms as a "three-way sword," with concern for humans, animals, and the environment:

The food system is total crap. The factory farm stuff coming into the stores and fast food joints and all that, everywhere is animals that are treated inhumanely, they're fed things that they're not supposed to be eating. It's making the animals sick. It's making humans that eat it sick, and fat and dumb and it's making the environment sick. So it's a three-way sword that's killing us. And my goal in life is to end it, and get more farmers doing what I'm doing.

His ecocentric values continue to influence the way in which he interacts as a farmer and with others. These justify his actions as a sustainable farmer and a proponent for sustainable living as he continues to persist. Many have had prior exposure to the heinous

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¹ Alex identifies as non-binary and prefers they/them/their pronouns.

conditions of factory farms, suggesting that circumstances for animals need to be changed. Because their material circumstance is suffused with innate understandings and ecocentric values, many of them justify their resistance to productivist ways of agriculture. Alisa similarly values the happiness of her free-range cows:

It really just comes down to like that's what we believe in. I think, I mean, seeing the cows. We have happy cows. They love to be on a pasture. We don't we don't push them for pregnancies. We don't, we don't do any kind of like medicating to like, sink their cycles or anything. We just, we let it happen naturally. We milk them for a long time actually. [Cow's name], the milking demonstration cow. She is actually one of our older cows in the herd and I think she's 13 years. Yeah, we, we just we believe in that like I, we are, we're animal lovers. We love all of our animals, and we keep them around as long as we can. And, you know, just give them a good life because that's what everybody deserves.

Alisa suggests that cows even deserve the same kind of life as humans. As a result of this understanding, she vindicates her and her husband's efforts to raise their cows in a post-productivist-like way. As these experiences with her livestock continue to occur, they continue to inform the way in which she and her husband practice farming. Other farmers discuss their intuition about animals or their enjoyment of seeing animals happy in their fields. In any case, their values and experiences amidst their farm (and beyond), continue to influence their perseverance, often in the wake of many material and social obstacles.

Religious and spiritual ecocentric values. Farmers also point to ecocentric understandings of their religious and spiritual values. While there are certainly other "types" of values which influence farmers, these are particularly important because they sometimes justify or object their ecocentric views. My conversations with Helen reveal the way in which religion affirms her ecocentric values:

Hannah: why do you continually choose to practice sustainably?

Helen: Well, I think a lot of it is my Christian background. I don't know if I can incorporate that or not.

Hannah: Yeah of course.

Helen: You know, we've only got one world that god gave us, and if we don't take better care of it, we're not going to have it.

Helen understands her Christian background as the reason she practices organic gardening. As Helen continues to observe the ecological harmony in her garden and the community impacts of her work, her experiences and values as a Christian reaffirm her decision to farm sustainably. Conversely, the experiences of farming sustainably continue to reaffirm her Christian and nature value beliefs.

Unlike most others, Branden was not motivated to begin sustainable practices for environmental or ecological values. He simply meant to maintain economic stability of their family farm, while also pursuing desires to own a cow/calf operation. Pursuing sustainability in itself had little "special" meaning as he began to transition. However, throughout the process of transition and as he continued, his understanding of farming sustainably transformed to hold value-laden meanings. As he began to learn and experience the differences in farming with cover crops and diversified practices, he began to become passionate about the ecological health of his land. The original mundane act of farming sustainably, transformed into a sacred quest:

I believe in a creator so I believe that god created corn in a special way that corn is designed to help other species, not designed to just help corn.... When [corn and soybeans] are planted beside each other, soybeans communicate to the corn, 'hey it's hot out. We need to shut down and stop functioning.' And so the corn becomes more drought tolerant when it's planted with soybeans, because the soybeans are communicating with corn, they shut down when it's hot.

In this description, a social, religiously constructed view of purposeful design by a higher entity (Halafoff and Clarke 2018) informs his understanding of the material processes that unfold when corn and soybeans were planted together. As he saw the way in which soybeans and corn grew better together, his religious understandings of purposeful interactions between nonhuman species reaffirmed his decisions to farm in an organic and sustainable way. At the same time, his religious values validated ecocentric values of which he began to adopt. This continues to influence the way in which he transitions all of his farm.

