# BLACK SWANS, PLAIN PRAXIS:
# RITES OF CHAOS IN U.S. BIRTH SYSTEMS

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Anthropology—Doctor of Philosophy

2023

## ABSTRACT

There has been a call within the medical anthropology literature to not merely describe health inequities, but to also reveal and combat their underlying causes. The application of practice theory to birth systems has been one promising area of work in this regard, revealing universal patterns to otherwise unique experiences of change. I further this anthropological endeavor through an analysis of an understudied dynamic within U.S. birth systems—the experiences of Amish, Mennonite, and Brethren parents and their care providers. This dissertation highlights how interpersonal relationships affect change on the individual and group level within healthcare systems and I attempt to answer how these relationships can be structured to address inequities in health experiences.

This dissertation is a multi-sited praxiography of birth systems across the states of Indiana and Michigan. Chaos theory and anthropological research on liminality were sources of inspiration for questions about praxis in these contexts and served as key frameworks in data analysis. Data on praxis was collected primarily through 41 interviews with providers, parents, and knowledgeable community members with the goal of understanding the power dynamics that change praxis at the individual and system level. Within this sample were former and current members of Brethren churches and several care providers with extensive experience with birth care in Amish, Mennonite, and Brethren communities. Archival research, auto-praxiographic reflections, attendance at public events, and the collection of relevant praxis documents were also important sources of data. Rather than detailing any one praxis system in depth, this dataset was intended to capture the complex interactions that occur between several praxis systems to affect change.

Data analysis revealed limits on both parents' and providers' power to control the birth process that are not adequately predicted by either obstetric or midwifery systems. Through analysis of experiences of vulnerability and examples of resilience in various birth systems, I illustrate the need for diverse relationships within and between systems while also advancing anthropological theories that further illuminate these concepts. I also outline how religious exemptions can be a source of unpredictable chaos that may simultaneously reduce health inequities for some and increase health inequities for others. I propose that examples such as birth in Amish, Mennonite, and Brethren communities demonstrate that exemptions for alternative praxis should not be restricted based on religion. Instead, I argue for the decriminalization of individual birth praxis, the facilitation of praxis change, and integrated yet autonomous health system designs.

Across three data chapters I critically compare the quality and design of U.S. birth systems and their unique answers to what is the right time, place, and care needed for a successful transition. The exploration of change at the individual and system level in two different transitional contexts—experiences with counter-culture systems and experiences with the birth process—challenges existing anthropological frameworks for change. By taking an interdisciplinary approach that borrows concepts from chaos theory, this dissertation also expands those frameworks. I conclude that birth is a chaotic, unpredictable process where there is no universal answer for the right time, place, and care for birth. For a birth system to be robust it should thus adapt to this diversity in praxis as opposed to attempting to control it.

*For Dad*

“Cause it's not about you, not you, anymore
It's about what I'd do with it all
And I, I'll never let you let me down”
(Folds 2012)

## ACKNOWLEDGEMENTS

Thank you to every participant in this research for entrusting me with your thoughts and experiences. You have taken me on a journey that has changed me in ways I am sure I do not fully even appreciate, but I have done my best to capture what I can within the pages of this dissertation. You have blessed me beyond words, but these seven chapters will have to do as an approximation of that gratitude.

I also want to thank the countless mentors that have supported this work formally and informally. In particular, Dr. Amanda Veile for setting me on this journey to a PhD and Dr. Heather Howard-Bobiwash for showing me how to end it well. A special thank you as well to the members of this committee, Dr. Chantal Tetreault, Dr. Masako Fujita, and Dr. Steven Roskos. All of you helped shape the details of this dissertation with your phenomenal teaching prior to my fieldwork and through your insightful feedback during and after. My gratitude also goes out to the Elizabethtown College for their funding support and the access to archives, as well as to Michigan State University for the amazing chance to pursue both an MD and PhD. I am also eternally grateful to my program director, Dr. Cindy Arvidson, for being a steady source of support through the twists and turns of this experience.

Finally, thank you to my family and friends for being a source of chaos I cannot change and would never want to. Thank you especially to my dear friend, Leo, for being the bridge to praxis I never would have found on my own. Thank you most of all to beloved wife, Dr. Mel Anderson-Chavarria, for helping me feel safe enough to take the risks that make life worth it.

I am truly honored to have had the chance to do this work and I will be forever indebted to all those who gave their time and energy to make it happen.

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## LIST OF ABBREVIATIONS

CDC: Center for Disease Control

CDEM: Certified Direct Entry Midwife

CMA: Critical Medical Anthropology

CNM: Certified Nurse Midwife

CPM: Certified Professional Midwife

DPC: Direct Primary Care

DO: Doctor of Osteopathic Medicine

MANA: Midwives Alliance of North America (MANA)

MD: Doctor of Medicine

NP: Nurse Practitioner

OB/GYN: Obstetrics and Gynecology

PCMH: Patient Centered Medical Home

# INTRODUCTION

On thanksgiving morning 2008, a family physician unexpectedly passed away at his home in rural Indiana. The following quote is from a write-in to the local paper shortly after titled, "Local Doctor Will Be Missed":

> "Thomas Anderson was known as a one-of-kind-doctor. His listing in the Camden directory reads: 'Call day or night'. Those were his hours. You weren't just a name, a face, a condition or complaint. For him, you were always one-of-a-kind, too. A visit really was a visit. You were glad to see him and began feeling better right away. He was on your case. A square, solid man with his beard, suspenders and distinctive (you might say) haircut, he wasn't the stereotype of the country doctor. He was independent, straight forward, a fighter, and you'd be surprised how thorough he could be. He'd made the right choice of profession—a calling… It goes without saying he made house calls. A good man, a good doctor, a good life only too short, way too short. A man like Dr. Anderson raises the quotient of goodness and well being all around him.
> I went to a surgical supply store to get a sort of brace he'd prescribed for my (slightly) chipped elbow. There happened to be a power outage so my credit card was no use. The proprietor told me to take the brace and pay for it later.
> 'But you don't even know me', I said. 'I've never been here before'.
> 'Oh, that's OK', he said. 'You're one of Dr. Tom's'". (Pharos Tribune 2008:6)

The focus of this dissertation is the human experience of change. The fundamental base of this exploration begins with my own experiences before and during this dissertation. As a daughter of "Dr. Tom", I have heard stories like the one above on many occasions. During the time while my dad was alive and, in the space since he has passed, individuals have shared with me the ways my father impacted or even saved their lives. His death was life-changing for my family, but for me at least, the change brought more certainty than uncertainty as my desire to pursue medicine crystalized in the wake of his passing. In hindsight, given the extent of his legacy in my small community, it is no wonder I wanted to emulate him. Knowing the struggles behind the legacy, however, is also what ultimately brought me to a PhD in anthropology.

A book detailing the history of family medicine as a specialty noted that the "horse and buggy doctor" or country doctors that did it all and made home visits, was a thing of the past

(Adams 1999). My father was a glaring exception to this, quite literally driving a horse and buggy at one point in my childhood. Likewise, when I was growing up our home was an informal medical center where several children were born and others, at the end of their lives, were able to pass away peacefully with their families. However, "call day or night" and opening your home at all hours is a demanding schedule and my father eventually traded the stress of owning his own private practice for a partnership with a hospital system. As tempting as it was and still is to mythologize my father and his medical practice, I saw cracks in the façade as he struggled to balance the demands of his career with his mental and physical well-being.

Perhaps time would have erased these and other idiosyncrasies from my memory, leaving only a myth that his patients experienced and that I could easily believe in as well. However, in the days that followed his death, individuals shared with me their own experiences with loss that ultimately shaped my expectations of the process and made me more aware of my own reactions. The book *A Grief Observed* by C.S. Lewis was recommended to me and the quote below has encouraged me to remember my father's life as it was and not as I would have wished:

> "Slowly, quietly, like snow-flakes--like the small flakes that come when it is going to snow all night—little flakes of me, my impressions, my selections, are settling down on the image of her. The real shape will be quite hidden in the end." (Lewis 2015:9)

While not an anthropologist, Lewis captured a widely shared human experience through his reflections on grief after the loss of his wife. Although grief is a unique and highly personal transitional experience, there is a tendency to mythologize the ambiguous and unknowable. The full details of someone else's life are turned into concrete extremes that are ultimately untestable. As Lewis observed, a seemingly unavoidable result of this process is that "The real shape will be quite hidden in the end" (2015:9). Anthropologists studying transitional experiences have been

fascinated by this dynamic blend of the unique and highly personal with universal, shared processes.

Anthropological research has demonstrated that transitional experiences, such as death and birth, serve as key moments in the lives of individuals and communities where systems of meaning can be both constructed and deconstructed (Kaufman & Morgan 2005). I follow in this long tradition of research and, like Lewis, offer up my own experience for analysis in the hopes of improving frameworks for understanding experiences of change. In doing so, I emphasize the humanness of medical systems and attempt to untangle the relationship between change at the individual and system level. My ultimate goal is to apply this knowledge to improve health systems and to guide my own future practice as a physician-anthropologist. Before trying to change the future though, I must untangle my own past.

In 1995, ~1% of births were out-of-hospital (MacDorman & Declercq 2019). I was one of those, born at home in rural Indiana with my father as the only attendant. At that time homebirth rates were at a turning point where, after declining for several years, they would start to increase incrementally (MacDorman & Declercq 2019). This change has been linked to the revitalization of lay midwifery through the work of one woman in particular—Ina May Gaskin (Kline 2015). Although she ultimately became an experienced midwife, Gaskin had little guidance in the early years of the birth center and commune she helped found in Tennessee. As she reflected, "…we were a survival experiment and we survived", but she was fortunate to meet "… a local family doctor who was not afraid of homebirths, having served an Old Order Amish community for the previous sixteen years" (Simkins 2011:106).

Twenty years later and two states north, a midwife would begin practicing in a rural Indiana community with a significant Brethren and Mennonite population. Members of these and

Amish churches that adhere to a "plain" style of dress are collectively known as the Plain community. Unlike in Tennessee, the Indiana midwife would bring homebirth into a Plain community where it was not practiced at all. At nearly the same time, my father would also begin working in this region and collaborating with the local midwife. In the span of five years, he would convert from a protestant Christian denomination into a Plain church and my parents would choose homebirth for the first time with the birth of their youngest—me. I would not appreciate the counter-culture nature of either of these choices until much later in my life and with the help of anthropology.

Brigette Jordan's book *Birth in Four Culture*, first published in 1978, was a catalyst for me to recognize patterns of culture in my own upbringing. Jordan compared practices and experiences in different birth systems and, in doing so, made the esoteric accessible for far more individuals than just me (1993). Within the historically male-dominated field of anthropology, birth was understudied prior to Jordan's work. Her efforts helped change that through detailed descriptions of many previously undiscussed birth practices but, far beyond that, she made a case for birth as topic of study with wide reaching relevance.

Jordan's comparative, biocultural approach demonstrated that birth is at once a universal and unique experience. Research on birth expands not only understanding of the specific process of birth, but also human experiences of transitions more generally and the ways in which humans collectively adapt to change. As part of a transitional process, experiences with birth can reveal the certainties and uncertainties that permeate life at every scale. Consequently, as an area of study, birth lends itself to approaches that are broadly applicable to experiences of change and demands a framework that is reflexive on the research experience itself. Jordan and many birth researchers since have met this challenge using practice theory.

Practice theory is an interdisciplinary area of study that is appropriate for exploring experiences of change across diverse scales and contexts. Recent research in practice theory has coalesced around the process of "learning to learn", or ritualization. The result of this process are experiences of "praxis", the enactment of learned knowledge, and praxis systems, the embodied structural relationships between distinct forms of praxis at the level of the individual and community. This body of theory has a long history within anthropology, with the concept of "rites of passage" being an early framework that is still used extensively within research on birth.

Rites of passage is a framework that approaches all of human life as a cyclical experience of transitions between hierarchical systems (Van Gennep 1960). Victor Turner has argued that the connection between praxis and transition is integral, with transitions serving as a source for new praxis and praxis serving as a source for experiences of transition (1969). He further argued that during periods of transitions, individuals are "liminal" or between systems. When liminal, Turner believed individuals are confronted with two oppositional models of humanity. He explained that this first model is of society as hierarchical and structured, while the second is of society as egalitarian and unstructured (Turner 1969).

Turner used the term "communitas" to refer to this egalitarian experience of society and theorized that all examples of communitas eventually become structured hierarchies and all structured hierarchies eventually become communitas. While Turner identified birth as a transitional experience for which rites of passages is an applicable framework, Robbie Davis Floyd (2003) was the first to explore this in-depth. Her work is also notable for adding a critical element that went beyond simply describing the designs of different rites of passage to critiquing the quality of the experience for individuals and society.

Davis-Floyd used the rites of passage framework to explore the power dynamics of ritualization within U.S. birth systems. She highlighted whose knowledge is valued and what types of learning are allowed, contrasting homebirth and midwifery systems with hospital birth and obstetrics (Davis-Floyd 2003). Today, threads of her work can be found in the study of stratified reproduction, or how individuals are ritualized to value the reproduction of some over others, often with measurable impacts on birth outcomes (Colen 1995). However, not all the theory underlying rites of passage as a framework has advanced alongside the applications. While the anthropology of birth literature is rich with theory on stratification and examples of the dynamics of hierarchical systems, there has been much less investigation of the aspects of rites of passages identified by Victor Turner.

Victor and Edith Turner, a married pair of anthropologists, spent much of their careers trying to develop a clear method for studying and discussing the innately ambiguous concepts of liminality and communitas. As Edith Turner has explained, "The characteristics of communitas show it to be almost beyond strict definition, with almost endless variations" (2012:1). Given that the Turners struggled to provide a definition for their own concept, it is not surprising that this area of research has progressed little beyond their original contributions. Commonplace understandings of what it means to be in "limbo" and to experience a rite of passage are on par with current anthropological theories. As Victor Turner once remarked, "Communitas is a fact of everyone's experience, yet it has almost never been regarded as a reputable or coherent object of study by social scientists" (Turner & Turner 1978:251). As a fact of everyone's experience though, one can expect to find it under other names outside of anthropology and in frameworks focusing on different aspects of the same phenomena. I believe one of those other names is chaos.

Within the context of this dissertation, chaos can be understood as an unexpected experience of praxis or a cause-and-effect relationship between praxes that is unpredictable (Mandelbrot & Hudson 2004). It is a description of a particular type of transition that can be studied at the individual and system level. Anthropologists using a chaos framework have produced research that suggests that, while not all praxis systems are themselves chaotic, ultimately, all praxis systems are shaped by the responses of their own, and other systems, to chaos (Mosko & Damon 2005). Taleb (2010), a philosopher and mathematician, has used the term "black swan" to describe encounters with chaos, or paradigm-shifting praxis that was previously unknown. Like communitas and liminality, the experience of chaos is a difficult concept to describe by its very nature. However, I believe some aspects of chaos theory, such as Taleb's applications, have advanced beyond research on communitas and liminality in ways that can potentially improve rites of passage as a framework and practice theory more generally.

The interdisciplinary nature of chaos theory allows it to connect with research across the four subfields of anthropology. Most notably; biocultural mechanisms of adaptability, resilience, and patterns in health outcomes, as well as more phenomenological questions on the embodied experience of change. Accordingly, insights borrowed from chaos theory hold promise for applied applications within critical medical anthropology that are concerned with syndemics and reducing inequities in health systems. It is my opinion that one of the most useful of these insights is the observation that there are structured patterns even in random chaos.

This dissertation does not attempt to engage with chaos theory through mathematical methods, but rather, it uses the theories that underlie those methods as a source of inspiration for asking new questions on familiar topics within anthropology. Just as Jordan's use of praxis theory allowed for her work on birth to be applied to transitional experiences more broadly, it is

my hope that the use of chaos theory will serve as a unifying framework for revealing the widely applicable dynamics of liminality and communitas. On a more personal level, chaos theory has already helped me better understand my own experiences of change through encounters with the unknown.

While anthropological birth research was highly impactful on the process of me coming to understand my own praxis system, I could not apply existing frameworks to the experience of my family and wider community without ignoring major contradictions. Moreover, I found that the Plain community was largely left out of the anthropological narritive of the history of homebirth. What little research does exist presented a neatly packaged myth of Plain birth that conflicted with the ambiguous chaos of my childhood. As the researcher Donald Kraybill writes of his own experiences with members of Plain churches, "For me, Amish ways disturb and disrupt. They disturb some assumptions that I take for granted. They disrupt my old habits, my predispositions, and my fixed understandings of how I think the world works" (2021:10). This research focuses on these disruptive experiences of change, such as relationships between individuals in different praxis systems and encounters with unpredictable processes, to shed light on praxis understudied within anthropology while simultaneously advancing a much broader field of research.

Rather than treating conflicts between a rites of passage framework and lived experiences as outliers, this dissertation attempts to create a new synthesis of theories that can better capture these complexities. To that end, while praxis and praxis system have been defined in this introduction according to current anthropological understandings, this dissertation treats these as working definitions that will be refined through data collection and analysis. Likewise, this dissertation does not presuppose any fixed associations between "Plain praxis" and any birth

praxis, nor does it aim to present a singular definition of a Plain praxis system. Rather, I use this specific example of praxis in the context of birth to challenge anthropological theories and advance applied methodologies for designing individualized but equitable healthcare systems.

This dissertation explores the chaotic relationships that change our lives in unpredictable ways. Applied to the context of out-of-hospital birth in Plain communities, these theories illuminate that some individuals are highly facilitated to occupy in-between positions where they have access to both mainstream and counter-culture practices. Furthermore, the experiences of these in-between individuals can have wide reaching impacts on systems of both extremes. By expanding the framework of praxis theory itself to include chaos, this research bridges a gap between research on stratification and liminality with implications for healthcare system design in the settings of this study and in regard to praxis systems more generally. More specifically, I aim to (1) gain a more nuanced understanding of the relationship between stratification and experiences of chaos, (2) explore the dynamics of praxis change at the individual and system level, and (3) identify equitable healthcare system designs for Plain and non-Plain women in America.

*Chapter Two:* The second chapter of this dissertation provides an overview of key theories and background relevant for this research. I reexamine theories that underly Catherine Bell's (1992) ritualization framework, highlighting dynamics of change studied by previous scholars that are not emphasized in Bell's synthesis. I overview literature within the anthropology of birth that suggests a lack of research focusing on these dynamics has made it difficult to form a holistic framework for transitional experiences. I outline birth in Plain communities as one example that existing theories struggle to accommodate and, consequently, leave out. I also introduce insights originating from outside anthropology that, when combined with existing literature, point to a

need to examine the specific themes explored by this dissertation. The resulting theoretical synthesis brings together frameworks from critical medical anthropology, religious studies, and mathematics to identify novel directions for study.

*Chapter Three:* The third chapter of this dissertation provides details on settings and methods. This dissertation is a multi-sited praxiography involving a variety of birth systems in the states of Indiana and Michigan (Mol 2002; Falzon 2009). Data on praxis was collected primarily through interviews with providers, parents, and knowledgeable community members with the goal of understanding the power dynamics that change praxis. Archival research, attendance at public events, and the collection of relevant praxis documents were also important sources of data collection. Sampling a range of different demographics and physical spaces was expected to generate a broad dataset rather than try to detail any one praxis system in depth. Pseudonyms are also used throughout to protect anonymity but still allow for an appreciation of a singular individual's experiences across the different topics of interest.

*Chapter four:* In this first data analysis chapter, I explore the birth praxis systems of a highly varied sample of parents and providers by focusing on praxis for control, prediction, and expertise. I highlight contradictions in praxis and expectations as identified by participants themselves and discuss how this data indicates a paradigm shift is needed to better reflect their experiences with birth. Through an analysis of Plain birth praxis, I also document how exemptions based on ill-founded predictions are ultimately detrimental to all practitioners that interact with a system. This line of questioning confirmed an important predicted finding; aspects of the birth process are chaotic, but also structured. This structure was identified by participants as two distinct experience—"normal" and "not normal" birth—and a series of expectations for praxis associated with each extreme.