Many describe their cumulative farming experience as transcending other material and social plains of experience. Often, their acts of becoming and being farmers emerge as inherent values in itself and informs their identity as sustainable farmers:

I absolutely am totally in love with [farming]. It feels like umm... [pauses] every part of me physically and emotionally is built for this kind of lifestyle. [Gary]

It's [pauses]... the rhythm of farming is awesome. I get up early. I go to bed early. I work hard, physically hard. I sleep pretty well. It's, it's just the most natural thing to be, to work the land, to work with animals, to produce food, and to keep it all at home. I don't know. It just feels right. [Teresa]

The way in which farmers persist continues to be informed by their interactions. Their daily acts begin to acquire valued meaning, further encouraging their deliberate persistence.

DISCUSSION

Awareness, Ideologies or Utopias?

In Mannheim's (1936) discussion of utopias, one conclusion is the increasing efforts to reach reality have foreshadowed the disappearance of utopias. Ricoeur

(1986:283) follows: "if we call ideology a false consciousness of our real situation, we can imagine a society without ideology. We cannot imagine, however, a society without utopia, because this would be a society without goals." The question is: in the world of sustainable agriculture, often rationalized by science (Obach 2015), do utopias exist and consequently induce change amongst its practitioners? Participants of this study suggest that future-oriented outlooks can shape the way in which they transition and persist. They simultaneously imply their understanding of the difficulties associated with widespread change. Perhaps their awareness, partially informed by scientific reality, can place limitations on their visions for the future. Although farmers illustrate desire for widespread change, individual future goals more frequently propel and inform change among farmers of this study. While I cannot ascertain the degree to which these hopes induce progress in their efforts, their presence seems to help guide their progress.

Farmers can very much imagine radically different agricultural futures. They not only imagine them, they actively engage in efforts toward those futures.

Terming their future imaginations as utopias involves a necessary researcher subjectivity on my part. My findings contradict some articulations of utopias. For example, Mannheim's notion of utopia was not prominently observed: "while individuality is not canceled, it is greatly deemphasized" (Ricoeur 1986:274). Rather than utopias functioning to unite a collective under mentalities that transcend reality as Mannheim (1936) and Ricoeur (1986) would suggest, unique utopian ideas that transcend reality perhaps function as guidance for farmers toward their own goals. These goals may involve visions for a wider collective, but they are not blindly followed, nor do they

deemphasize individual desires. Farmers still valued individuality, and few subscribed to one single farming group membership. I turn to Levitas' (2010:540) description of a crucial aspect of utopian desires: "[they] cannot be articulated other than through imagining the means of its fulfillment." Many of their goals were so far outside their normal circumstances, they could only *imagine* how their futures might progress. Stock et al. (2019) have also described similar utopian mentalities among sustainable farmers in which historical practices of farming are coupled with innovative goals for the future. While no overarching utopia emerged among all farmers as influential guidance toward sustainable farming futures, each farmer formulated their own version of utopia. Similar to the utopian definition by Levitas (2010), "educated desires," their visions for an alternative agricultural future guided many of their decisions. Not solely educated by factual information, their formulations included personal and familial goals that remained in congruence with their moral and social understandings (see Stedman-Jones 1998).

Some scholars assert that farmers and food movements purporting local, organic farming are ideological. They argue that such mentalities are devoid of the realistic predicament of feeding a growing population (Boyce 2013; Castellini 2019; Hinrichs 2013; Youngberg and Demuth 2013). Although these ideas may resonate among many associated with alternative food movements, farmers of this study are alert to the inherent obstacles of many popularized sustainable agricultural options. While farmers agree that various solutions offer "better" alternatives, the cultivation of a flawless system has not been found. The visions of the farmers of this study are arguably utopian, rather than ideological, in nature because they are comprised of projections that shatter the dominant

order (Mannheim 1936). Many of them live and farm differently than most others. Some scholars have also described the productivist or capitalist ideologies that exist among farmers (Lawrence et al. 2013; Rosin 2013). I suggest that while many adhere to certain components of these principles, material necessities and conditions often force compliance to some degree. This is perhaps overshadowed in these arguments. My findings are more similar to those that suggest small farmers seek and implement practices contrary to those ideologies (Lyson and Guptill 2004; van der Ploeg 2008). I do not assert that sustainable farmers are free of any ideological thought, rather their descriptions more appropriately reflect a utopia correcting itself. As they navigate the problems associated with their visions, they can imagine corrections. As demonstrated, farmers continue to reformulate future ideals for agriculture.

Trial and Error: Becoming Farmers

Although utopias highlight similarities and differences, the framework does not capture the greater complexities associated with transition and persistence. Levitas (2010) describes utopias as constantly evolving. Similarly, farmers are always becoming — evolving— amidst their conscious and unconscious ways of knowing and doing. I suggest that farmer agency can be influenced by utopias; however, the material and social worlds combined with ecocentric values can also impact the way in which farmers transition and persist. Action, as transition to and persistence in small sustainable farming, is a constant evolution informed by the way in which participants are aware of each of these. A common phrase among participants is trial and error, which suggests ways of knowing and doing are influenced by prior ways of knowing and doing.

However, in experimenting, farmers must guess or imagine the outcome despite the prior knowledge they might have. Though they are informed, they do not necessarily know how the results might unfold. Not entirely rational, I further suggest farmers are continuously "becoming" with reference to past realities, current circumstances, and future *educated* hopes (Levitas 2010). The material, social, and value-laden interactions are among the predominating factors that influence this "becoming."

The argument of farmers "continuously becoming" is not new. Burton and Wilson (2006) draw from Gidden's theory of structuration to describe the way in which the interactions of both structure and agency move the agricultural process along.

Furthermore, Darnhofer et al. (2016) describe a framework for farmers as "constantly becoming" in accordance to the context of their relationships. van der Ploeg (2018) describes the farmers in vacillation between de- and re-peasantization, always shifting and changing. Others have suggested that the social, material, and religious experiences can influence ways of knowing and ways of doing in agricultural and sustainable efforts (For religious values see Halafoff and Clarke 2018; for social see Geels 2011; Rosin 2013; for material see Barbieri and Mahoney 2009; Burton and Wilson 2006; Calo 2018; Cranfield et al. 2009; Mann and Besser 2017; Vallianatos 2012). However, few agrisocio researchers emphasize the importance of the dialectical interactions between these specific elements and consequent action in the ongoing process to becoming sustainable.

CHAPTER V

CONCLUSIONS

This chapter summarizes the arguments and discusses the implications of the findings presented in Chapter IV. I begin with a summary of research results. I then outline the implications of my methodological decisions on the research, and I further outline the implications of the results for theoretical frameworks. I end the chapter with a discussion of the limitations of this study and suggestions for future research.

SUMMARY OF FINDINGS

The primary purpose of this study was to outline the factors that influence the process through which small farmers transition to and persist in sustainable farming. When I began this study, I expected to find that sustainable farmers began their efforts in response to a shared and uniform goal. I imagined they all transitioned in order to work toward greater environmental sustainability and food system reforms. That was not what I found. Although some farmers transitioned in response to their distaste for corporate farming, others were less concerned about their role as environmental advocates. They adopted more "environmentally friendly" practices for various reasons. Most farmers had a number of goals they were working toward, and sustainable farming offered an avenue to reach those goals. Many wanted healthier food and lifestyle options for them and their family. Some sought new markets with higher demand for the products. Others wanted to be able to provide for their basic needs without reliance on outside sources. Still others wanted to cease involvement with what they perceived to be corrupt farming practices. In

any case, nearly all farmers transitioned to small sustainable farming because it aligned with their specific lifestyle and farming goals. Furthermore, as farmers progressed, they continued to formulate new and evolving goals for their sustainable agriculture pursuits. Their understandings became more harmonious with other farmers and more suffused with visions for a larger collective. Notably, each of them eventually came to value sustainable farming. They indicate the importance of their alternative practices not only for themselves, but for their communities and their larger (human or nonhuman) environment. They continue to pursue such practices, even though it often contradicts common societal and agricultural norms.

Another surprising finding was their predictions for the future of agriculture. I expected that each of them would believe that widespread agricultural efforts for sustainable farming are likely to occur. This was hardly the case, as most expressed their belief that the structural and cultural barriers currently in place will continue to impede progress. While their understanding of these barriers perhaps grounds and delimits their expectations of, and projections for the future, their attuned and calibrated awareness informs their multi-faceted desires for agricultural reform. Still, they all discuss an alternative agricultural future — one which looks vastly different from the predominating methods of today; in other words, utopias.