Interview responses indicated that ritualization helps maintain control, or a match between expected experiences and actual. Participants in this study reported distinct experiences of normal or not normal birth and experts were identified as being ritualized in both, with many parents looking to providers as their main source of expert guidance. Yet, parents and providers in this study identified several mismatches between the normal/not normal birth paradigm and their actual lived experiences. I close this chapter with a discussion of how these findings clarify the relationship between praxis and the praxis system, adding nuance to theoretical understandings of both concepts and ritualization as the process connecting them. I also present a revised framework for understanding how predictions both come to be made and are unmade through experiences over time and with different individuals. I conclude by arguing that legal exemptions protecting freedom of choice around birth praxis should reflect uncontrollable chaos in the lived experiences of parents and providers.

*Chapter Five:* Chaos theory guided the analysis of the events and questions of interest in the second data analysis chapter of this dissertation. Participants were asked directly about transitional experiences, such as birth, COVID-19, and interactions with members of Plain churches. Archival resources provided additional perspectives that, along with interview transcripts, were analyzed for unprompted examples of praxis change at the scale of individual experiences and community wide systems.

The first section of the chapter details different sources of ritualization that expose individuals to praxis and praxis systems, highlighting how relationships between individuals can serve as a type of indirect access to praxis not otherwise known. The second section examines more closely how, through experiences of change, individuals come to understand their own praxis and the praxis of other individuals better. The final section outlines how relationships

between individuals with different praxis is fundamental for understanding existing praxis systems and creating new ones. In my analysis of the data in this chapter, I add a phenomenological layer to the findings of the first chapter for a more holistic appreciation of the same process. Informed by my own experiences and those of the participants in this study, I conclude that experiences of change are a universal source of diversification.

*Chapter Six:* The final data chapter is a test of my own and others' expectations that healthcare in Plain communities is a truly transformative alternative to the American birth system. This is accomplished primarily through interviews with Plain and non-Plain individuals, a review of archival documents related to Plain health praxis, and a critical reflection on my own experiences with the systems of interest. The data in this chapter focuses on experiences of conflict during birth generally and during specific instances of transition, such as transfer and institutional changes.

I explore experiences of provider shortages, high costs, and limited locations for care. I then examine specific examples of conflicts and delays during birth and related transitional experiences. Both sections are contrasted with Plain individuals' experiences and those of the providers serving them, highlighting differences and similarities in praxis system designs. I finish by applying a blend of critical medical anthropology and chaos theory to evaluate system quality and design. In my closing analysis I explore the dynamics of health systems and argue that successful examples of healthcare in Plain communities are not unique to these communities, but an outcome possible for any community that is given the same opportunities.

*Chapter Seven:* The conclusion chapter of this dissertation discusses the future of healthcare as a shared outcome that is co-constructed. I synthesize the findings of the preceding chapters to discuss broad takeaways for health system design. I make an overarching argument for the

decriminalization of health praxis and situate my research within past discussions on health system change and relevant theories from outside anthropology. I highlight that knowing what change is needed is important, but transformation requires tangible methods. In conclusion, I demonstrate how my research is a significant contribution towards understanding those dynamics in the context of health system design and other transitional experiences more generally.

**Summary**

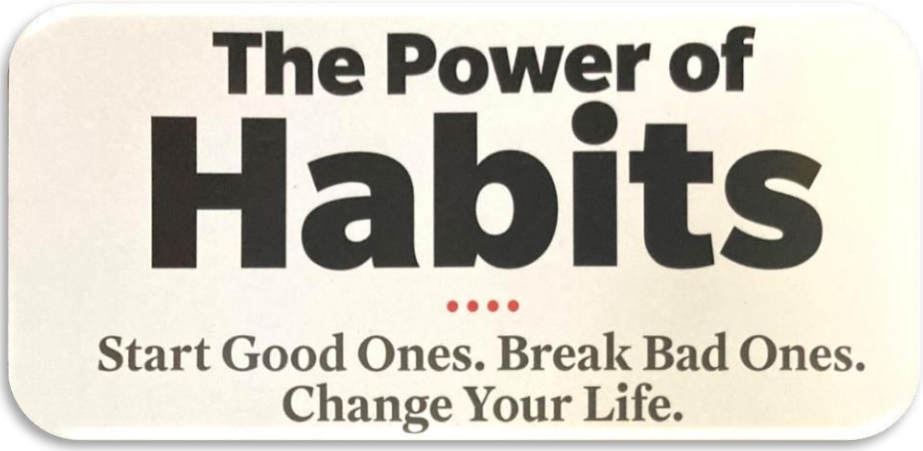
Research is itself a transitional experience where individuals can become vulnerable to change, but also resistant. In the first edition of *Old Order Notes*, a pamphlet concerning the history and theology of the Brethren church of which my father was a member, the editor defined research as "open-minded hard work" (Benedict 1978: 9). He clarified this is not the same as "…a broad-mindedness that makes no distinctions and, therefore, arrives at no worthwhile, common sense conclusions" (Benedict 1978: 9). Accordingly, this research aims to explore transitional experiences to generate both holistic conclusions and practical applications. At its heart though, this dissertation is a deeply personal attempt to answer how one should change themselves and their world through one's relationships with others.

When I began my PhD research, it was with the goal of understanding the logistical struggles my father faced as a rural family physician with a large practice of individuals from Amish, Mennonite, and Brethren backgrounds. My questions were centered around change that would allow me to emulate my father's career and perhaps even improve upon it. I had no doubts that my father's practice should be emulated. Slowly, however, I found myself asking what it meant for my small-town community when some individuals were treated differently because they were "Dr. Tom's" and others were not. In turn, this research has become a much broader analysis of healthcare system design and the dynamics of stratification, with implications that extend far beyond my own personal interests.

# CHAPTER 2:

# The Power of Praxis

Figure 1: The Power of Habits (Meredith Premium Publishing 2021)




Whether framed as rituals, habits, or praxis, studies of practice attempt to untangle the complex power relationships that circumscribe human experiences. This multi-disciplinary area of research is not limited to formal academic settings. The magazine pictured above, sold at a grocery store checkout in Michigan, invites anyone to explore the power of habits. As the sub-header implies, applying this theoretical knowledge gives meaning to existing and past practice, but also potentially the ability to change one's own and others in the future (Meredith Premium Publishing 2021). Or at least that is the pitch. Within the field of anthropology, practice theory has struggled to coalesce around the same definitions to describe the phenomenon of interest, let alone develop a coherent framework for how these theories can be applied to alter practice. A significant exception is the work of Catherine Bell (1992), as she has attempted to resolve some of this theoretical confusion by synthesizing practice theory frameworks from across the four-subfields of anthropology.

Bell deconstructed many contradictory binaries characteristic of past practice theories, such as ritual frameworks that viewed thought and action as opposites. She borrowed the term 'praxis' from Pierre Bourdieu to reflect that the experiences she was concerned with were the merging of both thought and action, or the embodiment of knowledge. However, Bell's most

significant contribution was to argue for a shift in research focus from what praxis is to what praxis does. To this end, she outlined "ritualization" as the process which creates praxis systems, internally coherent systems of power relationships that delineate what to do and what not do for practitioners in specific social contexts (Bell 1992).

Ritualization offers a methodological path forward for comparing how different communities construct and apply their own practice theories. Within the anthropology of birth in particular, this framework has gained significant traction as a useful tool for analyzing the power dynamics by which systems are created, maintained, and expanded. However, Bell herself admitted that this reframing to focus on ritualization does not resolve all of the unknowns and contradictions found in past practice theories. A clear theoretical understanding of how systems themselves change and the exact connection between individual praxis change and change at the system level remains elusive.

Thirty years before Bell's work, Clifford Geertz concluded his study of a funeral in a town divided by politics and religion with the lamentation that, "The driving forces in social change can be clearly formulated only by a more dynamic form of functionalist theory…" (1957:53). Bell's framework, with her focus on power relationships and the process that produces them, is an essential step in that direction, but it does not fully answer Geertz's call. To borrow the magazine's terminology, research on ritualization has largely produced examples of how to build praxis systems, not how to break them down. Consequently, the exact mechanisms by which we experience and direct change are still unclear within practice theory. In this chapter, I will outline the beginnings my own theoretical synthesis that expands on the work of Bell and others with the goal of unambiguously describing the dynamics of transitional experiences.

While ritualization theory is central to this dissertation, the exact topics of interest are aligned with those of critical medical anthropology (CMA). As Merrill Singer has explained:

> "Critical Medical Anthropology can be defined as a theoretical and practical effort to understand and respond to issues and problems of health, illness, and treatment in terms of the interaction between the macrolevel of political economy, the national level of political and class structure, the institutional level of the health care system, the community level of popular and folk beliefs and actions, the microlevel of illness experience, behavior, and meaning, human physiology, and environmental factors." (1995)

Singer has argued that anthropologists should not only describe power relationships, but also identify tangible ways that they can be changed (Baer et al. 1997). Within this dissertation, the goals of ritualization theory and CMA complement each other in my attempt to understand the power of praxis and, ultimately, use it to change reproductive health inequalities.

In this chapter, I reexamine key theories that underly Bell's ritualization framework, highlighting dynamics of change studied by previous scholars that are not emphasized in Bell's synthesis. In the next section, I overview literature within the anthropology of birth that suggests a lack of research focusing on these dynamics has made it difficult to form a holistic framework for transitional experiences. I outline birth in Plain communities as one example that existing theories struggle to accommodate and, consequently, leave out. Finally, I introduce insights originating from outside anthropology that, when combined with existing literature, point to a need to examine the specific themes explored by this dissertation.

***Ritualization and Transition***

In Brigitte Jordan's cross-cultural comparison of praxis systems for birth she observed that, "…whatever the details of a given birthing system--its practitioners will tend to see it as the best way, the right way, indeed *the* way to bring a child into the world" (1993:4). Jordan referred to this phenomenon as the process through which authoritative knowledge gains ascendance,

arguing that it is marked by hierarchical power relationships between praxis systems whereby the authoritative knowledge of one praxis system comes to dominate and delegitimize all alternative praxis systems. Karl Marx's theory of commodity fetishism provides further context for how this authority is produced and maintained (Tucker 1978).

Marx argued that commodification is characterized by a process that associates meaning or value with a thing and then transforms that association into something that is perceived as an unchangeable fact (Tucker 1978). The outcome of this transformation is specifically referred to as commodity fetishism and Bell has presented ritualization as a more general form of commodification with the same transformative power (1992). What a focus on fetishism overlooks, however, is that an awareness that relationships within a system are changeable seems to return during transitional experiences.

Emile Durkheim theorized that religion, or a praxis system, is a shared system of classification "… of the real or ideal things that men conceive of into two classes-two opposite genera-that are widely designated by two distinct terms, for which the words profane and sacred translate fairly well" (1995:35). Arnold Van Gennep further observed that in the liminal, ambiguous period of transition the sacred can "pivot", meaning that the sacred can become profane and the profane can become sacred (1960). Van Gennep argued "Such changes of condition do not occur without disturbing the life of society and the individual and it is the function of rites of passage to reduce their harmful effects" (1960:12). This suggests that, during transition—even if only for a moment—the arbitrary nature of praxis systems is recognized and becomes vulnerable to change.

Van Gennep asserted that a rite of passage is a pattern of praxis that guides individuals through transitions between oppositional praxis systems, such as from childhood to adulthood

during the transitional period of puberty (1960). He viewed a rite of passage as a linear progression through three distinct phases. Praxis in the first phase works to separate individuals from their past praxis system, praxis in the second creates the experience of change in the present, and the third reintegrates the individual into their future praxis system.

In Van Gennep's framework, a rite of passage functions as a unidirectional process that maintains praxis systems while individuals themselves undergo change within them (1960). Pierre Bourdieu carried this line of thinking further, arguing that the experience of a rite of passages is itself a type of change that creates differences in individuals' lives (1991). For example, by treating childhood and adulthood as separate, oppositional praxis, they become different experiences. Victor Turner noted though that, through transition, these delineations can also be broken down (1969). For Turner, a rite of passage is part of circular, bidirectional process where ambiguity informs certainty and vice versa.

The transitional phase of a rite of passage is also known as the "liminal" phase, with the other two phases framed as the preparation for and processing of what happens during this moment, respectively (Turner 1969). Turner argued that the experience of liminality is central to changing both systems and individuals. Furthermore, although transitional processes always involve liminality, liminality itself refers to a much broader range of experiences of change. While sometimes having a negative connotation, liminality has been explored by anthropologists as a source of creativity, revolution, and self-reflection for individuals and whole communities (Turner 2012).

Liminality, as conceived by Turner and Van Gennep, is to be in the midst of transition and thus between and outside of any praxis system (1969; 1960). As explained by Turner, liminal experiences involve the shared recognition of a "…generalized social bond that

has ceased to be and has simultaneously yet to be fragmented into a multiplicity of structural ties (1969:96). Turner used the term "communitas" to refer to this sense of a shared social bond and spontaneous harmony in praxis. He further described how, in an effort to regain or maintain this harmony, ambiguous relationships between praxes are often turned into explicit praxis systems. Thus, unavoidable experiences with liminality are both sources of—and counterbalances to—praxis systems.

Turner argued that during liminal moments individuals are confronted with two oppositional types of praxis. The first is hierarchical and structured while the second is egalitarian and unstructured. Turner saw structured and unstructured systems as interconnected, creating and defining each other through their opposition. He believed that no system or human experience is entirely structured or unstructured, but rather is marked by cyclical experiences of transitions between these two extremes. Significantly though, Turner hypothesized that some praxis systems could remain "in-between" in a more permanent way.

Turner used the phrase "ideological communitas" to refer to how liminal experiences are systematically sought out and obtained by individual pilgrims, revolutionaries, and certain religious and non-religious groups. Notably, he identified the counter-culture groups of the 1960s that were his contemporaries as an example of spontaneous communitas and, while he did not live to see it, at least one of these communities would play a key role in the revitalization of homebirth in America (Turner 1969; Kline 2015). However, despite the importance of liminality for understanding ritualization as an overall process and the suggestion of "in-between" praxis as an area worth studying, there is a dearth of anthropological research on

these topics. This is perhaps because of the lack of a clear synthesis between Turner's arguments and Bell's framework.

As Bell herself noted, an innate difficulty of working with practice theory is that anthropology is itself a praxis system where the theory used can easily presuppose the findings of the research (1992). In this case of liminality theory, the innate ambiguity of the concept makes it difficult to explore beyond descriptions of experiences and there has not been significant developments since Turner's work. In contrast, Van Gennep's "rites of passage" approach has been expanded through synthesis with other frameworks and applications to diverse settings.

Rites of passage and liminality are tightly interlinked concepts within both Van Gennep's and Turner's work, but a lack of advancement in the latter's theory leaves related concepts underexplored. For example, Bell stressed that ritualization is a negotiation where praxis systems are both challenged and strengthened, but she more thoroughly described the latter (1992). Consequently, within the anthropology of birth, the application of a ritualization framework often results in a focus on how praxis systems are built or expanded more than how they broken down. In the next section, I explore examples of this in how birth researchers, most notably Robbie Davis Floyd, have used Van Gennep's theory of rites of passage in a way that suggests expanding praxis systems is synonymous with ritualization (2003). Specifically, a stratifying form of ritualization that often converts individuals into authoritative praxis systems against their will, with real impacts on birth outcomes.

***Ritualization and Stratification***

Charles Briggs has argued that shared transitional experiences such as disease and death, "…are mirrors held up to society that reveal differences in ideology and power as well as the

special terrors that haunt different populations" (2003:8). Likewise, anthropologists have found that birth is mirror which reveals:

> "…physical and social reproductive tasks are accomplished differentially according to inequalities that are based on hierarchies of class, race, ethnicity, gender, place in a global economy, and migration status and that are structured by social, economic, and political forces." (Colen 1995:78)

Stratified reproduction is the specific term used by birth researchers to refer to inequalities in birth outcomes that result from power relationships that encourage reproduction for some and discourage it for others. In Robbie Davis-Floyd's seminal book, *Birth as an American Rite of Passage*, she described in-depth how both care providers and parents are ritualized in an authoritative, patriarchal praxis system that is dominant during birth in American hospitals and across the country in general (2003). Davis-Floyd highlighted stratification mainly along lines of gender that occurs as a result of this system, but other ethnographic work demonstrates that multiple forms of authoritative praxis can converge during birth to reinforce and intensify inequalities that are fetishized as fixed and unchangeable praxis systems (Colen 1995).

One example of stratification converging is offered by Karen McCormack (2005) in her analysis of the concept of the "welfare mother". McCormack argued that "Motherhood continues to be venerated when the mothers are middle and upper class, married and white; the mothering done by poor, nonwhite women, however, is systematically devalued" (2005:661). McCormack showed that power relationships become fetishized and effectively embodied when, rather than dismissing this praxis system outright, poor mothers adopt the system themselves by creating categories of "good" and "bad" mothers that encourages the reproductive praxis of higher income, nonworking mothers while at the same time discouraging lower income, working mothers.

The result of these associations is that lower income working mothers embody a praxis system where nonworking mothers, members of their own class, and even they themselves come to view their own praxis as "bad". Meanwhile, "good" birth praxis, such as being able to stay home with a child versus working, is often unobtainable. As McCormack explained, "By conforming to a middle-class definition of motherhood (coded as white), these women protect their identities but reinforce a system that by virtue of their class and race, is used to limit their power" (2005:676). In this way, authoritative praxis systems are often reinforced even when individuals do try to counter them through the creation or use of other systems.

Amy Miller (2009) has observed even women that choose unassisted childbirth at home still explain their choices and frame their experiences in relation to hospital birth, using the same terms and practices to justify their own system. Relatedly, Katharine McCabe (2016) has found that midwives are often more supportive of reproduction for mothers who are well-informed about midwifery and in socioeconomic position to choose their birth provider. These findings are significant because Davis-Floyd (2003) framed midwifery as a less authoritative praxis system in comparison to hospital obstetrics, as often argued by midwives themselves. Recent research on homebirth by Melissa Cheney (2011) suggests though that even midwifery praxis systems involve some amount of fetishism.

Cheyney has argued that some midwives attending homebirths co-construct "transgressive rites of passages" with mothers to challenge the dominant hospital birth praxis system (2011:520). Rather than untangling fetishisms that treat homebirth and hospital birth as extreme opposites, these midwives reorder the hierarchy so that homebirth is on the top. The effect is that midwives and mothers become progressively more ritualized in an alternative, but still authoritative, system of praxis (Cheyney 2011). Notably though, despite homebirth and

hospital birth praxis being associated with a binary, oppositional relationship in both these systems, Davis-Floyd found that the majority of women in her study were “in-between” these two systems (2003). That is, women had clear preferences for one praxis over another but not necessarily one praxis system over another.

Bell has argued that repeated experiences of ritualization culminate in practice mastery, the ability to strategically manipulate power relationships within a system and, consequently, praxis (1992). However, Davis-Floyd observed that the majority of women she interviewed did not exclusively embody either hospital birth or homebirth praxis systems (2003). Instead, these women used praxis from both systems, preferring to mix and match as needed (Davis-Floyd 2003). This observation points to a type of practice mastery relating to being in-between systems, not merely within them. A study by Rosalynn Vega (2017) of the commodification of indigenous midwifery in Mexico is a more detailed example of this type of practice mastery.

Vega described how advocates pushing for an alternative to stratified medical systems inadvertently promoted a hierarchy where indigenous birth praxis was fetishized as “natural” or “traditional”. These perceptions made indigenous birth praxis systems appealing to individuals seeking an alternative to the dominant praxis system, but it was non-indigenous midwives that profited from these perceptions while indigenous midwives were denied the right to legally practice. However, Vega noted the dynamism of indigenous midwives. That is, their own self-awareness of this fetishism and their ability to manipulate perceptions of indigeneity to their advantage by exaggerating or downplaying their associations with indigenous praxis to maximize their power in different settings (Vega 2017).