This thesis contributes to literature exploring the role (or lack thereof) of predominating social narratives as influencers of farmer agency. Informed by prior research on ideologies and utopias, the first research question of the study aimed to examine the presence and function of social mentalities across the group of small

farmers: how do farmers incorporate the ideologies and utopias that influence the way in which they transition to and persist in sustainable farming? It adds to discussions of utopias and ideologies among small farmers in three key ways. First, I suggest that before transition, farmers were not influenced by a singular shared utopian vision. Indeed, different material and social factors influenced each individual to become a farmer or change their farming techniques, most often in tandem with their individual and familial goals. Second, although farmers transitioned for various reasons, each of them experienced shifts in awareness, shifts that determined further stages of their farming or lifestyle transition. Following such realizations, they cultivated new goals (or reformulated existing ones) as they became aware of the inherent flaws within their original goals. For example, as farmers learned about the "unsustainability" of local organic markets for much of the working class, many of them begin to reformulate ways in which all groups, including those with economic disadvantages, could access high quality, sustainably sourced foods. As farmers continue to persist in this way, their various goals start to emerge on a shared horizon and look increasingly similar to each other.

Third, I adumbrate the visions of sustainable farmers for agriculture's future. Much work has gone into the formulation of utopian agricultural visions (Levitas 2010; Shucksmith 2018; Stock et al. 2015). I agree that ideas of community members must be continuously documented and included in such goals. In discussing their desires for farming, they address their hopes for a future vastly different from the observable agriculture of today. This includes policies and social values in support of better food

quality, societal concern about food currently consumed, and practices that revitalize the health and longevity of cultivatable farmland. Confirming the findings of Stock et al. (2019), farmers of this study draw from traditional farming methods of the past while pioneering future-oriented ways of conceptualizing food, producers and consumers. While their hopes may continue to guide their progressions, other factors also contribute to the way in which they transition and persist.

The second research question expands beyond social influences: How do small farmers describe the processes of transition and persistence in sustainable farming? By adopting a grounded theory approach, coupled with comparative methods, I arrived at the conclusion that farmers are constantly "becoming" who they are in a trial and error fashion, while interacting with the material, the social and the ecocentric value elements of their lives. To them, they have always been *becoming* farmers. The accumulation of their past experiences, even from childhood, has informed their decisions leading up to *becoming* small, sustainable farmers and acted as hindrances or encouragements toward their goals. While I do not wish to suggest each of their decisions is entirely rationally planned, progress is informed by lessons of the past, shifts in present awareness, and desires of a projected future. These objective and subjective elements may limit their degree of deliberate decision making, but small farmers of this study still proceed with a resolve to live and farm in alternative ways.

Although this study does not reveal a distinct avenue that all farmers follow to begin and persist in sustainable practices, I suggest that farmers from different backgrounds can progress toward increasingly similar goals. Thus, various efforts to

expose the general population to environmental conditions, food and farming realities, and nature in general can encourage involvement in food system change. Geels (2011) similarly suggests that proponents of sustainability must build from prior ideological and cultural precepts in order to build tolerance for a radically different future (Goldstone 2001). I add to this argument that illustrations of "continuously becoming" farmers emerge from the material, social, and value-relevant realities of the sustainable farming practitioners.

IMPLICATIONS

Theoretical Implications

This study adds crucial details to the theoretical framework initially adopted.

First, there is no prior shared utopian vision guiding the farmers. They arrive at a utopian vision of kinds, at various stages prior to or in their praxis of sustainable farming. As they practice in alternative ways, their utopian visions evolve. Second, contrary to the belief that sustainable farmers unconsciously subscribe to ideas from food movement advocates (Rosin 2013; Youngberg and Demuth 2013), this study finds farmers in possession of a keen awareness of the limitations of their practices.

Third, few studies attempt to conjoin ideologies or utopias with farmers' agency. I suggest that transition and persistence is sustained by individualized mobilization toward future desires. Also, shared social ways of knowing alone cannot explain the speed or lethargy of farmers' advancement toward their goals. The processes by which each farmer progresses indicates a continuous building from the prior ways of knowing and doing, unique to their endeavors. This finding confirms studies that support farmers'

autonomy as a primary influence in their persistence (Stock and Forney 2014; van der Ploeg 2018).

Fourth, this study finds that unique combinations of material conditions, social relations, and ecocentric values pave unique paths of engaging with food, sustainability, organic farming and agriculture.

Finally, against the greater backdrop of sociological theory (Dwiartama and Rosin 2014; Wynne-Jones 2017). I argue that the above frameworks offer a more holistic and integrative understanding of the factors that influence social change, desired or otherwise. *Methodological Considerations*

Several factors have shaped the presented results. First, interviews were conducted during the Covid-19 shutdowns in March and April of 2020. In phone interviews, many farmers expressed thankfulness in their ability to produce their own food during a time when grocery stores were running out of food. In other words, the emergent crisis could have resulted in more positive formulations of the participants' farming experience.

Secondly, although grounded theory methods are not typically utilized in conjunction with a theoretical framework (Savin-Baden and Howell Major 2013), I utilize both in order to suggest relevant reformulations of theory. By utilizing a theoretical framework, my methods are somewhat deductive, which is seemingly contradictory to the goals of inductive theory construction. However, grounded theory allowed me to inductively critique and build upon ideological and utopian frameworks. Furthermore, grounded theory provided an opportunity to explore a multitude of factors

that could influence the sequence by which processes of transition and persistence occur. While these decisions helped achieve overall goals of the study, they limited my ability to include extensive amounts of prior research (Charmaz 2006; Glaser and Strauss 1967). Although many theorists have reached distinctly divergent conclusions from mine, others have suggested the notion of "constantly becoming farmers" as appropriate and useful (see Darnhofer et al. 2016; Dwiartama and Rosin 2014; van der Ploeg 2018).

LIMITATIONS AND FUTURE RESEARCH

The realities portrayed in this thesis are limited to the constructions of reality that occurred in interviews. This inherently affects the presentation of results because there is a possibility that participants would describe their realities differently to others.

Similarly, different philosophical paradigms might encourage different presentations of results.

Secondly, due to the Covid-19 emergency I was not able to be physically present in interviews or observe realities of sustainable farming.

A third limitation is the scope of generalizability of this research. The sample size of 13 farmers cannot be representative of the thousands of small sustainable farmers across the United States (much less the world). However, the articulations presented in this thesis illustrate the importance of in-depth understandings that do not seek to generalize. In addition, recruitment methods using convenience and snowball sampling were not conducive to obtaining a generalizable sample. Notably, this study lacks inclusion of people of color and those with education levels at high school or below. Prior researchers demonstrate that agricultural studies greatly lack inclusion of Black, Hispanic

and American Indian farmers (Alkon and Mares 2012; Myers and Sbicca 2015; Norgaard 2019). I underscore the desirability for future studies to intentionally include farmers of color in processes of transitions to and persistence in sustainable farming. Because of this study's inability to generalize, future quantitative and mixed methods studies should examine the function of common ideological and utopian visions harbored and espoused by the alternative food movement. Researchers should also examine the ways in which shifts in awareness influence the creation of individualized utopian desires in contradistinction to collective utopian mentalities.

A fourth limitation of this thesis is the absence of a single utopian vision among the respondents. Although this is, in its own right, a significant reality, future research could be conducted with farmers who identify as a proponent of a collective vision. For example, those who identify as Joel Salatin (Polyface 2018) followers for "Polyface" farming might provide telling information about the way in which a common utopian farm desire influences change.

Finally, although this study remains limited in its ability to predict where transformation toward sustainable agriculture might occur, it suggests that many have the propensity to become engaged in sustainable agriculture. While these farmers were able to transition, future studies should engage populations that have not yet transitioned but maintain a desire to become small, sustainable farmers. This could be more indicative of the barriers that inhibit transitions.