In all these cases of “in-between” praxis systems lurking in the literature, the overall

theoretical focus is on fetishism and stratification. There is little ethnographic birth literature that focuses on in-between systems and praxis. This may be because these concepts do not fit neatly into the existing theories just outlined. In the next section, I outline how birth praxis in Plain communities is one example that is understudied by anthropologists, despite being highly relevant to research on homebirth and stratified reproduction.

***Plain Praxis***

Hutterites, Brethren, Mennonites, and the Amish are four distinct groups with a shared origin in the Protestant Reformation of 1517 (Kraybill & Bowman 2001). Collectively, these groups are known as the Anabaptist and Pietist community and, although outwardly similar, each of these groups has its own unique history and members' praxis varies significantly across churches. Despite differences, church members from all four groups often converge on praxis that generally distinguishes them from non-Anabaptist and Pietist individuals. One of the most visible forms of praxis that marks individuals as members of one of these churches is a "Plain" style of dress. (Kraybill & Bowman 2001) Another overlap in praxis commonly reported in the literature is homebirth.

Plain women have long been a presence in the American out-of-hospital birth movement. Their birth stories appear in the early 1970s homebirth guide *Spiritual Midwifery* alongside the statement that, "Amish women grow up expecting they will give birth at home, as their mothers and grandmothers did" (Gaskin 2002:166). While this quote implies a longstanding association between Plain praxis and homebirth, there are no national statistics on Plain out-of-hospital birth rates and a limited number of studies have been published on Plain birth praxis in the past three decades. Of the small handful of anthropologists who have published research on Plain

communities, a short piece by Gertrude Enders Huntington is one of the only analyses focused on birth (Kraybill 2003).

Huntington's work appears as part of a collection within a larger volume that describes negotiations between members of Plain churches and authoritative praxis systems at the local and national level. She explored negotiations between Plain individuals and healthcare systems in general as well as in the specific context of birth. She did not apply practice theory in her framing, but she did note the prevalence of both homebirth and hospital birth along with the success of these communities in changing local medical systems to accommodate their preferences in both circumstances (Kraybill 2003). More details on these types of cooperative relationships between Plain communities and medical systems has been documented by health researchers and social scientists outside anthropology. Karen Campanella and her co-authors (1993) offer one report of this nature on Amish birth praxis in an Ohio community.

The report explained that births historically took place at home in a Plain community until a maternal death prompted a switch to hospital births. Later, when rising obstetrical costs made it difficult for members of the community to have large families, they consciously switched back to out-of-hospital births and successfully partnered with local health systems to establish a birth center (Campanella et al. 1993). The significance here is that, as Betty-Anne Daviss has argued in her research on stratified reproduction, "…just as a canary can serve as a barometer of air quality…the ability of a community to retain control over its birth culture is a good indicator of the life force of that community" (1997:442). Given anthropologists otherwise extensive work on homebirth and stratified reproduction, the absence of more research on the birth praxis of members of Plain communities is conspicuous.

Birth is framed as a transformative change within practice theory, but what research there is on Plain women's birth experiences suggests they do not always experience birth as a rite of passage, or at least not in the same ways that are commonly described in the out-of-hospital birth literature (Klassen 2001). Furthermore, despite birth being understudied across all Anabaptist and Pietist communities, the reproductive praxis of Plain women, and Amish women in particular, has been fetishized within some healthcare praxis systems. As the sociologist Natalie Jolly has noted, there is sometimes an unquestioned narrative in the healthcare literature that "…Amish women birth differently, and according to the health researchers… birth better" (2017:150). Birth is acting as mirror though, reflecting perceptions of the Amish that are not confined to birth.

Jolly has observed that, despite the assertion of a clear Amish praxis system for birth that is "better", care providers and researchers have very vague ideas of what Amish praxis is, let alone how it is associated with birth (2017). Assumptions are projected into this void that are often more reflective of the values of the observer than the Amish individuals themselves (Kraybill 2003). However, plain individuals are often aware of this process and at times even benefit from the fetishism of Plain praxis. For example, in regions with a large Amish tourism industry, local city governments are inclined to resolve conflicts with Amish communities in ways that ensure they do not leave.

Plain communities can be paradoxically diverse and adaptive in praxis while also benefiting from authoritative systems that fetishize members' praxis. In a deviation from what is commonly described in the anthropological birth literature though, the system changes to accommodate the real praxis of Plain individuals as opposed to changing their praxis to fit the expectations of the system. This integration, combined with exemptions from local and national

laws, means these communities effectively occupy a liminal, in-between position in relationship to American's authoritative praxis systems. Of note though, when conflicts have occurred between Amish and non-Amish individuals, members of Amish churches rarely advocate on their own behalf.

Local neighbors and sympathizers that benefit from the continued presence of Amish communities are most likely to argue for what the Amish want. However, this willingness to adapt to the needs of Plain communities may primarily be because it meets the needs of certain non-Plain individuals as well. In this way, the autonomy of the Amish community is maintained by a "cocoon" of less conservative communities and Amish-sympathetic individuals (Kraybill 2003:221). These individuals support Amish communities to maintain their in-between praxis, but often further the fetishism of Amish praxis overall. Floeresch and co-authors (1997) offer a notable criticism of the tendency of both health and social science researchers to frame Plain praxis in this way.

They discuss how researchers can also be considered part of a 'cocoon' through work that obscures diversity in Plain praxis. Pointing out that this is a viewpoint especially prevalent in genetics research that describes Amish communities as closed systems and the "ideal human laboratory," these authors argue that the theoretical frameworks used to present research in Plain communities contain an assumption that these groups are homogenous, isolated systems (Floeresch et al 1997:137). They call out anthropologists directly as participants in this process of fetishism and a survey of the literature suggests this is not an unfounded criticism.

Anthropologists have largely contributed to Plain studies through research in medical anthropology, but there is a notable absence of a CMA approach. For example, an article published within the text *Genetic Nature/Culture: Anthropology and Science Beyond the Two-*

*Culture Divide* describes the methods of one of the first individuals to conduct genetic studies in Amish communities (Goodman et al. 2003). The article appears to offer uncritical praise of the same research Floresech warns against. Fetishized generalizations of Amish populations as "closed-societies" are repeated rather than deconstructed in a discussion of how the genetic researcher's "… labor turned the Amish into a medical and scientific resource" (Goodman et al. 2003:42). Unfortunately, this type of representation is not an isolated trend.

In another example, Hutterites are included in a popular medical anthropology text as an example of a natural fertility population to which others can be compared (Wiley & Allen 2009). This is despite arguments against these blanket characterizations and long-standing reports of some Hutterite women utilizing a number of different contraceptive options (Ingoldsby & Stanton 1988). Jolly's more recent work suggests that this type of praxis fetishism can make it difficult for Plain women when they try to seek medical services that defy these expectations (2017). In this way, even in a system where Plain reproduction appears encouraged, overall autonomy may be discouraged by fetishism that pushes Plain praxis from being "in-between" into firm categories.

From the literature, it seems likely that the fetishism of Plain communities is part of the power dynamics of stratified reproduction in America. However, much of what has been written about Plain birth praxis from the perspectives of both medical professionals and anthropologists seems to further contribute to fetishism versus deconstructing it and its impacts. A recent review of Plain studies suggests a general lack of diversity in theoretical approaches and conspicuous absence of research on power (Anderson 2017).

The development of new theories and methodologies for plain studies research has stagnated (Anderson 2017). In a review of 75 years of plain studies research, Cory Anderson

demonstrates that the bulk of studies have focused on two topics, language and health, with two scholars, Hostetler and Kraybill, making up the majority of citations. Anderson argued that this creates a hierarchy where a small number of theories endorsed by these researchers dominate. Likewise, many Plain studies researchers seem to take on the role of privileged insider through frameworks that protect and translate a narrow view of Plain praxis to the wider public. The result is a body of theory that does not often critically engage with its own questions, those of other fields, or those of the members of the communities involved (Anderson 2017). This dissertation aims to be an exception to these trends.

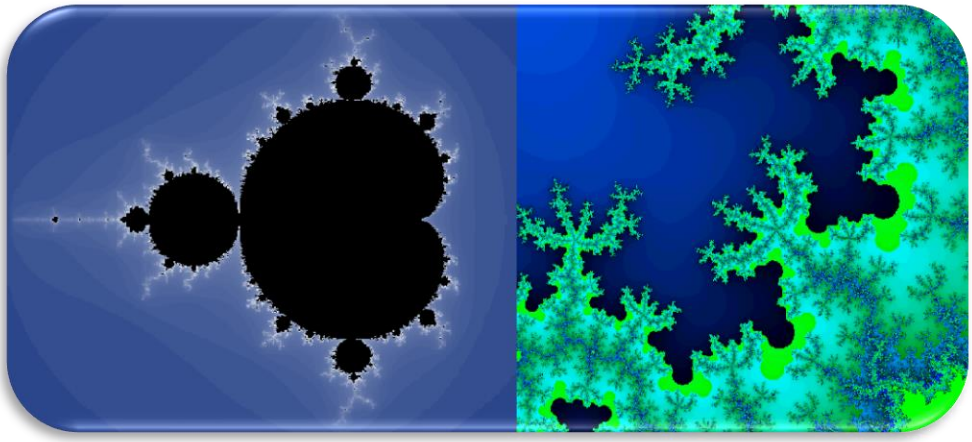
One focus of this dissertation is the power dynamics of the "cocoon" that surrounds Plain communities. This offers an opportunity to reflect on the contributions of anthropologists and other researchers to stratified reproduction and the fetishism of Plain communities while also developing a more holistic framework for the different power dynamics between systems of praxis and during transitional experiences more generally. This inquiry, however, must be guided by a framework that is capable of conceptualizing these nuances. Unlike the genetic researchers described in Goodman (2003:54) that searched for methods to mitigate "the chaotic conditions of the (human) field" in their work with Plain communities, this dissertation seeks to describe the full chaos of change across human experiences.

### *Praxis for Change*

Mathematical theories may offer inspiration and revitalization for anthropological research on power, praxis, and change. Within mathematics, chaos is understood as a pattern that is deterministic, highly dependent on initial conditions, self-similar in structure across scales, and completely unpredictable (Mandelbrot & Hudson 2004). A fractal pattern can be understood as the shape of chaos. A fractal presents as a self-similar relationship at the macro and micro scale,

such as the complex branching pattern found in both the roots and the limbs of a tree, all the way down the veins on a leaf. Mandelbrot, the founder of fractal geometry and a major contributor to chaos theory, has argued that fractal patterns are found across many systems in nature. The image below is an example of a fractal pattern generated by the Mandelbrot set, a mathematical function that attempts to emulate the structure of chaos.

Figure 2: Images from the Mandelbrot Set (University of Utah, 2022)



Fractal patterns can be readily observed in extremely unpredictable but identifiable examples of chaos, such as hurricanes. Mandelbrot has also observed that instances of chaos and massive change in otherwise "stable" systems are more common than estimated and, in a conclusion similar to Turner's observations on transitional experiences, perhaps a key dynamic in all systems (Mandelbrot & Hudson 2004). This is a significant observation for practice theory because it challenges many frameworks that present praxis systems as stable structures and change as something unstructured and somehow separate from systems. Mandelbrot's work implies that all systems change and that all change has structure, but the more chaotic that change is the more difficult it is to describe—much less predict—through praxis systems (Mandelbrot & Hudson 2004).

Mandelbrot first recognized the presence of chaos in systems assumed to be stable while comparing the graphs of commodity prices to those of economic stratification; indicating that chaos theory may have relevance for research on stratification more generally. Yet, despite the many potential applications, few anthropologists have engaged with chaos theory significantly. Among those who have, however, there is a recognition of the utility of chaos theory within anthropology. As Mark Mosko has argued:

> "Social anthropology now stands poised on the verge of recognizing a third fundamental type of scientific model… chaos models, due to their distinctive nonlinearity, reflect similarities of form across a variety of scales, or, in other words, previously unperceived patterns of deterministic order among seemingly random events" (Mosko 2005:45)

A text titled *On the Order of Chaos: Social Anthropology and The Science of Chaos* includes work from leaders in this area of study. There are many different syntheses of praxis theory and chaos theory, but Catherine Bell is not cited. The authors instead rely on earlier approaches to practice theory such as Lévi-Strauss' work on myths (1967). While this abstract, structuralist approach is perfectly valid, it is not conducive to the types of applied research questions that a CMA approach seeks to answer. A more promising bridge between CMA and chaos theory may instead be found in the work of Nassim Taleb (2014). While not an anthropologist, Taleb's approach to chaos theory complements both Bell's work on ritualization and the applied goals of CMA (2014).

Taleb, a philosopher and mathematician, has made observations about how change is experienced in different ways that can be easily reframed using the same concepts as Bell. Taleb argues that "fragile" praxis systems treat change as slow, infrequent, and predictable. Individuals ritualized within these systems react to unexpected change to the system as a threat (2014). Drawing on the anthropological theories outlined in preceding sections, this type of ritualization

is likely to be hierarchical and highly effective at maintaining fetishism within existing systems during transitions. When change does occur to this system, it might be conceptualized as liminality or the breaking down of the system.

In contrast, "antifragile" ritualization treats unexpected change as an opportunity to create new praxis and add to existing systems. Applying Turner's work primarily, an antifragile praxis system might be thought of as egalitarian and unstructured with practitioners experiencing change to this system as unifying communitas. Taleb's last type of reaction to change, "robust", involves ritualization that treats change as something neutral to pass through unchanged. Experiences within this last type of system may be theorized as resembling ideological communitas or an attempt at permanent liminality where change, paradoxically, becomes a constant.

Individuals working within healthcare systems have taken up Taleb's ideas to improve care delivery and health system design. One researcher, Thomas Clancy, has defined a fragile system in a healthcare context as one that "…when exposed to volatile behavior, the potential for harm increases" (2015:1). He identifies events that contribute to volatility as uncertainty, variability, imperfect or incomplete information, randomness, chaos, and so on. In these cases, the system can adapt to small, frequent stressors, but not a sudden significant change. An example of this is patient volume and scheduling. A fragile health system will collapse in the face of sudden increases or decreases in patient volume whereas an antifragile system benefits and improves from these same volatile conditions. A robust system, meanwhile, does not change at all (Clancy 2015). While Taleb and applications of his work focus on identifying fragility and emphasizing antifragility as the key to long term sustainability in systems, I suspect that

"robusticity" may often be the preferred experience in the present and a dynamic in need of further study.

Taleb's theories offer the chance to revisit old concepts with different questions to prompt new directions for studies on health systems. Turner's theories regarding ideological communitas, combined with Taleb's characterizations of change and the specific example of Plain praxis, suggests being between praxis systems is itself a type of robust system with its own power dynamics. Furthermore, this type of system may be a preferable goal in system designs over antifragile or fragile systems. Lazarus' (1988) analysis of doctor-patient interactions in a perinatal setting provides a basis for this last prediction.

Lazurus' research demonstrates that both care providers and parents are embedded in their own unique praxis systems that shape their preferences for birth praxis. Lazarus found that what made the biggest impact on both provider and parent satisfaction was a match between expectations and experiences, even if the experiences were not necessarily preferred. For example, a thirty-minute visit may be preferred over a fifteen-minute, but it is not always a positive experience for a visit to last thirty minutes if it was expected to be fifteen. Lazarus concluded that, rather than focusing on differences in the praxis systems of care providers and mothers, researchers wanting to improve women's birth experiences should look at mismatches between expectations and experiences that occur as a result of the design of institutional praxis systems (1988). Likewise, it can be expected that there is a relationship between experiences of stratification and the design of praxis systems with respect to change.

Synthesizing these theories, praxis can be reframed as a reaction to change or a type of change itself. Praxis systems then are embodied knowledge of change that can potentially provide power over one's own and other's praxis through accurate predictions of reactions to

change. Ritualization is the process by which these predictions are formed and broken through the juxtaposition of expectations for change and the actual experience of change. Individuals will respond with robust praxis when there is no mismatch between expected praxis and actual praxis, fragile praxis when the actual experience is worse than what was expected, and antifragile praxis when it is perceived as better than expected. Fetishism can thus be conceptualized as a lack of change in the expectations of a praxis system to match past experiences.

Mandelbrot observed that, although chaotic patterns are easy to recognize, it is very difficult to replicate the rules that drive them (2004). Mandelbrot himself, while able to generate models that could approximate chaotic patterns, still struggled to generate novel examples of true chaos. From this it may be inferred that chaotic-appearing systems are likely a reflection of genuine praxis relationships. Furthermore, praxis within these systems can be expected to share traits with other chaotic systems, such as fractality. Thus, fetishism that fundamentally misrepresents praxis and creates unknowns can be conceived as source of human-generated chaos and fragility in systems. While fetishism is expected to be marked by patterns of self-similar stratification at different scales, diversity in patterns across scales is likely to be associated with minimal fetishism.

Birth, as a shared transitional process for all human beings, is likely to involve experiences with chaos and is thus an ideal context in which to test this synthesis. Likewise, Plain praxis represents a stratified area of practice theory and birth research where the refinement of these theories could have substantial applied significance. As Jordan has argued regarding birth systems, “The question is not whether they will or should change-this is a foregone conclusion-but rather what shape this change should take in the best interests of the populations involved” (1993:128). This research, through the testing and revising of the synthesis presented

above, aims to understand the shape of chaos, with the goal of improving birth experiences for both Plain and non-Plain women in America.

### *Conclusion*

> "The world is revealed to us, not by the fact that we come to have habits, but in the moments when, forced to abandon our old habits, we come to take up new ones." (Kohn 2013:66)

The ultimate goal of this research is to better understand the diverse ways individuals experience change and to apply this knowledge to reducing health inequities. The theoretical synthesis outlined above brings together frameworks from critical medical anthropology, religious studies, and mathematics to identify novel directions for study in the rich but perplexing field of transitional experiences. General themes identified for further exploration include the relationship between praxis, chaos, and stratification, correlations between ritualization and experiences of chaos, and the dynamics of praxis change at the system level. The three data chapters of this dissertation will focus on each of these themes, respectively, while the next chapter describes the settings and methods by which they were explored.

# CHAPTER 3:

# Settings and Methods

As coined by the philosopher and mathematician Nassim Taleb (2010), a "black swan" is something that shatters certainty. Taleb outlined this concept in his book of the same name through a historical example of a period when many western populations believed that all swans were white. He explained that, upon finding a new example of a white swan, the certainty that all swans were white increased steadily. That is, until a black swan was discovered. Taleb argued that not everyone reacts to this type of discovery the same way, but the number of potential responses is still limited.

An individual or group could change their system of praxis for white swans to include black swans, making no praxis distinction between them. They could define this new discovery as 'something else', a new type of bird that is not a swan. This would require a new praxis system but minimal change to the existing system for white swans. Lastly, they could simply ignore this finding, perhaps by dismissing it as an outlier, a mutation, an aberration that requires no change in praxis. What Taleb's work does not explore in-depth is how these three experiences of change overlap and shape one another within the context of the same or different individuals and communities (2010).

The previous chapter outlined that the nuances of praxis change are ambiguous within existing theoretical frameworks. However, that should not preclude its study. As one mathematician has remarked:

> "…many of the great moments in the development of mathematics occur when mathematicians-requiring some concept not yet formalized-work with the concept tentatively, dismissing-if need be-mental torture, in hopes that the experience they acquire by working with the concept will eventually help put that concept on sure footing." (Mazur & Stein 2016:75)

Accordingly, this chapter is a roadmap for studying the fundamentally nebulous experience of praxis change.