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GLOSSARY

- Alternative farming: Another term used to describe farming which favors local markets, organic practices, smaller size, and farm diversification (Bruce 2019)
- Commodity Crops: Crops produced for the commodity market rather than for direct consumption. Many times these crops are used for animal feed, oils, or sweeteners. Corn, Soybeans and wheat are amongst the most common commodity crops produced in the United States. (USDA 2019)
- Community Supported Agriculture: A way in which small farmers sell directly to consumers. Consumers are able to pledge to a farmer throughout a growing season to buy produce (and other products) in order to give greater security to the farmer.
- Conventional farming: Somewhat of a misnomer, conventional farming often refers to the predominant forms of agriculture today which stress profit and production maximization. Often not organic (although the conventionalization of organics thesis might suggest otherwise), conventional farming often favors pesticide and insecticide use and heavy machinery. (Cristache, Vuta, Marin, Cioaca and Vuta 2018).
- Cover crops: Cover crops are essentially various grasses, legumes, and other forbs that help replenish and protect the soil. Cover crops are often planted in between other crops in order to create resilience and healthier soil. (USDA 2008)
- Depeasantization: van der Ploeg (2018) describes depeasantization as, "a twofold process that involves there being less farmers and agriculture being less

peasant-like" (van der Ploeg 2018:236). Depeasantization removes the number of farmers in a community, utilizing technologies opposed to manpower, and emphasizes specialization.

- Farm diversification: Having an array of different products being produced on a farm. For example, multiple vegetables, fruits, and livestock all on one farm.
- Local: Farm products which are sold within or very close to the community by which they are produced.
- Mixed livestock crop ecosystems: When farmers allow livestock to graze and interact amongst landscapes of crop production. This is typically thought to increase sustainability of the farm by increasing soil fertility while allowing natural grazing patterns to occur (Rudel et al. 2016).
- Monocrop (also monocultures): When farmers, typically conventional farmers, only produce one (or very few) species of crops, most often in large scale commodity crop production.
- Organic: There is some debate over the actual definition of organics. The USDA defines organic production as anything that is produced in the way it naturally would be. This prohibits use of pesticides or insecticides on produce or food of which livestock eat. It also prohibits use of genetically modified organisms. In addition, animal products with the organic label cannot have been given any added hormones or antibiotics, and must have lived in conditions that would allow for natural behaviors. (McEvoy 2017)

- Post-productivism: The term post-productivist agriculture is often used to describe the more recent farming trends that divert from maximized production. Post-productivists encourage grassroots participation, wider distribution of power concerned with farming policy, and farming techniques that are considered to protect the environment (Wilson and Rigg 2003).
- Productivism: As the farming industry continues to change, some scholars have coined the term "productivism" to describe this global propagation of large scale farms. The term productivist agriculture refers to maximized production of food output, hegemonic domination, and heavy machinery that is often associated with environmental exploitation (Lowe, Murdoch, Marsden, Munton, and Flynn 1993).
- Repeasantization: Repeasantization "means that the agricultural process becomes more peasant like" (van der Ploeg 2018:237). Van der Ploeg suggests that farms began to shift back toward peasant-like practices during the 1980s after the modernization and depeasantization of farms in Europe. This shift typically reverts larger farms to smaller scale farms. Repeasantization may be a result of farmers' desire to reconnected with local, rural communities and to recreate multifunctional farms, cultivating ecologically diverse landscapes that might include multiple crops and animals.
- Transformative: See alternative farming

$\label{eq:APPENDIX} \textbf{A}$ IRB APPROVAL LETTER



February 12, 2020

Hannah DeVries Sociology

Re: Exempt - IRB-FY2020-210 The transition to small sustainable farming

Dear Hannah DeVries,

The above referenced study has been reviewed by the TWU IRB - Denton operating under FWA00000178 and was determined to be exempt on February 11, 2020. If you are using a signed informed consent form, the approved form has been stamped by the IRB and uploaded to the <u>Attachments</u> tab under the <u>Study Details</u> section. This stamped version of the consent must be used when enrolling subjects in your study.

Note that any modifications to this study must be submitted for IRB review prior to their implementation, including the submission of any agency approval letters, changes in research personnel, and any changes in study procedures or instruments. Additionally, the IRB must be notified immediately of any adverse events or unanticipated problems. All modification requests, incident reports, and requests to close the file must be submitted through Cayuse.

On February 10, 2021, this approval will expire and the study must be renewed or closed. A reminder will be sent 45 days prior to this date.

If you have any questions or need additional information, please contact the IRB analyst indicated on your application in Cayuse or refer to the IRB website at http://www.twu.edu/institutional-review-board-irb/.

Sincerely,

TWU IRB - Denton

APPENDIX B INTERVIEW QUESTIONS

Interview Schedule

Demographics:

- 1. How old are you?
- 2. What race or ethnicity do you identify with?
- 3. What gender do you identify with?
- 4. What is the highest level of education you've completed?
- 5. Which city and state is your farm located in?
- 6. Are you the main operator of your farm? Anyone else?

Farming question

- 7. Could you describe your farm for me?
- 8. How long have you been a farmer?
- 9. Could you describe how you practice sustainability on your farm?
 - a. How long have you been using sustainable farming methods?
- 10. Could you describe how you began to practice small, sustainable farming?
 - a. Probing notes:
- i. Who or what influenced you?
- ii. Who or what taught you the practices?
- iii. How did you learn to farm sustainably?

- 11. Why did you choose to adopt sustainable farming as a central practice for your farm?
- 12. How would you describe some of the obstacles you faced when beginning a small sustainable farm?
- 13. How would you describe the benefits you foresaw before having a small, sustainable farm?
 - a. Tell me about the benefits now and how they might have changed
- 14. Tell me about how society has impacted your choice to become a sustainable farmer.
- 15. Tell me about how sustainable farming has impacted you personally.
- 16. What does success in sustainable farming look like?
- 17. Could you describe how you feel about your lifestyle?
- 18. How would you describe the attitudes of those in your community toward sustainable farming models.
- 19. Describe the attitudes of people in the entire United States toward sustainable farming.
- 20. How would you describe the future of farming in America?
- 21. How would you describe your hopes for the future of farming in America?
- 22. Is there anything else you would like to tell me concerning your experience as a farmer?

APPENDIX C RECRUITMENT SCRIPT

RECRUITMENT EMAIL

Dear director of [organization's name]:

I am a researcher at Texas Woman's University interested in the study of small, environmentally sustainable farms. The goal of this research study is to gain a better understanding of the process by which farmers transition to small, sustainable farming models. I am interested in documenting the experience of operating a small sustainable farm.

I am writing to ask for your help in completing the research I am conducting on this topic. If you are interested in assisting me, I'd greatly appreciate if you could share the message below to members of your organization.

Hello Farmers!

I'm a researcher at Texas Woman's University working on my master's thesis about small, sustainable farms. The goal of this research study is to gain a better understanding of the process by which farmers transition to small, sustainable farming models. I also plan to document their current experiences. This is all intended to illuminate how individuals, communities, or policy makers can best support current and future sustainable farmers.

If you identify as a small, sustainable farmer and would like to proceed as a participant in this study or would like more information about the study, please email me at hdevries@twu.edu. Participation in this research is voluntary, and participants can withdraw at any time. As a precaution, there is a potential risk of loss of confidentiality in all email and internet transactions.

Thank you for considering this request.

Sincerely,

Hannah DeVries

APPENDIX D INFORMED CONSENT

Note: Per my IRB approval, I expanded my research sample to farmers throughout the United States. This consent form discusses participants as farmers in Texas; however, in an email sent to participants with the consent form, I explained that the study would take the same precautions amongst all farmers in the study, even though the form predominantly discusses the study about small farmers in North Texas.

TEXAS WOMAN'S UNIVERSITY (TWU) CONSENT TO PARTICIPATE IN RESEARCH

Title: Small Texas Farmers: The Path To Environmental Sustainability And Food Security

Principal Investigator: Hannah DeVries <u>hdevries@twu.edu</u> 940/898-2052 Faculty Advisor: Mahmoud Sadri, PhD <u>msadri@twu.edu</u> 940/898-2061

Summary and Key Information about the Study

You are being asked to participate in a research study conducted by Ms. Hannah DeVries, a student at Texas Woman's University, as a part of her thesis. The purpose of this research is to understand the process through which small Texan farmers navigate the transition to sustainable farming practices. You have been invited to participate in this study because you are a small, sustainable, organic farmer. As a participant you will be asked to take part in a phone, video chat, or face-to-face interview regarding your experience as a small sustainable farmer. This interview will be audio recorded, and we will use a code name to protect your confidentiality. If you do not wish to be audio recorded, I will take notes during the interview. The total time commitment for this study will be a maximum of one hour. The greatest risks of this study include potential loss of confidentiality and emotional discomfort. We will discuss these risks and the rest of the study procedures in greater detail below.