While mathematical theories are a source of inspiration for these efforts, the settings and methods of this research are firmly anthropological. This dissertation is a multi-sited praxiography involving a variety of birth systems in the states of Indiana and Michigan. Data on praxis was collected primarily through interviews with providers, parents, and knowledgeable community members with the goal of understanding the power dynamics that change praxis. Sampling a range of different demographics and physical spaces was expected to generate a rich dataset. Rather than detailing any one praxis system in depth, this dataset was intended to capture the complex interactions that occur between several systems to affect change.

A key methodological takeaway from Taleb's work is that, to evaluate the validity of the experience that "all swans are white", it is much more efficient to look for swans that are not white than to keep looking for more white swans (2010). In my own approach, I treat reported associations between birth praxis and Plain praxis in the U.S. as "white swan" statements or potentially fetishized praxis systems themselves and I intentionally sought out contradictions or "black swans" through an anthropological methodology that will be detailed below. Rather than trying to replicate existing reports on these settings that ultimately support damaging power relationships, the goal was to reveal potentially stratifying assumptions in my own and others' expectations for Plain birth praxis in the U.S.

## Plain Birth Praxis in the United States of America

While there are significant differences in the praxis systems of Amish, Mennonite, and Brethren churches, the most conservative "Old Order" members that practice plain dress and rely on horse and buggy transportation are generally considered by researchers to have more in common with one another than non-Plain individuals within their own respective religious movements (Kraybill & Bowman 2001). For the wider public as well, nuances in praxis are often

overshadowed by stark differences that are noticeable when comparing to individuals outside of these communities altogether.

In 2010, it was estimated that there were 578,195 members of Amish, Mennonite, or Brethren churches living in the United States of America. Of the 101,600 Amish members, three distinct churches were identified and all members were reported to dress plain and use a horse and buggy for transportation (Kraybill 2010). An estimate from 2022 that combines Amish membership across these churches reports 367,295 total members, but the 2010 summary remains the most comprehensive estimate of membership in the other communities (Amish Studies: The Young Center). Mennonite churches present considerably more diversity in praxis with at least 61 distinct churches and over 296, 125 members, but several congregations also adhere to plain dress and utilize a horse and buggy (Kraybill 2010). There are at least eleven Brethren churches with 175, 395 total members, but plain dress and the use of a horse and buggy is practiced by only a few thousand members (Kraybill 2010).

Limited studies on birth in the different communities also contribute to the appearance of overlap in praxis between communities and sharp contrasts to non-Plain communities. Namely, there appears to be no scholarship on the birth praxis of either Plain or non-Plain Brethren communities in the U.S. and the literature is dominated almost entirely by studies of birth in Amish communities. Thus, the starting "white swan" setting for Plain Amish, Mennonite and Brethren birth praxis can largely be found in the published literature on Amish birth produced by religious studies scholars, social scientists, and health researchers.

There are no national statistics on out-of-hospital birth rates in Amish communities living in the United States. Despite this lack of data, it is often taken as a given that homebirth is common and preferred in these communities. The basis for this assumption comes from

examples such as a Pennsylvania study where 52.8% of Amish women reported that they had given birth at home or in a birth clinic compared to only 1.4% of the non-Amish women surveyed (Miller et al. 2007). Likewise, in an Ohio Amish community, it was estimated that 41% of Amish women give birth outside of the hospital, with that number reaching as high as 82% in some communities (Hurst & McConnell, 2010). However, closer examination of some specific birth praxis trends suggests nuance and variability across communities and over the course of the same individual's life.

It is often reported that Amish women initiate pre-natal care late or not at all, but these simple statements mask the complexity of decision-making around praxis. Amish women have been known to supplement their diets with herbs and other remedies during pregnancy as their own form of pre-natal care (Campanella et al. 1993). The reasons for this trend are sometimes given as Amish individuals being generally unlikely to engage in preventive medical care, but when it is considered that pre-natal care can be expensive for those who are uninsured—especially in a high parity family and when visits require travelling—it may be less of a preference and more of a practical choice (Jolly 2007). This hypothesis is supported by reports that Amish women initiate pre-natal care early in pregnancy with their first child and then progressively later and less often with subsequent children (Campanella et al. 1993).

While there do appear to be some differences in the birth praxis of Plain and non-Plain individuals in the U.S., sweeping generalizations about Plain health praxis are often misleading. For example, it has been stated that, "No amount of education will convince the Amish woman to practice contraception" (Adams & Leverland 1986:67). Yet, numerous studies report Amish women do find ways to effectively limit family size and, when looking across communities and over time, changes in average parity suggest that preferences around contraception are not stable

(Colyer et al. 2017). Similarly, while it is often reported that all Amish individuals reject health insurance, this diverts attention away from the diversity of responses to high medical costs (Kraybill et al. 2013).

Health insurance is not uniformly prohibited across Amish communities, with the decision often being left to individual congregations to decide. Additionally, many members pool money to create a health savings fund that is managed by volunteers (Kraybill et al. 2013). In some cases, these funds are formally organized institutions, such as the Mennonite mutual aid fund which has both Amish and Mennonite members (Kraybill & Swartley 1998). It had also been reported that Amish communities have successfully negotiated reduced payment plans with individual health care providers as well as large hospital systems (Kraybill et al. 2013). Relatedly, health clinics have been created to serve some of the specific health needs and preferences of Plain populations,

Due to small founding populations and endogamous marriage practices, there is a high degree of consanguinity in some Amish and Mennonite communities. Consequently, genetic diseases are one area of medical care where Amish individuals are consistently described in the literature as actively seeking treatment. The result is several different examples of long-term collaborative relationships between Plain communities, health care providers, and researchers from many different fields (Kraybill et al. 2013). Since 2003, there have been 23 genetic disorders mapped using Amish population data (Strauss & Puffenberger 2009). Many of these diseases are not affected by treatment and five are lethal in infancy. Of note, microcephaly is one of the most common genetic disorders in the Amish and is a large contributor to high rates of neonatal mortality (Strauss & Puffenberger 2009).

In Pennsylvania, the Clinic for Special Children was constructed in 1989 to help manage and diagnose these conditions in both Amish and Mennonite communities and to engage in research that helps identify new treatments (2022). Similar clinics have since been established in other states and they often provide services to non-Amish individuals suffering from genetic diseases as well (Kraybill et al. 2013). Significantly, these clinics are not merely constructed on behalf of Amish populations, but are often initiated, funded, and built with the support of community members and their management is subsequently overseen by a board of both Amish and non-Amish individuals (Clinic for Special Children 2022; Hostetler 1993). This has also been the model for birth clinics that serve these communities (Kraybill 2003). These types of structural relationships and their impacts on stratified reproduction across both Plain and non-Plain communities are the central focus of this research. Accordingly, a "white swan" expectation is that members of Plain churches are highly supported to give birth out-of-hospital despite potential barriers to accessing that praxis. The next setting relevant to this research is the larger environment of birth praxis systems in the United States and in Indiana and Michigan in particular.

## Birth Praxis Systems in Indiana and Michigan

With approximately 62,800 active adult members, Indiana has the third largest Amish population in America (Amish Studies: The Young Center 2022). The largest settlement was established in 1841 in northern Indiana and its geographic boundaries include a large number of Mennonite and Brethren communities as well as non-Amish households (Amish Studies: The Young Center 2022; Meyers & Nolt 2005). Meyers and Nolt (2005) have suggested that northern Indiana is a region with one of the most diverse and densely concentrated collections of Plain

communities in America. There are also a number of Plain communities in other rural regions of the state (Meyers & Nolt 2005).

Michigan, in contrast, has the sixth largest Amish community in America with approximately 17,920 adult members concentrated in several different parts of the state and much fewer Mennonite and Brethren communities (Amish Studies: The Young Center 2022; Kraybill 2010; Huntington 2001). No Amish settlement in Michigan is currently larger than 2,000 members and the oldest settlement still in existence was established in 1910. However, unlike Indiana, there are a number of new settlements across the state, with three settlements of approximately 40 households established as recently as 2019 (Amish Studies: The Young Center 2022). There have been no comprehensive studies of Amish healthcare in either of these states nor of birth praxis specifically. In the absence of this data, the default "white swan" expectation is that rates of certain birth praxis in these communities will resemble overall trends found in both states.

In 1900, almost all U.S. births occurred at home but by the 1940s the rate of out-of-hospital births fell to 44% and then to ~1% by 1969, where it remained through the 1980s (MacDorman & Declercq 2019). There was a sustained decline from the 1990s to 2004 but since then the rates of out-of-hospital births have been gradually rising in the United States. While the majority of out-of-hospital births in the U.S. are homebirths, from 2009-2019 the number of birth centers in the U.S. grew by 65% and there are currently 400 birth centers in operation today across 40 states (AABC 2022). In 2017, 0.99% of births in the United States occurred at home and 0.52% in birth centers for a total of 62,228 births occurring out-of-hospital overall (MacDorman & Declercq 2019) One major driver behind trends in birth location has been changes in who attends birth.

Historically, midwife-attended birth at home was the norm in many countries including the United States (Wertz & Wertz 1989). However, physicians became increasingly interested in studying birth and developing interventions such as the cesarean section (C-section). Desiring to be viewed as professionals in the area of birth and health more generally in a time when training was not standardized, physicians began to see midwives as competition that undermined their expertise and limited their opportunities to gain experience. By the mid-1900s, a national accrediting body and standards of training distinguished the practice of physicians from other care providers and further specialization led to the growth of obstetrics as a hospital-based surgical field (Wertz & Wertz). This transformative process has been referred to as the medicalization of birth (Wiley & Allen 2009).

Through medicalization, it became the standard within U.S. birth praxis systems to react to birth as a risky event requiring exclusive management in the hospital. This change in praxis and the loss of other praxis systems through authoritative medicalization that favored hospital-based physicians contributed to the rapid and near complete shift in birth location from home to hospital (Wiley & Allen 2009) Some non-physician birth attendants adapted to this new system, creating their own complementary specialization pathway for attending birth in the hospital (Klassen 2001). The most notable of these is the American College of Nurse Midwives (ACNM) which certifies midwives that have obtained a college degree, completed nursing school, and received specialized training in midwifery. Up until 1980, the ACNM recommended against homebirth. Meanwhile, a significant number of other midwives rejected the praxis system of hospital birth, pushing for the demedicalization of birth and a return to midwife-attended homebirth.

The revitalization of homebirth in America has been driven largely by direct-entry midwives starting in the 1960's and 1970's (Klassen 2001). This movement evolved into the North American Registry of Midwives (NARM), which recognizes midwives if they have graduated from a handful of accredited schools or have completed a standardized apprenticeship pathway with community-based midwives (MANA 2020). Midwives certified through NARM are often referred to as certified professional midwives, but this exact title can vary from state to state. While certified nurse midwives (CNM's) are allowed to practice in all 50 states, certified professional midwives (CPM's) can only legally practice in 35 as of 2019 (MANA 2020). Additionally, direct-entry midwives who have not received recognition for their training through one of these pathways still practice across the U.S. (Klassen 2001). However, who attends birth and where is highly stratified by state, certification, and ethnicity.

In 2017, physicians attended 90.6% of all hospital births while CNMs/CPMs attended just 8.7% (MacDorman & Declerq 2019). Of planned homebirths, physicians attended 0.7%, CNMs/CPMs attended 29.4%, and non-certified midwives attended 50.7%. In birth centers physicians attended 2.7% of births, CNMs/CPMs attended 56.6%, and non-certified midwives attended 36.7% (MacDorman & Declerq 2019). Demographic surveys of physicians in the United States described a majority white, Judeo-Christian provider population with individuals that identify as black or Hispanic being the most underrepresented (AAMC 2022; Curlin et al 2005). Meanwhile, a recent demographic report on midwives in the United States did not have information on religion but did report that 85.52% of midwives identify as white, with Hispanic midwives most severely underrepresented (AMCB 2020). Of note, 25% of all hospital beds in Indiana and Michigan are owned by Catholic hospitals that limit access to certain reproductive

praxis such as abortion and contraceptives (ACLU 2022). Parent demographics for out-of-hospital birth are also very stratified.

Out-of-hospital birth rates in America are highly stratified by socioeconomic status, ethnicity, education, and age. While rates of homebirth have increased over recent years, the changes seem to be confined to a homogenous population. A 2014 study of 16,924 of planned homebirths from across the United States reported that 92.3% of their sample was white, 58% had completed four years or more of higher education, 88% were married, 64.4% were self-pay, and the average age was 30 (Cheyney et al.). Of note, 6.5% of women in their sample were also members of a Plain church (Cheyney et al. 2014). Regardless of state, the current "white swan" demographic expectation of out-of-hospital birth is married parents that are white, older, college educated, upper class individuals. Yet, homebirth in the United States has not always been this homogenous.

There is a history of midwifery and homebirth in diverse communities across the United States (Fraser 1995). However, the revitalization of homebirth has not been equitable and, today, the communities most underrepresented in U.S. homebirth statistics are also the most overrepresented in rates of maternal mortality (Hoyert 2022). Significantly, Indiana has the third largest Plain community and was also reported as having the third worst rate of maternal mortality in the country in 2022 (World Population Review 2022). Michigan, meanwhile, ranked 25$^{th}$ for rates of maternal mortality (World Population Review 2022).

There is a maternal mortality review committee actively working on reviewing the causes of this trend in Indiana, but it was a local newspaper that drew attention to the disparity and has since launched an in-depth investigative report (Indianapolis Star 2022). Their preliminary findings have drawn attention to the fact that many counties in Indiana, especially rural ones,

have no obestric wards and over the last 20 years 16 hospitals in the state have closed their wards (Indianapolis Star 2022). Maternity care deserts such as these are common in the United States and can be a major contributor to maternal mortality through the lack of providers and dangerous travel times to hospital (Jean-Louis, 2022).

Both Indiana and Michigan have created pathways for midwives that are not CNMs to legally practice, with bills passing in 2013 and 2017, respectively (Hayden 2013; Taylor 2017). Further significant differences in birth praxis between the two states and the overall U.S. population can be appreciated in the table below.

Table 1: Trends and State Variations in Out-of-Hospital Births in the United States (MacDorman & Declercq 2019)

| **2017** | **Total Births, n** | **Total Out- of-Hospital n(%)** | **BC n(%)** | **HB n(%)** | **% of HB Planned** | **BC Self-Pay** | **HB Self-Pay** | **BC Medicaid** | **HB Medicaid** |
|---|---|---|---|---|---|---|---|---|---|
| U.S. | 3,855,500 | 62,228 (1.61) | 19,878 (0.52) | 38,343 (0.99) | 84.9 | 32.2% | 67.9% | 17.9% | 8.6% |
| Indiana | 82,170 | 2,103 (2.56) | 732 (.89) | 1,354 (1.65) | 92.8 | 85.8% | 93.9% | 0.0% | 0.5% |
| Michigan | 111,426 | 1,542 (1.38) | 117 (0.11) | 1,375 (1.23) | 87.0 | 27.6% | 62.1% | 3.4% | 2.6% |

It is reasonable to expect that comparing birth praxis in different communities and between these two states will provide insight into the process of stratified reproduction. Given the clear stratification of access to birth praxis, it is anticipated that comparing experiences across these two states will prove to be a challenging testing ground for the previous chapter's theoretical synthesis and will reveal black swans that undermine the power structures of stratified reproduction.

## Methods

Praxiography involves the study of praxis and praxis systems (Mol 2002). Praxiography can involve direct observation of praxis, reflexivity regarding personal experiences and the

research itself, formal and informal interviews with experts and participants, and analysis of documents such as personal journals and how-to guides (Bueger & Gadinger 2018). Due to COVID-19, this study was modified to exclude in-person participant observation, but all other methods were used to collect data on birth praxis in the states of Indiana and Michigan. Prior to COVID-19, informal pilot research that included participant observation was conducted.

A multi-sited approach was used in this research to maximize the chance for comparisons at different scales and in diverse contexts (Falzon 2009). In total, I spent approximately four months collecting interview data from individuals who had experiences with birth clinics, hospitals, and with midwifery services in the states of Indiana and Michigan. Institutional Review Board (IRB) approval for this research was granted in June 2019, but no data collection took place before COVID-19 required modifications. Modifications were approved in June 2021 and data collection lasted through the end of the calendar year. All institutional, local, state, and federal COVID-19 guidelines were followed throughout the course of this research. The following sections provide more in-depth details on the methods used to conduct this research.

*Sampling and Interviews:* The inclusion criteria for all participants was that they must be adults and have personal experience with or knowledge of birth and/or Plain praxis in Indiana and Michigan. Due to concerns around COVID-19 and increased risks during pregnancy, individuals who were currently pregnant were excluded from the study. Given a theoretical focus on ritualization involving direct experiences with birth, parents and providers were prioritized for recruitment into this research. Community members as a category includes individuals that were recruited based on recommendations from either parents or providers in this study and individuals that were identified as having extensive experience with birth or Plain communities.

I planned to conduct interviews with providers from two different birth clinics, two different hospitals, and two different midwifery services and at least one of each type of institution in Indiana and Michigan. I aimed to interview at least 20 care providers, 20 parents, and 10 community members, with a goal of 15 Plain and 15 non-Plain individuals in the total sample of parents and community members. I also planned to interview at least two care providers, two parents, and one community member in connection to each different birth location. There were expected to be too few Plain care providers at hospitals and birth clinics to provide an equal sample, but perspectives of both Plain and non-Plain care providers were sought. This plan was modified to allow for remote interviews via phone or correspondence through mail due to COVID-19.

A snowball sampling method was used as it is well equipped for the insular communities of interest in this dissertation (Bernard 2011). Using this method, I first identified a small, but diverse group of participants for initial recruitment. As the sample grew, recruitment efforts focused in on perspectives that were missing. Over 300 total individuals were invited to participate in this research, with flyers and word-of-mouth serving as a point of indirect contact for an unknown number of additional individuals. All participants were asked to recommend others for recruitment to the study and—if they felt comfortable—share an informational flyer. Twelve individuals were recruited via referrals from other participants.

Table 2: Parent Demographics

| Characteristic | Range | N Parents |
|---|---|---|
| Age | 30-40 | N=6 |
| | 40-50 | N=5 |
| | 50-60 | N=2 |
| | 60-70 | N=2 |
| | 70-80 | N=2 |
| Number of children | 1-2 | N=5 |
| | 3-4 | N=4 |
| | 5-6 | N=5 |
| | >6 | N=3 |
| Income level (household) | <25k | N=3 |
| | 25k-50k | N=2 |
| | 50k-75k | N=2 |
| | 75k-100k | N=2 |
| | 100k-200k | N=4 |
| | 200k-300k | N=1 |
| | No data | N=2 |
| Highest educational attainment | 8th grade | N=3 |
| | 12th grade | N=5 |
| | College | N=5 |
| | Graduate | N=4 |
| Current religious affiliation | Brethren | N=5 |
| | Catholic | N=3 |
| | Protestant | N=3 |
| | Christian: non-specific | N=2 |
| | No affiliation | N=4 |

A total of 41 participants were recruited for this study (See table one and two for demographics). Four participants had some form of familial relationship to me. Two care providers attended births in both Indiana and Michigan and many participants had experiences with birth in other states. Five participants were active members of Brethren churches and three participants were former members of Brethren churches. Three other participants had family members that were formerly Brethren. Two providers had family members that were active members of Plain churches. One care provider identified as Plain, but was not a member of any Amish, Mennonite, or Brethren community. Another care provider was a former Plain church member. To protect anonymity, exact church affiliations are not given although that information was obtained. It can be stated though that this sample includes active and former members of four distinct Plain Brethren churches.

Table 3: Provider Demographics

| Characteristic | Range | N Providers and Community Members |
|---|---|---|
| Age | 30-40 | N=6 |
| | 40-50 | N=4 |
| | 50-60 | N=3 |
| | 60-70 | N=9 |
| | 70-80 | N=1 |
| | No data | N=2 |
| Number of children | 0 | N=3 |
| | 1-2 | N=8 |
| | 3-4 | N=9 |
| | 5-6 | N=3 |
| | No data | N=2 |
| Income level (household) | <25k | N=1 |
| | 25k-50k | N=1 |
| | 50k-75k | N=1 |
| | 75k-100k | N=4 |
| | 200k-300k | N=1 |
| | >300k | N=3 |
| | No data | N=12 |
| Highest educational attainment | 12th grade | N=4 |
| | College | N=9 |
| | Graduate | N=12 |
| | No data | N=2 |
| Current religious affiliation | Catholic | N=2 |
| | Protestant | N=5 |
| | Quaker | N=2 |
| | Christian: non-specific | N=7 |
| | No affiliation | N=8 |
| | No data | N=2 |

All participants had some degree of familiarity with Amish, Mennonite, or Brethren individuals, although this was not a requirement for participation. Participants in this research were asked open-ended questions that allowed them to distinguish between the three communities based on their past experiences and all individuals were asked for their own specific religious affiliation. Many care providers had extensive experience with Amish communities, but experience with Mennonite and Brethren communities was less commonly reported. Although it should also be noted that some care providers did not know the exact affiliation of those they cared for.

Semi-structured interviewing was used with all but two participants in this study. Due to time constraints, only a select few questions were asked of these two participants and their interviews lasted 15 and 30 minutes, respectively. All other interviews covered the full list of questions and lasted 30 minutes to two hours and 30 minutes, with the average being one hour. Semi-structured interviews follow a consistent question guide which facilitates more rigorous data collection and comparison (Bernard 2011). This method allowed for questions to be added or modified based on interviewees' feedback and responses. I interviewed parents, care providers, and community members about a broad range of topics and individuals were

encouraged to digress as needed to fully describe their experiences (see the appendix A for an example of a semi-structured interview questionnaire).

Table 4: Praxis Systems Represented

| **Care Provider Praxis Experience** | **Indiana** | **Michigan** | **Hospital** | **Home** | **Center** |
|---|---|---|---|---|---|
| OB/GYN | 2 | 2 | 4 | 0 | 0 |
| CNM | 0 | 1 | 1 | 1 | 1 |
| CPM/CEDM | 4 | 5 | 0 | 9 | 5 |
| Family Medicine | 1 | 2 | 3 | 0 | 0 |
| Nurse practitioner | 1 | 0 | 0 | 0 | 0 |
| Doula | 2 | 2 | 4 | 4 | 3 |
| EMS | 0 | 1 | 1 | 0 | 0 |
| Emergency Medicine | 0 | 1 | 1 | 0 | 0 |
| Labor and Delivery Nurse | 1 | 0 | 1 | 0 | 0 |
| Childbirth educators | 2 | 1 | 2 | 2 | 0 |
| **Other Praxis Experience** | | | | | |
| Mothers | 10 | 4 | 13 | 7 | 2 |
| Fathers | 1 | 1 | 2 | 0 | 0 |
| Community Members | 2 | 1 | 1 | 0 | 0 |

Participants in this research identified as part of diverse praxis systems and were asked to describe not only their own systems and experiences, but also the praxis of others they had interacted with. Table four gives an overview of these different systems. Notably, some individuals identified as part of multiple systems.

The design of the interviews and specific questions themselves were informed by pilot research, ritualization theory, and past anthropological research on birth. Participants were asked directly about experiences of transitions and changes to their own and others praxis. General topics included how individuals learned about birth, their experiences with different birth praxis, and their reflections on praxis change in their own or other systems. Overall, questions in this research were designed to be open-ended and able to accommodate participants choosing their own terms to characterize their birth experiences. In the data analysis and conclusion chapters of this dissertation randomly assigned pseudonyms are used when discussing all participants responses. Potentially identifying details are also changed to protect anonymity, however, the

overall content of their experiences has not been altered and it is possible to appreciate the same individual's responses across the different topics highlighted in this dissertation.

As it was not possible to engage in direct participant observation due to COVID-19, questionnaires were designed as a shared transitional experience that could serve as a unit of study. To facilitate this, topics and multi-part questions within the interviews were arranged to follow the flow of a rite of passage. Anticipatory anthropology methods, specifically futures studies research, also provided an important source of guidance for asking questions about chaos and uncertainty (Inayatullah 2012). Other sources of guidance for specific questions on birth came from, Robbie Davis-Floyd (2003), Pamela Klassen (2001), and Brigette Jordan's (1993) research. The COVID-19 pandemic also offered the opportunity to ask questions about praxis around an additional shared, transitional event.

*Auto-praxiography*: Auto-ethnographic approaches typically merge traditional descriptive ethnography with a critical analysis of the researchers' experiences and observations within the same settings (Chang 2008). An auto-praxiographic approach combines traditional auto-ethnographic methods with a specific focus on praxis (Bueger & Gadinger 2018). Key documents available for this type of analysis included my own contemporaneous journal entries made during pilot work in 2017 and over the course of data collection from 2020-2021. This research was highly personal in nature and prompted constant reflection on my own praxis. Through data collection, my understanding of my own past experiences changed, and I was confronted with many unknown details concerning the praxis of my own family members. As relevant, my accounts of these experiences and critical reflections on them are included throughout the data chapters.

*Archival Research and Document Collection:* Archival research is a methodology well-suited to a study of praxis and transitions over time (Bernard 2011). Types of materials especially relevant to a praxiographic approach include memoirs, diaries, correspondences, how-to manuals, and handbooks (Bueger & Gadinger 2018). I conducted archival research in Pennsylvania and Indiana that involved an extensive review of Amish, Mennonite, and Brethren publications and the personal notes and correspondences of researchers. Periodicals examined in-depth include *Family Life, Little Red Hen News, The Diary, The Pilgrim, and Old Order Notes*. Personal accounts of birth experiences, detailed birth records, and advice regarding birth from Plain church members living in Indiana and Michigan were all found in these periodicals. They also provided insight into changes in other relevant areas of praxis, such as theology, education, and healthcare more generally. Collectively, these journals offered insight into changes in Plain praxis from the 1960's-present day.

I also had the opportunity to review the *Donald B. Kraybill Collection* housed in the Hess Archives and Special Collections at Elizabethtown College in Pennsylvania. The extensive collection includes research reports, contemporaneous news articles, and correspondences donated by the researcher Donald Kraybill after several decades of scholarship. Many items in the collection are marked with notes from Kraybill himself and several items are early drafts of work that would later be published, offering an in-depth look at Kraybill's praxis as a researcher. A similar collection, the *Louise Stoltfus Collection*, offers comparative insights on research praxis from someone with experiences different from Kraybill. Archival research at the Mennonite Historical Library housed at Goshen College involved a more general review of Plain-published literature, such as poetry and philosophy related to birth praxis. I also collected documents directly from participants.

I collected relevant handbooks and how-to documents from participants as well as specific titles of books or other materials that had an impact on their birth praxis. In total, six different sets of documents directly related to birth praxis were collected from midwives. These documents primarily consisted of informed consent forms, new client information pamphlets, and transfer planning forms. One mother also shared with me a contemporaneous account of her own transfer. Additionally, I collected publicly available documents online and through my attendances at conferences and while visiting relevant locations in the community from 2017-2021. Documents personally collected this way include news reports, conference handouts, informational pamphlets, and magazines. I also collected documents that detailed my own father's praxis as a family physician serving members of Plain communities. The combination of all of these sources of data resulted in a rich data set with which to contextualize changes to my own and others praxis.

## Modifications

Due to COVID-19 disruptions that prevented in-person recruitment, fewer active members of Amish, Mennonite, and Brethren communities participated than initially planned for. A halt on all human subjects research by MSU IRB meant that both new rapport building and data collection had to be condensed into the same time frame. Significantly, this also pushed data collection to a time when care providers were very busy due to COVID-19 and farming families were at peak workload during the summer. All of these factors led to relying on previously established connections as opposed to forming new ones. This contributes to the overrepresentation of Brethren individuals in the study and the differences in numbers between the two states when looking at mothers and care providers.

In terms of overall demographics, a wide variety of economic, educational, and social backgrounds are represented. Some demographic information is not available, mainly income level, as many individuals declined to answer or did not know. Other sources of incomplete information include individuals that were not able to complete a full interview due to time constraints and certain questions that were only added as interviews progressed and it became apparent that information would be useful in analysis. These unknowns are addressed in the following data chapters where relevant. I will also take care in my analysis and presentation of the data to note what areas of further research are needed and where diverse viewpoints may be lacking.

## Data Analysis

This praxiographic approach produced five separate but complementary sets of data: auto-praxiographic reflections resulting from personal experiences during and prior to data collection; transcripts and notes from semi-structured interviews with participants; documents from institutional sources, community sources, and participants; and a wide mix of archival documents. Documents were scanned and uploaded to NVivo, along with transcripts and notes. NVivo is a software system that assists with data management and in-depth analysis of themes in qualitative data (Bernard 2011). Data analysis consisted of several stages of coding, progressing from coding general themes and low-tech pattern identification to more specific coding and analysis using NVivo.

I was able to analyze roughly three categories of experiences of praxis: direct accounts of experiences with different types of praxis, reflections on past, present, and future praxis, and reports of experiences with specific forms of praxis stratification. The interview questions generated very different types of data for analysis. Some questions focusing on the recall of

emotional reactions and experiences with praxis in the past while other questions were intended to assess individuals' present praxis. These types of questions tended to be open-ended, testing theoretical concepts and exploring individuals' own praxis systems and their expectations of others.

Finally, some questions were intended as general surveys, not exploring the experience itself and reactions to it as much as the presence of that experience at all. These types of questions included demographics but also questions about specific birth preferences and barriers to care. Similarly, documents and archives were analyzed for the same general types of data. The structure of the interviews themselves allowed for many informal interactions through open-ended questions and feedback at the end. I was highly conscious of engaging with individuals of a wide range of backgrounds and this interview structure facilitated auto-praxiographic reflection on my own praxis as a researcher.

Initial codes mapped onto my specific interview questions while later codes emerged from analyzing the data. Examples of themes coded for were impressions of Amish, Mennonite, and Brethren birth praxis, views on control and prediction in birth, and impressions of one's own or other's status as experts in birth praxis. Direct comparisons were made between semi-structured interview responses to identify patterns based on demographic characteristics, praxis systems individuals identified as being part of, and individual perspectives on change. Data was also compared for unexpected differences and similarities in praxis patterns. Results from these comparisons were integrated with notes and collected documents to obtain a fuller picture of significance.

## Summary

This research was conducted primarily through semi-structured interviews with participants living in Indiana and Michigan and through archival work taking place in Indiana and Pennsylvania. A praxiographic method produced a rich, multilayered data set that allowed for in-depth comparative analysis of birth praxis and systems in a range of different settings and across diverse demographics. This mixed-methods approach of praxiography was chosen because it is well-suited for exploring the themes outlined in the previous chapter and in the settings detailed here. More specifically, my aims were as follows: 1) gain a more nuanced understanding of the relationship between praxis change, praxis systems, and experiences of chaos, 2) analyze the power dynamics of stratification by comparing expectations for Amish/Mennonite/Brethren birth praxis with actual experiences as reported by members of those communities, and 3) identify equitable healthcare system designs for Plain and non-Plain women in America.

# CHAPTER 4:

# Patterns in Chaos

On October 30th, 2018, a public hearing was held in Lansing, Michigan for a proposed bill that would legalize direct-entry midwifery in the state. Before this law passed, non-certified nurse midwives in the state operated in a legal limbo where their praxis was unregulated, neither legal nor illegal (Taylor 2017). The new law changed this by requiring the fulfillment of standardized educational requirements for midwives and adherence to a praxis system that was integrated within the larger Michigan medical system. One speaker at the hearing, a physician and representee of the Michigan Maternal Mortality review committee, commented on the importance of this type of standardization (Personal Notes from Hearing 2018)

The representee summarized that reducing maternal mortality came down to three primary things; right care, such as evidence-based guidelines; right time, meaning no delays in treatment; and right place, as in having the resources necessary. In discussing right care, she was careful to make a distinction between midwife-attended birth and OB/GYN-attended birth, with the former being appropriate for a completely "normal" pregnancy and the latter caring for "sick" individuals (Personal Notes from Hearing 2018). By clearly specifying several preexisting medical conditions and emergent symptoms that require consultation or transfer from a midwife's care to a different provider, the bill gave the impression of complimentary praxis systems for two distinct processes (Michigan Board of Licensed Midwifery 2018). The speakers phrasing of "right" praxis further implied that these systems are comprehensive and efficacious. However, an exemption from the regulations passed in the bill subverts these expectations.

A clause within the law passed in 2018 exempts religious practitioners from the licensure requirements. While the bill provided detailed contingencies for "sick" birth, there is no equivalent guide defining the parameters of this religious exemption (Michigan Board of Licensed Midwifery 2018). This gray area within the bill suggests there may be other outliers

potentially left out of the bill's seemingly comprehensive delineation between normal and not normal birth. In general, the bill invites comparison of these expectations to providers' and parents' own experiences as well as an exploration of the impacts of praxis being "right" for some and exempted for others. Ritualization is a useful framework for comparing how individuals in diverse contexts answer these questions for themselves and the mechanisms by which those answers come to have tangible impacts on their lives (Bell 1992).

In this chapter I explore the birth praxis systems of a highly varied sample of parents and providers. I focus on praxis for control, prediction, and expertise as the literature suggests these are common aspects of praxis systems that also overlap with studies of transitional, chaotic processes (Bell 1992: Taleb 2014). I highlight contradictions in expected and actual praxis as identified by participants themselves and discuss how this data indicates a paradigm shift is needed to better reflect their experiences with birth. Through an analysis of Plain birth praxis, I also document how exemptions based on easily disproved predictions are ultimately stratifying.

I end with a discussion of how these findings clarify the relationship between praxis and the praxis system, adding nuance to theoretical understandings of both concepts and ritualization as the process connecting them. I also present a revised framework for understanding how predictions come to be made and unmade through experiences over time and with different individuals. I conclude by arguing that parents should be free to choose their preferred birth praxis. If those choices do not exist within current systems, rather than simply being treated as exceptions, birth systems should adapt to make those choices widely available.

**Provider Experiences of Control, Prediction, and Expertise**

***Interviewer:*** *Do you think what happens in a birth can be controlled at all?*

***Michigan OB/GYN:***
*[Laughs] No. No, I don't… I would say, in my sort of outlook on physiology involved in childbirth, is that it's not something that we have control over. It's going to happen whether or not I'm there or she has any sort of conscious input into what's happening with her body. (Dr. Jackson)*

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***Indiana/Michigan Midwife:***
*Ultimately, obviously yes, right? Otherwise, why would we keep track of statistics? If it can't be controlled, then everyone's C-section rate would be the same and everyone's outcome would be the same. So, maybe that's affected not controlled. Ultimately controlled? Of course not. It's a bodily function, but we have more control over it than we want to own responsibility for, sometimes. (Lauren)*

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***Indiana Midwife:***
*I don't know. What I think is I am hired to hopefully give this family the optimal birth that they view in their mind that they want... And then the other thing is I think that someone greater than you and I holds the keys to life and death. So in that part, I don't think I have control. (Stacie)*

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***Michigan Emergency Medicine Physician:***
*I view birth as planned chaos or organized chaos. Obviously, we don't really have a ton of say in when baby is going to make their appearance, but we can try and control where it happens by educating mom and supporting people that need to be at an OB capable hospital. (Dr. Chandler)*

To explore parents' and providers' ritualization in chaos, I asked participants in this study if they felt anything in birth could be controlled or predicted. The small sample above illustrates the diversity of responses to the first of these questions. Few felt that control was always possible and no individuals conflated control with prediction, instead seeing them as distinct but interrelated phenomena. One midwife assessed regarding birth, "I think that's an easier one to say that things sometimes can be predictable as opposed to controlled" (Kate). Likewise, as seen above, nearly all participants identified some aspects of birth as uncontrollable, but some saw prediction as a source of control over outcomes while others viewed prediction as inherently fallible, looking instead to what they could control outside of birth.

Dr. Caldwell, an OB/GYN and medical school educator, related to me an example of how prediction and control interact. She explained that if a person is at risk for certain negative outcomes, early in pre-natal care she will try to intervene to reduce that risk. She summarized that, "…in a sense, we're influencing the outcome. And you can predict with a reasonable sense of security that this patient will or won't have issues. But it's never 100%". Another OB/GYN, Dr. Hutchinson, observed that there seems to be a perception that obstetricians have control over birth outcomes, but she was not entirely sure if she agreed. Dr. Caldwell echoed this observation:

> "I mean, lots of the time, you feel like you're in control, right? And it's a very false sense of control because then it comes out the way you expected it or wanted it and so obviously you think you created that. But you could do everything exactly the same the next time and it comes out different."

Notably, care providers of all praxis systems emphasized the fallibility of prediction, with an emergency medicine physician commenting "Unfortunately, medicine is an art that is grounded in science. And so, you can make all the predictions you want in the world and everything can go to hell in a hand basket in 10 seconds" (Dr. Chandler). For some though, this unpredictability was described as a source of fascination, not frustration. Sarah, an Indiana doula who had recently completed training as a certified professional midwife as well, summarized:

> "It's a wonderful thing to be a birth provider because, if you have any sense of reality, you're going to want to keep doing it. Because you're going to be wrong. And it's been very wonderful for me to work with some really experienced—I think pretty brilliant—midwives and watch [that] they're wrong a lot of the times about things."

Several experienced birth care providers also described the unpredictably innate to birth and being wrong as a never-ending, but enjoyable, aspect of their work. However, some also noted that if unpredictability was unexpected by the person giving birth, it could be negatively experienced as a loss of control. Many providers felt it was important to prepare families for this, often in the form of sharing their own perception of control and prediction with parents.

Dr. Caldwell related to me that she would always mark out "plans" on parent's birth plan and write in "wishes" instead. She further explained that, to her, a birth plan indicated a lack of trust between the patient and provider "…because you have to outline things that instinctively I would have asked anyway and would have attempted to honor anyway…". Dr. Caldwell detailed how she explains to her clients that birth is an uncontrollable event and then assesses that individual's level of trust in her to do her best to accomplish what they had planned together. A family medicine physician shared a similar viewpoint about birth as a process, but emphasized the importance of providers supporting women to control what they can about birth:

> "I always say that there's not a woman on the planet who goes into labor without being afraid, and part of it is she no longer has control. This is a process she has no control over. So I think it's really important for practitioners to work to give the woman in labor as much control as possible to help her be more comfortable and ease her fears…I think that we try to work with the family—we try to work with the process that's happening—but there's so much that can happen that's unexpected and unable to be predicted. And we can't control any of that." (Dr. Bryan)

A childbirth educator and former labor and delivery nurse likewise observed that parent's mental awareness is a crucial part of control during the birth experience (Brandi). Sarah further delineated, "I want people to accept that there are some things that are going to be out of their control, but I also want people to advocate for and understand that they should actually always have control over their medical decisions". These answers suggest that praxis mastery, at least in the context of birth, must involve knowing what cannot be controlled as much as what can.

My findings highlight that knowing when to use or not use praxis, such as a medical intervention, is perhaps a better measure of experience than being able to engage in the praxis itself. Kate, a certified nurse midwife with a long career working in hospitals, explained that it was possible to "set yourself up" for birth with your choice of sensory environment, care provider, and so on, but it often does not work out as planned and you just have to "…get in a

river and see where it takes you". She philosophized, "So can it be controlled? I don't know that it's meant to be controlled. It's like, do we control making love? No, no. That wouldn't be as much fun". Another midwife argued, "I think part of being an expert on birth is trusting the process and teaching women how to trust their bodies so that the process works" (Lola). Further insights from providers at different stages in their careers indicates that their relationship with control transforms over time and with more experiences.