Your participation in this study is completely voluntary. If you are interested in learning more about this study, please review this consent form carefully and take your time deciding whether or not you want to participate. Please feel free to ask the researcher any questions you have about the study at any time.

Description of Procedures

As a participant in this study you will be asked to spend one hour of your time in a phone, video chat, or face-to-face interview with the researcher. You and the researcher will decide on a day and time if you wish to do a phone or video chat interview. If you wish to do a face to face interview, you and the researcher will decide on a private location on the TWU Denton campus. You and the researcher will decide on a code name for you to use during the interview. The interview will be audio recorded and then written down so that the researcher can be accurate when studying what you have said. In order to be a participant in this study, you must be at least 18 years of age or older.

Potential Risks

You will be asked questions pertaining to your experience as a small, sustainable farmer that may include but are not limited to obstacles in your experience, different influences, and personal importance of your farming methods. A possible risk in this study is discomfort with these questions you are asked. If you become tired or upset you may take breaks as needed. You may also stop answering questions at any time and end the interview. If you feel you need to talk to a professional about your discomfort, the researcher has provided you with a list of resources.

Another risk in this study is loss of confidentiality. Confidentiality will be protected to the extent that is allowed by law. The risk associated with loss of confidentiality will be minimized by storing the audio recording, the transcribed interview, and researcher notes about the interview in a locked safe in the researcher's home office. Only the researcher and her advisor will hear the audio recording or read the written interview. The audio recording and the written interview will be destroyed within three years

Approved by the Texas Woman's University Institutional Review Board **Approved: February 11, 2020**



after the study is finished. The signed consent form will be stored separately from all collected information and will be destroyed three years after the study is closed. Specific farm locations will not be disclosed. Only regional descriptions of the farm will be used in the research report.

Loss of anonymity is also a potential risk. The risk of loss of anonymity will be minimized by using code names within the study. If you do a phone or video chat interview, a code name will be used during the interview. If you do a face to face interview, the interview will be held in a private location on the TWU campus that you and the researcher have agreed upon. A code name, not your real name, will be used during the in person interview. No one but the researcher will know your real name.

Finally, participants risk loss of time. The risk of the loss of time will be minimized by limiting interviews to a maximum time of one hour. Participants may also choose to do a phone or video chat platform interview to minimize travel time.

The results of the study may be reported in scientific magazines or journals but your name or any other identifying information will not be included. There is a potential risk of loss of confidentiality in all email, downloading, electronic meetings and internet transactions.

Your audio recording and/or any personal information collected for this study will not be used or distributed for future research even after the researchers remove your personal or identifiable information (e.g., your name, date of birth, contact information).

The researchers will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem and they will try to help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Participation and Benefits

Your involvement in this study is completely voluntary and you may withdraw from the study at any time. If you would like a summary of the results of this study we will email them to you.

Questions Regarding the Study

You will be given a copy of this signed and dated consent form to keep. If you have any questions about the research study you should ask the researchers; their contact information is at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the TWU Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at IRB@twu.edu.

Signature of Participant	Date
*If you would like to know the results of this study tell us where you want them to be sent:	
Email:	

Approved by the Texas Woman's University Institutional Review Board **Approved: February 11, 2020**

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List of Resources

Psychology Today: Therapists in Texas https://www.psychologytoday.com/us/therapists/texas?gdid=EAlalQobChMlr4K_l5q25wlVw8DACh1jxguaEAAYASAAEg/9jvD_BwE

 $\label{thm:counseling} \begin{tabular}{l} Texas Health and Human Services: Adult Mental Health Counseling \\ \underline{https://hhs.texas.gov/services/mental-health-substance-use/adult-mental-health/adult-mental-health-counseling \\ \end{tabular}$

Counseling Center of North Texas https://counselingcenterofnorthtexas.com

Counselors of Texas https://www.counselorsoftexas.com