Rene admitted that, as a newer midwife, she was more likely to try to control birth than an older midwife. As she reflected, "I try not to control it, but there are times that you need to control it". Sarah, as a recent midwifery school graduate but long-time doula, also reacted strongly to the question of control and birth. Sarah responded, "Gosh, I feel like I can spend the rest of my career wrestling with that question" and mused that she was curious to see if later in her career, as a midwife who has been around for five or 10 years, she would feel like "I do have more control over the outcome". Tammy, an Indiana doula with substantial experience as a midwifery student, seemed to support this notion, saying that "… I have confidence that if a woman is in labor, I can get her under control real fast. I have confidence because of the 30 years I've been doing it, you know what I mean?". However, Tammy also noted with that experience came more awareness of what could go wrong—one reason why she ultimately chose to be a doula as opposed to a midwife.

Likewise, a Michigan midwife with several decades of experience explained to me that time changed her desire to try and control certain outcomes where failure could mean tragedy (Elana). Elana explained that, after attending 3500 births as a midwife, she no longer takes on the same risks as when she had only attended 300. To further explore these nuances of praxis mastery, I asked participants of all backgrounds: "Would you consider yourself an expert on

birth or anything related?". Responses suggest that praxis mastery requires specialization in the extremes of that praxis.

Many providers hesitated to describe themselves as experts, often pointing out that they were still learning new things. Individuals instead seemed more comfortable admitting that others would call them experts. Dr. Jackson replied sheepishly "I guess I better say yes…", before pointing out that women had been giving birth for millions of years without the assistance of experts. He concluded that he would say that he is "…an expert in managing complications of birth". In contrast, Elana outlined her experience with "normal" birth praxis.

> "…when you say expert, what I can say as a definition of that is I have been honored to see the diversity of birth. The box is very large… and I know when they're out of the box. That what they [parents] want me to do as a guide is not only support them, nurture them and protect them and not distract them, but also to know the parameters of normal and not normal. I might not know what the problem is, but I've seen enough diversity to be an expert on normal so when it's not in that arena, I can say, 'We need another testing. We maybe need to go to a different environment…'."

Providers in this study put considerable emphasis on the difference between "normal" and "not normal" birth and tied their expert status to the capacity to recognize and control the transition between them. In 2018 I had the opportunity to attend the International Normal Labour and Birth Research Conference (in Ann Arbor, Michigan) where I was first introduced to the binary of normal and not normal birth. Several influential birth researchers, including the anthropologists Robbie Davis-Floyd and Melissa Cheyney, were keynote speakers at the event (Normal Labour and Birth Research Conference 2018). The basic argument, as described by other researchers worldwide as well as participants in this study, is that ~ 95% of births are normal.

As indicated in some answers regarding control and birth, these "normal" or "physiological" births are experienced as routine change by providers. Lauren, an Indiana

midwife, explained this type of birth is as predictable as going to the bathroom but "…that's why we train. For the unpredictable". These providers' responses draw attention to a conundrum where providers, regardless of being considered experts in normal or not normal birth, must have experience with both types of birth to successfully identify which they are dealing with.

If normal and not normal birth are different processes requiring expertise in unrelated praxis systems, being an expert in both seems logistically difficult. As Kate argued:

> "Practice, in the correct use of the word, it's something you have to practice everyday. It's not like, 'oh, just when I need it'. No, no, no. It's something that you have to use so it's automatic, that it's just part of how you approach your life."

Providers in this study often described themselves as highly specialized in normal or not normal birth while at the same time reporting an expectation for themselves and other experts to delineate between normal and not normal birth regularly. Dr. Hutchinson, having recently become a full time laborist at a tertiary care institution, often commented in our conversation that her responses were biased by only seeing the sickest of the sick. However, she also identified herself as an expert and explicitly defined an expert in birth praxis as someone who has experience in both normal and not normal processes of labor. Meanwhile, a parent with experience as a doula and childbirth educator, contested the notion that physicians become experts in normal birth during general training—let alone after they specialize (Gail). Gail stated conclusively, "To me, care providers within the hospital system see every birth as risky. There is not normal birth, birth always includes risk". The inverse of this may also be true for specialists in normal birth though, where birth is always seen as normal and more exposure to risk is needed.

As noted by Sarah, research on transfer suggests midwives struggle to recognize that things are outside the box of normal when they must identify several small changes or "little

flags" instead of just one "big red flag". This indicates midwives, while ritualized in the diversity of normal birth, are put in situations that require familiarity with not normal birth as well. Similarly, Kim, a nurse practitioner (NP), considered herself an expert in only normal pregnancy because, as an NP, attending births was outside of her scope of practice. At the same time, through her work with a medically underserved population, Kim often found herself providing pre-natal care to patients that would likely have complex births. Part of the solution to the conflicting expectations put on providers may be found in Elana's earlier reflection on the limits of expertise. Elana saw her extensive experience within the boundaries of normal as what also allowed her to sense when something was clearly outside of those limits and ask for help. In this way, a relationship with someone who is an expert in a different system helps fill gaps in one's own praxis.

A praxiographic method explores not only individuals' direct experiences with praxis, but also a range of indirect sources by which they are ritualized. Accordingly, participants in this study were asked who they considered an expert they would go to for advice or guidance about birth. Providers of all specialties mentioned consulting with those in different professions. When asked who they would avoid going to, the overwhelming response from participants was that there was no one they would not at least listen to. However, lines were still drawn around from whom and for what they might seek advice.

Care providers of all specialties admitted they were unlikely to go to a colleague for advice if they found them difficult to work with, even if that colleague was otherwise very competent. In the case of good working relationships providers still described being selective though. As one midwife emphasized:

> "Oh, well I mean obviously I wouldn't go to anyone but a midwife or maybe a very experienced doula with any sort of question about physiological labor and

> delivery, right? Because, that's our specialty. So I wouldn't go to an OB to ask questions about natural child birth, right?" (Lauren)

This answer highlights that, for someone highly specialized in a praxis system, advice is most valued from someone with more experience within the same specialization or experience in a different praxis system altogether. Other care providers and even how-to-manuals produced by care providers can serve as sources for this type of ritualization without requiring specialization in the whole system. However, the initiation of these forms of indirect ritualization hinges on an individual knowing what they don't know.

As individuals gain more experience over time, their relationship to different sources of advice shifts. Dr. Hutchinson explained that she would not take any guidance from the lay population because "I think a lot of people get their information from sources like the media or magazines, sort of non-scientific publications or word-of-mouth from their friends." She clarified that while she thought some of those things had value, at 10 plus years into her career, she did not feel that was a good source of information for her. An Indiana midwife, meanwhile, identified one of her sources of advice as the internet but specified "Well, I can go there—I do—but not unless it's peer reviewed research, I try not to go with it too much" (Traci). Relatedly, Sarah admitted to skepticism regarding one commonly used praxis among midwives because, while it did not seem to be harmful, she felt there was also little evidence to support its efficacy. A variety of other providers also emphasized the value of "evidence-based" praxis to me while also pointing out areas of uncertainty within their own systems.

Both midwives and physicians critiqued the notion that birth praxis systems can be entirely "evidence-based". One reason is because commonly accepted methods for establishing evidence, such as randomized control trials, would expose participants to significant harm. Dr. Bryan, a family physician, was particularly wary of standards of care for birth at the local level,

as she felt many hospital policies in her community were decided via internal politics instead of external research. As she explained, "…if the leadership people in that department have strong opinions about something, just like politicians anywhere, they're going to take their strong opinions and they're going to draft laws or rules to fit those opinions".

Sarah offered a window into this at the provider level, arguing that some in-hospital providers "appropriate some of the more natural or holistic language" of the out-of-hospital birth movement to tell patients things like, "'Well, you just need to surrender to the fact that you're not dilating and we're going to give you Pitocin [a medication that increases contractions]'.". The result is provider expectations are affirmed while parents find their expectations changed. Yet, providers' responses suggest this is an ephemeral dynamic as even the most experienced providers find themselves surprised by the birth process.

The combined comments of the providers presented in this section offers some insight into expectations for the birth process and the praxis of experts. Control, based on interview responses, can be conceptualized as a match between predicted praxis and actual praxis. However, providers' experiences make clear that the birth process is always vulnerable to the unpredictability of chaos. While "not normal" and "normal" birth seem to be regarded as separate processes, even requiring separate praxis systems, participants' responses suggest that it is not possible to predict with certainty which process will take place at a given moment. While not every experience of birth is chaotic, the potential for chaos is always present and—when viewed as a singular process over time and distributed across different individual lives—chaos always presents itself in birth.

Expertise is thus not the ability to always control a process, but rather the ability to change one's predictions to accurately describe the process. Individuals cannot always maintain

control during the birth process, but they can change their own expectations to regain control. Experience with the full range of diversity of that process is essential for both forming and testing predictions. Yet, individuals are limited by time and space. Mastering new praxis may make other forms inaccessible. Consequently, relationships between individuals in different praxis systems and with varying levels of experience with praxis in the same system are highly useful bridges to regaining control. The next section adds more nuance to these observations through a comparative look at parental perspectives.

## Parental Perspectives on Expertise, Control, and Prediction

While providers sometimes identified mothers as experts, no parents in this study described themselves as experts on birth. Some parents felt that they had too few experiences while others felt their experiences were not generalizable enough because they were either too normal or not normal enough. Providers were instead unanimously identified by parents in this study as parents' main source of guidance on birth, with OB/GYNs, midwives, and labor and delivery nurses being explicitly identified as experts. While some parents said they would only consult a midwife or physician, the majority felt comfortable going to both. Parents also mentioned friends and family, but more often as misleading sources of ritualization.

Peggy explained that her approach to her friends was to "…take things that they say more with a grain of salt, just because I know their experiences and they don't line up with what I've experienced or they come at it from a certain viewpoint". Peggy described how she struggled to take advice from her own sister because they had such different preferences. As she explained, "…it's less that I don't respect her opinion, but we come at it from very different angles". Other parents also expressed a preference for advice from experts with similar experiences and expectations as their own.

Jill observed that—in her experience—the type of provider was not as important as a good personality fit. Relatedly, Jill was quick to reply that she would avoid taking guidance from anyone who had never had a child. Another parent echoed this sentiment, explaining that, while he would not necessarily avoid them for advice, "…people who have never had children I would think have less understanding. That doesn't mean that they wouldn't have expertise but maybe would not have a full picture" (James). Despite the apparent centrality of provider's roles in ritualizing parents for birth though, many parents reported that providers gave little to no guidance on some issues.

As one parent reflected, none of her care providers helped her decide between different systems:

> "…it's like the doctors don't even bring up anything like, 'Oh, have you thought about a doula or have you thought about—do you have your birth plan in place? And here's how you would navigate through that'. At least my experience was, they were very loving and kind, but they were not approaching things that way. And then I thought maybe it was going to come from the nurses, but they're like, 'I've got a bunch of women in labor. When do you want your epidural?'. I did not get any fuzzy vibes from them." (Felicia)

Felicia's expectation of an expert was someone who could help her navigate the many different feasible systems of praxis for the various aspects of the birth process. She was not the only parent in this study with this experience. When I asked parents if they had received advice on where to give birth, few could recall having any conversation with their provider, and care providers themselves acknowledged rarely discussing this with parents. Given the emphasis on "right" place at the hearing, this was a surprising finding.

Providers in different praxis systems offered a range of reasons for not initiating conversations about birth locations with parents. Dr. Bryan, a family physician, admitted to a conflict of interest where recommending homebirth would mean losing that parent's business.

OB/GYNs, meanwhile, felt that they could assume that if a mother was coming to them, she wanted a hospital birth. Likewise, no certified professional midwives interviewed in this study had hospital privileges and their clients often self-selected for an interest in homebirth.

Midwives in this study did report sometimes recommending hospital birth or other providers more generally to potential clients whose expectations of homebirth were not aligned with their own. However, Kim, as an employee of a federally qualified health center, was restricted from making these individualized recommendations. Kim shared with me that, while she might recommend homebirth to a friend and would not discourage a parent if the choice was already made, she could not suggest it to parents at her center because of federal standards of care. In choosing their provider then, parents may be unknowingly choosing their birth location as well—and with very little guidance.

Several parents in this study expressed a preference or interest in giving birth at a birth center, but there was a significant disconnect between provider and parent expectations of praxis at birth centers. Parents saw birth centers as "in-betweens" that offered some of the same safety precautions of hospital birth but with the comfort of homebirth. However, midwives interviewed with experience working in centers were clear that birth centers were no different from home in terms of safety. Instead, the biggest difference identified was simply less clean-up for the parents. Given that parents, not providers, seem to make the initial decision on where to give birth, this disconnect is concerning. Parental experiences of control and prediction also become even more relevant in light of this realization.

When questioned about their own planning for birth, most parents described having to be highly adaptable and learning over multiple birth experiences that in some cases it is not possible to plan. Regarding control in this context, one parent answered:

> "I mean, ultimately I think God is in control of every detail of our lives and that gives me a lot of confidence in his provision and protection… It's not that it doesn't matter what we do, we need to make good choices and we can influence things, but ultimately we're not the ones who control things. So our best laid plans can go awry." (Rita)

Many parents described their own specific experiences of learning that birth is uncontrollable or unpredictable, with several drawing interesting connections between control and prediction. Elsie summarized that "some things, not all things" are predictable. She went on to specifically identify predictable aspects of birth as "…the water breaking, crowning. The things that you know when this happens, this is going to happen…", but she also acknowledged moments "when everything looks right and things still don't happen the way they should". As seen in Elsie's assessment, parents were quick to identify the physiological aspects of birth as predictable but also reported how, through their own experiences, they had come to feel that there is no certainty in birth overall.

Unlike providers, parents seemed more confident that aspects of birth could be controlled than predicted. Lynne—a parent who had six C-sections—felt strongly that birth could be controlled as, in her case, she felt the praxis of C-section had saved her life. For Lynne, control was synonymous with praxis that intervenes in the birth process to change an otherwise seemingly certain outcome. Another parent also felt birth could be controlled, but like some care providers, emphasized parental expectations and their environment:

> "Somewhat your mind. I would say somewhat. Like I know someone who had a baby that was born with defects that died. And so then when she was going to give birth to the next baby, she just stopped. She couldn't. The midwife kept working with her and finally she convinced her that not all of them were the same. And then the baby was born. I mean, I think your mind can control. And of course, [husband] was a real help to get my mind into a 'you can do this' type of thing." (Delila)

When parents described what they could control about birth; reactions, expectations, and the presence of supportive individuals were some of the most frequently emphasized aspects. Family was especially mentioned as an important part of the environment, mainly as a source of support, but sometimes as a barrier to control before and during the birth process. Of note, when parents were asked whether birth location was a decision they made on their own, jointly, or someone or something else made for them, nearly every parent answered that it was a joint decision between them and their spouse or partner.

A few mothers expressed wanting to give birth at home with past or future children but because their husbands felt hesitant, they continued to give birth in hospitals. James, as a father of five, offered some insight into these feelings. James explained that his wife would likely prefer homebirth because all her births so far had been uncomplicated hospital births, but "…the reason for giving birth in the hospital is because of the things that can go wrong. Not because if everything goes right we don't need it. It's really more of a security blanket I think". Thus, environment and a sense of control are closely related, with some parents feeling more secure in some settings than others.

A lack of predictably and control in birth is, paradoxically, expected and planned for when parents choose their birth locations. While many parents I spoke with had considered both home and hospital birth and were not necessarily opposed to either, the majority still expressed strong personal preferences for one over the other. Control was often a deciding factor, with each environment holding different connotations. Kirsten, both a mother and a midwife, provided the following comparison of home and hospital:

> "I would say homebirth is very client oriented. It's what the laboring mom wants to do, and things are done on her schedule and her timeframe, and there aren't a lot of facility protocols to follow or anything like that. Just a lot of freedom. Freedom of choice, freedom of movement, freedom to make decisions without

> coercion. Those are the things I would use to describe home birth… hospital births are great for higher risk moms and babies. But for low-risk women, it tends to suck them into a system that is not designed for low-risk women and babies, and be more likely to cause interventions to happen, and all interventions carry some level of risk."

Many other parents and out-of-hospital birth providers shared similar expectations with me, emphasizing more control or comfort for parents during birth at home while also acknowledging a need for hospital birth in some situations. Gail, another parent with experience as a provider, also emphasized the danger for low-risk individuals giving birth in the hospital. She suggested that predictions made in a hospital setting regarding not normal birth can function as a self-fulfilling prophecy. Gail described a "cascade of intervention" when providers, predicting that a birth may not be normal, react in ways that ensure it. As Elana explained in-depth from her own experiences as a midwife:

> "We know mothers and babies can die in any setting. So obstetrical birth says, 'Well, if we know that, let's control the variables and do managed care. We're going to get better outcomes.' That works for disease—you're out of the box, you need to bring it back to norm. But when you have a normal situation and you take that control and try to say, 'Oh, you're 40 weeks. Let's induce. You're four centimeters, let's break the bag of water',…then that control of the variables can open up Pandora's box and you can introduce things that now could be an issue that never were there."

Rather than being a security blanket with no downsides, for some parents, birth in the hospital presents its own risk of care providers beginning a cascade of control that alters the course of an otherwise normal birth. As defined by Gail, "Normal birth is release… release of total control". Accordingly, even when the cascade of control begins as a needed life-saving intervention, it can have unexpected downstream consequences. Lynne, although she did not use the terminology of a cascade, provided an apparent first-hand account of this process in her response to my question, "Can birth be controlled?".

With Lynne's first pregnancy, she had an emergency C-section. She went on to clarify, "…actually, I really don't think it was an emergency", but it was perhaps an emergency under the standards of nearly 20 years ago. Her experience involved "failure to progress" which, as she understood it, was marked by 24 hours with her water broken and her cervix only minimally dilated. To her surprise, the doctors told her that she could not just go home or try later, but that she had to have the baby right then and there. With her next pregnancy, she attempted a vaginal birth but after many hours of labor, the combination of pain and failure to progress once again made C-section the more appealing option. By her third birth and C-section, the surgeon said she could no longer safely attempt a vaginal birth. By her sixth birth and C-section, she was told that her uterus had been cut so many times it was "like tissue paper" and the doctor advised her that birth should no longer be attempted at all.

Lynne summarized that, given her experiences with both planned and unplanned C-sections, she felt birth could be controlled through medical interventions. However, she had experienced tangibly the unpredictability of birth. Lynne told me that her mother had given birth to several children at home, all vaginally, and without problems. Going into her own birth, Lynne expected the same for herself; "You all have your ideas of what motherhood's going to be like and, 'Oh…'". She was also struck by the fact that if she had been born a hundred years ago, she might have died in childbirth. Yet, as Gail reflected on her own experience with the cascade that led to a C-section, she felt that wanting a normal birth is not incongruent with wanting a healthy baby.

In Gail's view, being told "you should be happy" your baby is healthy and you are alive, dismisses any other concerns as irrelevant. She summarized regarding hospital care providers, "… what I can discern is that their management is to manage risk and risk aversion". For both

Gail and Lynn, disappointment was found in unmet expectations of a normal birth. Other parents interviewed relayed similar reactions to their birth experiences, even in cases stereotypically viewed as normal.

Interviews with parents suggest that a purely normal, predictable experience may be difficult to achieve in any birth process. Felicia explained how with her first pregnancy she had a check-up where the OB/GYN told her she had a "more than picture perfect" pregnancy and predicted the baby would be small and that the labor would go smoothly. That same day, Felicia went into what would turn out to be a very difficult labor with an over nine-pound baby. She described to me how she first tried to labor without an epidural, but did not feel she had the tools to be successful. Nurses at the hospital did not help in this area, often telling her to lay still on her back so that they could do checks and repeatedly asking her if she wanted an epidural yet.

Felicia eventually accepted the epidural, but was no longer able to feel enough to push effectively. At that point the nurses began offering C-section as an option. She refused these prompts and, in the end, gave birth vaginally. However, after the birth, complications continued as she struggled to initiate breastfeeding and then was forced to stop due to an infection. She shared with me that she wished experiences like hers were discussed more often in her personal church community where homebirth and "natural", or unmedicated vaginal births, were common.

> "I found it sometimes difficult to hear people sit around talking about something that comes so easy for them, that didn't come for me very easy. And I feel that would be something I would say, 'Hey, it's okay if it's not the easiest thing. There's nothing wrong. You didn't fail in that'. And that, 'it can look different ways'. But coming from [exposure to] a lot of conservative Christians where they have like six kids and seem to be able to have babies like it's nothing at all and they all nurse them…that's lovely and wonderful, but I think that sometimes that experience becomes so normal that it can be difficult to understand someone else's experience isn't." (Felicia)

Parents identified a multitude of experiences that went undiscussed by providers and other members in their communities that, although related to birth, were more nuanced then purely normal or not normal birth. A relativly more benign example given by Felicia was her surprise learning that, once the water breaks, the fluids continue to flow. As she recalled, "…so I'm really concerned and I get to the hospital and they're like, 'This is normal. The color is normal.' And they were sort of like, 'This is not a big deal'. And I felt kind of stupid" (Felicia). It fell to Felicia to make the initial call of normal vs. not normal, but she was not given the ritualization needed to succeed. Felicia went to what she thought was the right place, shared with the right provider, all in the right time, only to feel like she had done the wrong thing.

Felicia's experience may explain why parents hesitated to describe themselves as experts in this study. Providers sometimes quantified their expertise in terms of births attended, with over a 1000 being a milestone for expert status identified by both midwives and physicians. In contrast, the highest number of births experienced by any parent (that was not also a provider) in this study was under 10. Thus, even when parents are able to recognize that change is occurring, they are not always experienced enough to predict and control what kind of change.

This section demonstrated that parents and providers have similar expectations for predictability and control during the birth process and parental birth experiences do seem to include extremes of "normal" and "not normal" birth. However, parents' embodiment of praxis as normal or not normal is relative to past ritualization and parents seem to have minimal ritualization in distinguishing these processes prior to their own birth experiences. Compared to providers' experiences of prediction, this leaves parents at a disadvantage. Major initial predictions about the birth process are still made by parents though and, consequently, parents

have significant impacts on their own birth experience without necessarily always being in control of those impacts.

The combined experiences of parents and providers suggest many experiences are not well described by the normal/not normal paradigm. Flaws in this pattern are significant because, as one family physician explained:

> "Being a good physician, a lot of that is pattern recognition. And just having to recognize when the pattern is in the normal range...You just have to watch the patterns of what you can objectively and, to some degree subjectively, observe. And you need to be ready to recognize when something is an outlier and intervene." (Dr. Allen)

In treating parent and provider experiences that do not fit cleanly into the normal/not normal binary as outliers, the chance is missed to learn from these examples and to look for a pattern that is a better fit. In the next section, I explore out-of-hospital birth in Plain communities as an outlier that, when examined more closely, challenges the notion that the "right" place is a controllable, predictable pattern for anyone.

## The Amish Homebirth Myth

Gail proclaimed that "normal birth is homebirth" and midwives have argued that 95% of all births are normal, yet only a small fraction of births in the U.S. take place at home (Downe: 2004; MacDorman & Declercq 2019). Rita recalled feeling out of place in this small community when she first started birthing at home, as she joked, "…the only people who do homebirths are the Amish, the farmers, and the hippies". To explore the basis of this supposed relationship between homebirth and Plain praxis, I asked all participants if they knew of anything different about birth in Amish, Mennonite, or Brethren communities as compared to non-Plain communities. I was intentionally broad in my phrasing of this question, with the goal of capturing—not suggesting—associations.

A current member of a Plain church in Indiana who had considered homebirth, but ultimately gave birth in the hospital with all five of her children, responded that:

> "…If you have a happy home and a healthy marriage, I think your birth is going to go a lot easier. I think if you're stressed out and you don't really get along anyway, the hospital room isn't going to be the place you're going to learn to get along. And that doesn't mean just because you're Plain or just because you're not Plain, that's just a marriage relationship in general… it's when you're at peace and when you get along, it just makes everything in life better." (Delila)

A lack of any unique associations between birth praxis and Plain praxis was emphasized by both current and former members of Plain churches. Debra, a former member of an Indiana Brethren church remarked, "…you've got people that are in both camps as far as midwife/hospital/doing it in the home and you've got that across the board. It has nothing to do with a certain sect of people" (Debra). However, in my interviews with non-Plain care providers and parents, there was a perception of several differences when comparing Plain birth praxis to non-Plain.

A Michigan midwife who also attends births in Indiana shared her perception that, when birth in the U.S. switched from home to primarily in the hospital (see chapter two for an overview of this change), Amish families did not make this transition to the same extent as non-Amish families (Traci). Traci stated:

> "… with the Amish, they don't have a generational gap in homebirth. Non-Amish, the English clients, most of them are the first ones in their families or the first generation in their families to be doing homebirth, their moms and grandmas probably didn't birth at home. So there's a little bit of a disconnect there with maybe not trusting homebirth or not being able to fathom how it works."

Meanwhile, an Indiana midwife who had also attended births in Michigan reported that, while the Plain families she serves are not the first generation to choose homebirth, "…it's two generations deep max. Simply because there weren't midwives available" (Laura). A different Michigan midwife, Lola, also reported that when she started her work, members of the local

Plain churches primarily gave birth in the hospital. In one specific Indiana Brethren community, I was able to confirm a similar sequence of events as well.

Georgette, a Plain woman in her 70s, described to me how a family physician attended her mother at home. However, when it came time for Georgette to have her own children, there was no option for a provider to attend at home and all her births were in the hospital. For Georgette, her first birth was also her first experience in a hospital. She described the hospital as overwhelming, but that she just had to "let them do what they were going to do". She recalled that the first time a homebirth was done in her church community was because a non-Plain midwife moved to the area and began offering the service. Now, many of Georgette's own children have given birth at home, some attended by the same midwife that first came to the community. Others, comfortable with the knowledge they have learned over the years, have given birth unassisted by providers and with only the help of family members. After observing some of these births herself, Georgette reflected that she would have likely preferred the comfort of homebirth had it been an option for her.

Many non-Plain participants described Plain parents as normal birth experts. Lola, a midwife who had worked with Amish parents from multiple communities in Michigan, relayed her experience that Plain women approach homebirth differently from her other clients, "…they just know it's going to be hard and they don't really question whether it's going to work for them or not". She recalled teaching childbirth education classes and finding that the Amish women she worked with were very interested in getting books on birth and learning about their bodies.

In Lola's assessment though, compared to her non-Amish clients, first time Amish moms were able to have their babies "just fine" without much knowledge about birth or how their body works. She admitted:

> "I don't think I spend as much time educating them. I'm certainly around to answer their questions and provide information if they want it, but I don't feel impelled to spend as much time unlearning things they might have heard or learned from the sources that bombard non-Amish..."

Lola identified one of these sources as the high caesarian rate in the United States that gave many parents the expectation they would be the "one in three" who would have a C-section. She explained that with non-Amish women, you have to break through the misinformation "…so they can get to a place where they trust the process and trust their body". Although, as others observed, this comfort and knowledge with homebirth varies from church to church and family to family.

A review of archival sources could not confirm exact rates, but a Plain periodical in 1972 contained reports of Plain births taking place at home and in the hospital in Indiana (Old Order Church of America 1969-1973). Providers in this study that currently serve Brethren and Amish communities estimated that current rates of homebirth range from 50/50 home/hospital to nearly all at home. Of the Plain individuals I spoke with, these ranges were accurate for their communities overall, but their experiences suggested considerable variability across individual experiences and over time. Thus, homebirth is not uniformly a more common or "normal" praxis for members of Plain churches. Additionally, in interviews with parents and providers, there was no indication that the birth process itself was more "normal" either.

Many midwives and non-Plain parents relayed impressions of a "natural" Plain lifestyle that that had a positive influence on outcomes, while at the same time identifying factors such as high rates of familial diseases as being a known source of birth complications. Reports regarding nutrition and other health praxis were also conflicting, with some providers reporting better overall health and diets among members of their local Plain churches while others observed worse. Notably, Plain women interviewed in this study described their own health praxis

positively, especially regarding nutrition. Likewise, Plain individuals reported good birth outcomes in their church communities, although many I spoke with had experienced complications with at least one birth themselves.

When these reports are taken in combination with the health literature outlined in chapter three, there are no indications that Plain praxis is predictive for a normal birth. Relatedly, it does not appear that Plain providers or parents are more likely to be experts in birth than the general population. A midwife and former member of a Plain church in Michigan shared her experience that, in Plain communities, "Everyone's expected to have a lot of babies, it seems like, and so it's not like this monumental event. It's still a really big deal, but it's not something people are necessarily fearful about or really anxious about as much" (Kirsten). This midwife felt this resulted in a very "matter of fact" attitude towards birth that, while positive in her experience, could also be problematic when it led to, "… not necessarily being aware or prepared for things to not be super normal" (Kirsten).

Many care providers and parents in this study described the praxis of Plain parents positively when confined to the realm of normal birth. However, birth care providers that were also members of certain Plain communities were not always regarded as experts by their non-Plain colleagues. In the case of the Michigan bill, Lola believed that the exemption had been crafted with local Amish communities in mind. She felt it was problematic though because, "There are some really poor practitioners in the Amish community". Significantly, another Michigan midwife noted that younger members of some Plain churches were turning away from local providers towards licensed midwives in the state as they begin realizing "…maybe they're not as safe and a baby dying shouldn't be an okay outcome" (Rene). This observation suggests

that the exemption in the Michigan bill was based more on assumptions about Plain parents' preferences than on the actual preferences of those parents.

Relatedly, I asked providers and parents alike if they felt Plain women should receive different advice on birth than non-Plain women. Reactions were split, with most individuals generally feeling that care should always be individualized, but many having an expectation that Plain women would need adjusted advice. Plain individuals interviewed in this study, in contrast, largely felt they should receive the same advice. Of note, when providers and parents were asked how they might identify that someone was Plain, style of dress was the first reply for all but two providers. The two exceptions said they would ask. Forms inquiring about religious objections were also mentioned as a source of identification by both Plain and non-Plain individuals. However, more Plain women interviewed in this study identified as spiritual rather than religious.

Overall, participants in this study preferred to identify as spiritual, both spiritual and religious, or neither. Many individuals felt both terms were limiting, with one mom explaining in response to my question, "do you identify as spiritual or religious":

> "Well, in my mind, the term religious can bring up the notion of just doing certain practices—or I have to abide by these dietary laws, or whatever these are—as just kind of a ritualistic type thing that does not involve heart. And that doesn't encapsulate it. And then the term spiritual, a lot of people use that to explain why they are not religious or to explain why they haven't actually affiliated with religion, and it turns into basically… I just make up my own rules for me and I feel spiritual about it. And I feel like that doesn't encapsulate either the faith that I practice [or the] belief that comes from divine revelation from God through the scriptures." (Rita)

This parent's reaction to the terms "spiritual" and "religious" highlights that religious exemptions in birth are themselves dependent on a flawed paradigm.

Exemptions, when based off subjective expectations of praxis, easily result in stratification. When asked if there was anything different about birth in Plain communities, Elana pointed out a pattern of "selective prosecution" where some Plain communities are targeted for being outside the law and others are supported. On this topic, a midwife shared with me a traumatic and prolonged experience of harassment by local law enforcement for her work with Plain individuals (Traci). Another midwife described observations of her clients' experiences:

> "…when I send a young, conservative couple, whether they're Amish/Mennonite, it doesn't matter, because the nurses and doctors can't tell by looking at them what church they go to. They just know they're looking at somebody who probably doesn't have much education and their community pays their bill for them anyhow. So they get strapped to a bed, given all this stuff, lied to, threatened, coerced, held hostage, and it's consistent. It's consistent." (Lauren)

Meanwhile, Rene reported the opposite observation, describing a "double standard" where hospital staff support Plain couples to make different decisions than non-Plain couples. For example, Plain families being able to leave the hospital after 24 hours, but other parents being reported for doing the same. The midwife struggled with the fact that many of these decisions seemed to be based on an expectation that Plain parents have significantly different praxis than non-Plain parents. In Rene's experience, this was rarely the case. Moreover, midwives observed that hospitals often did not change their assumptions even after experiences with Plain individuals that directly contradicted those assumptions.

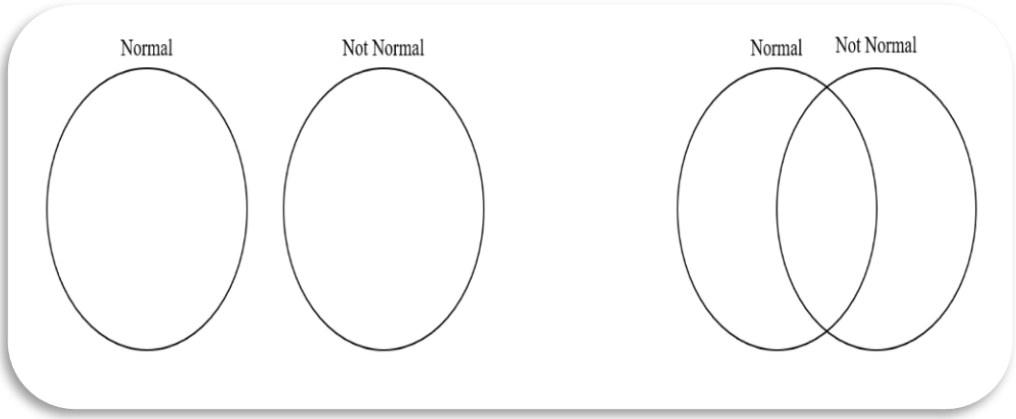
One example given by Rene was a hospital system that offered reduced prices exclusively for uninsured Plain parents. She shared with me a story of Old Order Amish parents that felt uncomfortable with the special treatment and consequently did not accept the discount. While the system did change for the Plain couple, it ultimately maintained fetishized expectations of Plain praxis as opposed to changing the system to fit the parents' actual praxis or that of uninsured parents more generally. In this way, the system tried to retain control over its

own expectations by forcing parents to change theirs. In a highly relevant example with a different outcome, Lola described how she used to offer a discount to Plain clients. Over time, Lola realized that many of her Plain clients were extremely well off while for others—both Plain and non-Plain—even the reduced fee was still too much for them to afford. She changed her praxis system to allow both Plain and non-Plain individuals to pay what they want, remarking to me that "it all comes out in the wash" as some pay more than she would have expected and others pay less. Instead of trying to eliminate this unpredictable chaos, Lola built her system around it.

Lola changed her praxis system to include the unpredictable. This required her to first recognize where her own predictions were off, namely, that she could not predict financial need based on Plain praxis alone. This shift led to the more significant realization that perhaps the "right" fee cannot be predicted by the provider for any client. Although, of course, a suggested fee was still indicated in new client packages (Collected Praxis Documents-Lola 2020). The result was an exemption that did not stratify by leaving known praxis out or by changing praxis to fit expectations, but instead reflected genuine, unpredictable human diversity. In the analysis section below, I will synthesize this data with anthropological theories to discuss how, in this same way, ritualization as a framework may be revised to better understand the birth process and other transitional experiences.

## Analysis

Figure 3: Conceptualizations of Birth as a Process



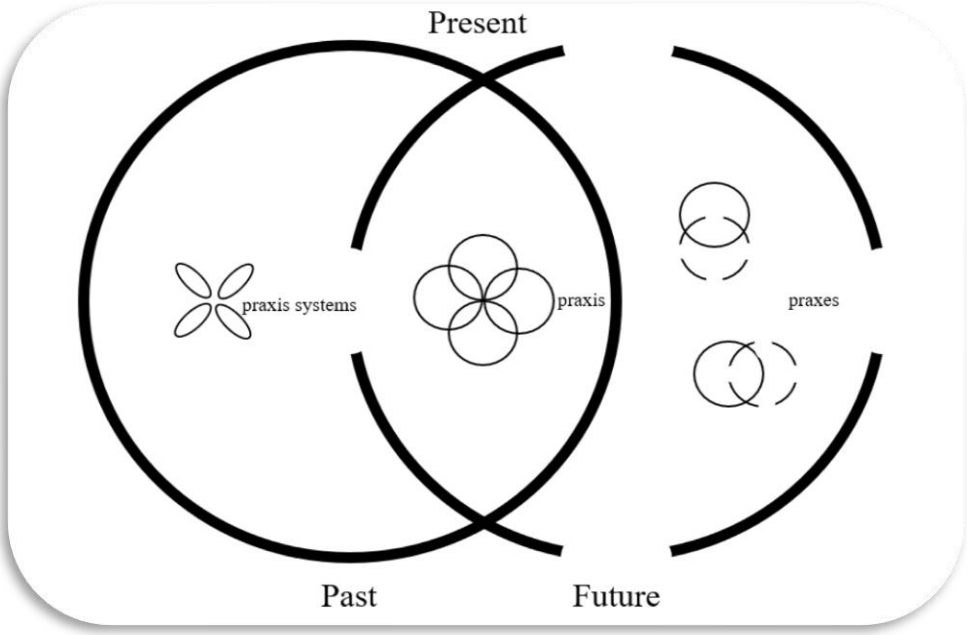

The diagrams above are two potential ways of expressing the relationship between normal and not normal birth praxis based on the data presented in this chapter. On the left, normal and not normal birth can be interpreted as non-overlapping, discrete experiences of change with fixed boundaries where other, unrelated praxis fills the space outside the systems. On the right, normal and not normal are extremes of the same continuous praxis. Ambiguous in-between praxis is at the center of the system and, as its boundaries shrink and grow, the definitions of normal and not normal praxis change. Based on the data presented in this chapter, a holistic framework for ritualization must be able to account for both of these representations and the experiences to which they apply.

Geertz (2004) observed that praxis systems involve interactions between "models of" and "models for". Models of, as understood by Geertz, "…function not to provide sources of information in terms of which other processes can be patterned, but to represent those patterned processes as such, to express their structure in an alternative medium" (2004: 8). An example of a "model of" given by Geertz is a theory of how a process works while a "model for" is when that theory is applied to achieve a particular version of that process. Applied to the data in this

chapter, a model of birth might be understood as the full spectrum of a singular praxis while a model for birth describes how to combine different praxis to achieve one specific point on that spectrum. For example, a model of birth location would include home, hospital, and everything in between, while right time, place, and care is a model for obtaining a specific experience at one of those locations. My data suggests these models interact and shape one another, with the efficacy of both being related less to the specific outcomes and more that the outcomes match expectations. This was a predictable finding given past research by Waldram (2013) and Lazarus (1988).

Waldram (2013) has argued that, while the embodied sensory experience of how someone feels is important for creating a sense of efficacy, efficacy is primarily defined through the negotiation of healer and patient expectations of intended or hoped for outcomes. Similarly, Lazarus (1988) has concluded that in perinatal visits between patients and doctors, met expectations about the visit were more important for positive experiences than patients and doctors having the exact same expectations. As the data presented here reveals though, the unexpected is unavoidable and through experiences over time and with different individuals, expectations of different praxis can change. The graphic below illustrates this through a synthesis of past anthropological theories and new data collected as part of this dissertation.

Figure 4: Ritualization as a Bidirectional Process




This graphic shows ritualization or experiences of birth and other transitions more generally. It can be conceptualized as a fractal where zooming in on the smaller circles on the right would reveal this pattern contained within them and, likewise, zooming out would show this pattern contained within a larger set of circles. This representation illustrates how praxis systems are created and reordered through experiences of change. Contained within the larger circle on the right are two examples of praxis spectrums. The larger and smaller circles are segmented to indicate transition points where new praxis is encountered and old praxis is reevaluated. This process is limited by time and space, with experiences of praxis in the present formed through the collision of past and future experiences.

It is not possible to experience the entire process at once any more than it is possible to experience every possible example of a specific praxis at the same time. Said another way, the left and right circles represent real—but not entirely accessible—past and future experiences of praxis. The overlapping circles in the middle of the diagram are thus a highly simplified view of actual lived experiences in the present. A relevant example is the pairing of praxis for birth

location (hospital or not hospital) with praxis for dress (Plain or not Plain). Within the ephemeral present, praxis becomes binary as the spectrum of possibilities narrows and experiences of different praxis overlap. On the left is the result, a stratified range of systems that obscure ambiguity in the underlying praxes.

Within the context of the presented data, normal and not normal birth can be understood as extremes in the spectrum of a singular praxis. Likewise, predictable, and unpredictable birth represent extremes of a praxis that, through some participants' lived experiences, has come to be associated with normal and not normal birth praxis. Once overlapped, the process shifts from defining what normal or not normal praxis is to classifying an experience as predictably normal, unpredictably not normal, and so on. In this way, continuous, open-ended experiences can be quantified and compared as finite categories. This is a not a unidirectional process though. As the open circle indicates, past experiences can be contrasted with praxis in the present to change expectations for the future.

Participants' responses suggest control is associated with a match between expectations, including explicit predictions and implicit intuition, and actual experiences. Ritualization in the extremes of a specific birth praxis gives a wide awareness of what is possible, but this is only part of the process. Being able to change expectations facilitates maintaining control during novel experiences. Looking at the diagram, these two processes can be understood as going from left to right and right to left, respectively. The overall diagram is thus an equilibrated transition that can be embodied as expert status that is maintained through the repetition of old experiences and exposure to new. However, individuals are limited by what they can directly experience.

Relationships between individuals with diverse experiences helps to fill gaps in praxis spectrums and improve the robusticity of praxis systems. From this perspective, providers learn

from other providers, but also parents and vice versa. Of note, providers seemed to hold contradictory expectations for themselves. Most providers in this study who identified as experts also described themselves as either specialists in normal or not normal birth, but there was a shared understanding that to be an expert requires extensive experience with both extremes. In my analysis, this is a genuine observation about ritualization muddied by a flawed concept of normal.

Ritualization, or the process of praxis mastery, requires a balance between specialization and diversification. Intensive knowledge of a singular praxis in all of its forms, combined with an awareness of other types of praxis, is what allows for adept identification of old and new praxis. In areas of praxis where parents are unlikely to have as much or as diverse experience, parents in this study understandably looked to providers as experts. Around certain birth praxis though, such as location, there appears to be a breakdown in this relationship that suggest deeper disconnections in expectations.

Providers and parents alike were explicit that homebirth is for normal birth. Given that providers are experts in determining normal from not normal, it follows that providers would also be crucial sources of advice on birth location. Instead, my research suggests that birth location is often decided by parents independent of provider input. Providers offered some reasonable explanations for this, but the most significant finding is that the normal/not normal birth paradigm does not seem to shift to reflect this reality. Experiences that undermine normal birth as a fixed, objective category, such as birth in Plain communities, are exempted rather than treated as the contradictions they are. The consequence is stratification and uncontrollable uncertainty when these individuals and their care providers are left to form spontaneous praxis systems in the vacuum left by exemptions.

One of the most high-profile exemptions of Plain praxis was the 1972 supreme court case Wisconsin vs. Yoder which exempted members of certain Amish churches from legal education requirements on the grounds of religious freedom (Kraybill 2003). As one scholar wrote regarding an accompanying opinion with the ruling, "From the day it was announced, Chief Justice Burger's opinions have made lawyers and legal scholars uneasy…The uneasiness arises because it is very difficult to explain Yoder in legal terms" (Kraybill 2003:270). The scholar further described the opinion as "…a kind of love letter to the Amish way of life…", that, rather than answering the specific legal question at stake, "…renders a verdict on the Amish as a people" (Kraybill 2003:270. He summarized that it is a verdict that does not expand religious freedom rights, but the rights of the Amish and only the Amish that resemble a narrow and misguided set of expectations.

In my own opinion on the Amish homebirth myth, I am inclined to conclude that it is not a narritive that describes a genuine relationship between homebirth and Plain praxis. Instead, it is a form of a stratification that reflects the power of some to change their birth location to fit expectations while others must do the opposite. Relatedly, normal and not normal birth is a paradigm that deserves closer examination. This chapter illustrates that providers and parents are deeply ritualized in this paradigm, with direct impacts on their experience of the birth process and perceptions of power over it.

In considering birth location specifically, a more representative framework for the lived experiences of participants must recognize this as a source of chaos for both parents and providers. Consequently, the focus should shift away from matching parents to the "right" birth location to instead reevaluating what all is known about this praxis and what else might be possible. In this novel experience, parents and providers should have access to similar

opportunities for ritualization to ensure future paradigm shifts are truly representative of their experiences. The remaining chapters of this dissertation will add more detail to this analysis and propose tangible ways of accomplishing the recommendations outlined here.

## Summary

This data chapter sheds light on underdeveloped aspects of ritualization theory within the specific context the birth—a transitional event which has inspired many foundational anthropological frameworks for studying praxis. Data was collected through interviews with a diversity of parents and providers and key topics explored in this chapter include expectations for control, prediction, and expertise during the birth process. This line of questioning confirmed an important predicted finding, that aspects of the birth process can be characterized as chaotic. It also revealed two extremes in experience—normal and not normal birth—and a series of expectations for praxis associated with them.

Participants in this study reported distinct experiences of normal or not normal birth and experts were identified as being ritualized in both, with many parents looking to providers as their main source of expert guidance. Interview responses further indicated that ritualization provides a sense of control when it is perceived as a match between expected and actual experiences. Yet, parents and providers in this study identified several mismatches between the normal/not normal birth paradigm and their actual lived experiences. Concerningly, my findings reveal that parents must often make critical decisions about the "right" time, place, and care for their births without the input of providers. Parent responses suggest that fathers may be particularly under-ritualized but are still equal partners in decision-making. However, rather than this being addressed to give parents better control during the birth process, these experiences are treated as outliers.

The example of Plain birth praxis drives home that exempting outliers based on easily disproved expectations ultimately undermines the control of the system granting the exemption and those being exempted. Participant accounts suggest that experts, through extensive but diverse experiences with praxis, are able to adapt these expectations to match lived experiences. Relationships between specialists in different praxis appears to be a critical mechanism for achieving this match. It is my conclusion that certain ritualization experiences should be made accessible for providers and parents to facilitate this process. Additionally, in my discussion of these findings, I synthesize these observations with anthropological theories to construct a holistic framework of this overall process of forming and changing expectations. Over the next two chapters, additional data adds nuance to this framework and provides tangible examples of changing expectations at both the individual and system level.

# CHAPTER 5:

# Sojourners of the Unknown

An *Emergency Physicians Monthly* article compared the experience of being an ER physician to a classical music piece that combines "…musical instability" with adherence to "strict tenets of orchestration and musical axioms" (Reisdorff 2017: para. 1). As the author clarified, ER physicians are faced with the unknown and unpredictable daily. They are not mere listeners or players though. The ER physician is an expert in composition, gradually creating patterns in the chaos. First, they begin with three basic tones of airway, breathing, and circulation, then, expectations from past praxis are layered in with physical exam findings involving current praxis. Other perspectives from colleagues, researchers, and technology accompany these notes. At last, "…a nuanced differential diagnosis is narrowed to a single harmonious condition, replete with comorbid factors that define risk stratification" (Reisdorff 2017: para. 1). The final diagnosis is the final chord of the composition, a completed symphony that pairs the unknown with the known.

The paradoxical combination of change and uncertainty with shared experiences of structure has been thoroughly documented by Edith and Victor Turner through their study of the concept "communitas". As Edith Turner elucidated:

> "Music is a fail-safe bearer of communitas, significantly because it is the genre that is by its very nature the most ephemeral. Music will always die. It exists as long as the vibrations continue…. It has its living existence in performance, and its life is synonymous with communitas, which will spread to all participants and audiences when they get caught up in it." (2012:43).

At the level of the praxis system, the analogy of music has also been used by a Plain scholar. As Kraybill argued, "…the rituals of interaction combine culture and structure into a social symphony in Amish life" (2001:112). However, it is one thing to recognize that music is being made but it is another thing altogether to be able to articulate how. This chapter takes a

closer look at this ambiguous process through novel frameworks that examine a variety of individuals' experiences of uncertainty and composition.

Chaos theory guided the analysis of the events and questions of interest in this chapter. Participants were asked directly about transitional experiences, such as birth, COVID-19, and interactions with members of Plain churches Archival resources provided additional perspectives that, along with interview transcripts, were analyzed for unprompted examples of praxis change as well. The first section of this chapter explores those findings in the form of general patterns in individual ritualization experiences. The second section focuses on experiences of praxis change within a system, and the final section examines change between praxis systems. Weaved throughout this chapter are also auto-praxiographic reflections on my own experiences of change. I close with an analysis of this data in relation to existing anthropological theories and key findings from the previous chapter. I conclude that relationships between individuals with diverse praxis are integral to maintaining and changing praxis systems.

## Sources of Ritualization

Prior to beginning this project, I had hoped that my first experience observing a birth would be at home; invited by a family as an anthropological researcher. My expectations were a mix of own past experiences and a sense of pressure to replicate the work of several anthropologists, such as Brigitte Jordan, that trained as midwives and engaged in extensive participant observation for their research (1993). Instead, as a second-year medical student, I found myself following a resident into the operating room for an emergency C-section involving two parents I had never met before. I can still recall hesitating outside the door of the operating room, excited for the experience but disturbed by the circumstances. Earlier that same day I had been explicitly told that, as a medical student, "You are here to learn, you don't have to wait on

an invitation to observe". However, the uninvited anthropologist could not be extricated from the medical student.

With my head filled full of anthropological theories from years of reading, I could not stop myself from soaking up the details and analyzing the event as a rite of passage. It quickly became clear to me though that I was not observing the rite of passage of the parents, but my own. I had entered the room excited because I had been interested in pursuing training in obstetrics and gynecology (OB/GYN) and learning the praxis of C-sections myself. A short 15 minutes later and this expectation for my future was in shambles. It did not so much feel that the praxis was entirely wrong, but that it was wrong for me. In speaking to physicians who have been exposed to the same praxis during their ritualization, I found that I was not alone in this reaction.

> "The first birth I witnessed was a C-section, and I'm going to tell you, I almost passed out. I wasn't scrubbed in, I was just observing on the periphery, but I had to go in the corner and sit down with my head between my knees because that doctor had his arm up to the elbow in that woman's body through the incision. It just freaked me out. It wasn't the blood, it wasn't anything else, it was the sight of his arm in her body. So that was a little bit traumatic, actually, and it did leave me with a lifelong dislike for caesarean delivery. I recognize the necessity of it, absolutely, and that it saves lives, but my experience was that it's a pretty brutal thing—and later on—that it's done far too cavalierly in this country." (Dr. Bryan)

The experience above was shared with me by a family physician regarding her own ritualization as a second-year medical student in Michigan. Her description of the experience was very similar to my own reaction decades later. In my interviews involving participants with diverse backgrounds, I often found areas of communitas such as these—shared experiences of change that cross space and time (Turner 2012). Yet, no individual related an experience of ritualization that entirely overlapped with my own or other participants. For every shared

experience, there were countless other areas where ritualization diverged around unique experiences of change or different reactions to the same change.

A Michigan OB/GYN who first pursued training in a different specialty described to me how the people initially drove him away from his preferred praxis system:

> "I found myself on the receiving end of a medical student abuse issue, an experience that at the time—I can't say medical schools really addressed issues of medical student abuse. Or if they did, I certainly wouldn't have known where to turn to. So instead, I just ran away from the specialty, basically saying, 'If this specialty attracts and fosters these kinds of individuals, I want no part of it'…. And so it kept me from acknowledging the fact that I actually really enjoyed the material, which I think deep down I knew. I knew I really thought the subject matter was fascinating and there was so much I had a lot of interest in. But I had no interest in working on a daily basis with people that treated each other so horribly and treated patients horribly." (Dr. Jackson)

Dr. Jackson was later able to have a more positive experience with physicians within a program where they "…cared about education, they cared about their patients, they treated their patients with respect, they really valued the relationships that they had with their patients". This allowed Dr. Jackson to see a side of the specialty he had not experienced before, and consequently, opened the door for him to rethink his future praxis. His story highlights that recognizing one's own reactions to change, or praxis, can be difficult. Furthermore, in Dr. Jackson's case, it was not initially clear to him that the negative power relationships he had experienced were not always associated with the praxis of OB/GYNs. It took a contrary ritualization experience in a different system to override these expectations. From other provider and parent accounts, direct experiences in a process appear to be essential for clarifying praxis systems and directing individuals towards or away from future praxis. However, indirect experiences of ritualization are also important for setting initial expectations.

In general, participants of all backgrounds mentioned ways their family shaped their expectations for the birth process. As one parent that was closely involved in the birth of her

siblings at home explained, “You're told, like, ‘This is what's going to happen to your body and it's okay. Nothing scary, you're not dying’” (Lynne). Growing up around animals was also identified by several parents as a ritualizing experience in this study. As Lynne summarized, “…you have animals, you start putting things together”. Books and birth classes were mentioned as well in interviews, with some individuals describing high school health classes as their only source of formal learning prior to their own birth experiences.

As both care providers and parents mentioned books or additional resources that had an impact on their ritualization, I asked participants if there was anything they could recall that significantly changed their views or approaches to birth. In response to this question, midwives often had substantial resources to recommend—or even lend—that had impacted their past and current praxis. Meanwhile, the physicians I spoke with more often described reading textbooks or other materials early in their careers that were important for their learning at the time but were no longer as relevant now. Parents, likewise, reported reading useful books that taught about the physiology and basics of birth, but they struggled to recall the titles and admitted they rarely returned to them after their first birth experience.

The few books and resources that were recommended to me passionately by providers and parents tended to go beyond the physiological. Ranging from widely read books and research recommended by more than one participant to more niche work being published in various medias, these resources shared a common focus of changing birth praxis systems. However, for many parents and providers in this study, change came in the form of unexpected experiences whether they sought it out or not.

Felicia expressed a sentiment shared by parents and care providers alike in this study, “I read all these books and I think that what was most surprising was there was—just when you

really got into it—there was so much I didn't know and no one told me". As one example, Felicia explained how she and her husband were unable to get their newborn to eat after they brought him home from the hospital. She described having prepared for this situation through a variety of sources such as birth classes and lactation consultants, but still not knowing what to do. Furthermore, when she reached out to these sources, she got conflicting advice that suggests the experts were uncertain as well.

Prior ritualization shapes what individuals expect during experiences of change, but no matter how much preparation goes in, the unexpected is unavoidable. Relationships between individuals with different praxis can fill gaps but, as indicated by Felicia's example, sometimes uncertainty cannot be eliminated—only shared. Relatedly, I asked participants in this study if they could recall an experience related to birth where they felt they did not know what to do and how they handled it. Many respondents felt they had multiple experiences to draw upon while others could only recall a few or even none. In one of the most dramatic accounts shared with me, a parent described a homebirth experience where the midwife missed the birth completely.

Peggy told me she never felt scared while giving birth unassisted but did feel "a little unprepared" simply because it wasn't what she planned. However, it was not her first child, and while they are not all the same, "…once you get that far, you at least know what's going on." She went on to explain that there was a complication with the birth that could have been fatal for her baby, but it was something described in a manual her midwife gave out to all her clients. Peggy reflected that, because she had read the manual, she felt comfortable handling it even without the midwife—although she recalled that her husband did not. I asked why she thought that was and she elaborated: "That was not how he'd planned to do things and it's not his body. His wife is

going through this, so he had much less of an idea of what was going on. And also, I don't think he had read the manual".

She further explained that her husband had a background in medicine, but nothing related to birth. She reflected that this little bit of ritualization may have made things worse because he only knew to expect the worst outcomes and not necessarily what to do in response. In contrast, a midwife, Lauren, reflected that she had only been in this type of situation for perhaps an instant:

> "First of all, you pray, right? You pray that God is with you and the spirit is guiding you. So, there's a subconscious, instantaneous, quicker than the twinkling of an eye, check in with the spirit… And then you remember your training, right? That's why we train, that's why we drill. That's why it's so important that midwives be midwives and not just women who want to call themselves midwives."

Lauren's response illustrates a common finding in my interviews—accepting one's own uncertainty does not preclude responding to it. However, it is not a given that every individual will react with the same praxis. Through her relationship with a midwife, Peggy gained access to a system that paired an otherwise new experience with pre-planned praxis. Meanwhile, her husband responded based on his own ritualization. This diversity in experiences and praxis is not necessarily a negative, especially compared to isolation.

Dr. Jackson shared with me how difficult it was for him to relocate early in his career and leave behind burgeoning relationships with mentors. As he explained:

> "I went from finding myself being in a practice of 10 fellow OB/GYNs to a practice of none. Five years into my career, and all of a sudden, I had to be the expert. And I didn't know anybody in this community. And I didn't know who to turn to other than maybe a small number of people that I had met beforehand… And then when we did hire someone, it was someone that was junior to me in experience as well and fairly fresh out of residency. And so all of a sudden, I found myself being the mentor of somebody in [something] which I didn't have my own confidence and skillset in..."

Dr. Jackson's experience highlights that the same individual who thrives within a network of relationships will struggle when isolated. Additionally, a relationship between only two individuals with different praxis is not a substitute for a diverse network of potential mentors. As discussed in the beginning of this section though, it is important to be able to sort out one's own preferred praxis from what others expect. A birth story shared by Gail illustrates how, through exposure to different praxis during transitional experiences, the limits of individual praxis systems can be both expanded and reinforced.

Gail shared that, despite growing up in a large Catholic family where her mother had "a very matter of fact attitude towards birthing babies, you just do it", she did not learn about birth from talking with friends and family. Rather, she explained, "I learned about birth first from an anthropology class I took with Brigitte Jordan at Michigan State University and I became familiar with her book *Birth and Four Cultures*". From there, Gail did her own reading and connected with like-minded individuals who shared a goal of educating women on their local birthing options. She became an activist in her community, eventually teaching prenatal classes and providing labor support. However, Gail's own personal birth experience was marked by a traumatic C-section. As she related:

> "I was very determined to have a vaginal birth. I didn't. I had a C-section and that radicalized me. I recognized very quickly that it didn't matter how much you knew. That once you entered into the hospital and that system you became—you were expected and needed to be—compliant with what the larger structure offered, that individual choice mattered very little."

Gail went on to explain how she felt a total loss of control as her labor failed to progress and the experience became "not at all what I wanted." She recalled her OB/GYN stating something along the lines of, "if we are going to do a C-section, let's do it now because I don't want to hang out here all night or get called back". At the time, she wanted her family doctor to

just tell them to let her come back later when she was in active labor. However, the providers had emphasized the risk of infection so much that even if her family doctor had called and told her to go home—in hindsight—she probably would have stayed. In the end she had the C-section and the next hardship was the recovery. Gail recalled that after the C-section she was determined to stand up and care for her newborn despite feeling physically awful. She was trying to change the baby's diaper when a nurse came in and asked what she was doing. Gail explained that she felt:

> "…so disempowered that I couldn't even be a mother to this baby. And I don't remember a whole lot from that time period because I was drugged for not the post-partum pain, but the post-surgery pain. So yeah, it was really traumatizing for me. I was angry; I was so angry. But in many ways, it changed my life too."

As Gail aptly summarized at the beginning of her story, her birth experience "radicalized" her. Gail shared with me that, prior to this experience, she had been passionate about changing hospital birth by working within the system. After her traumatic experience and, in combination with other things she had seen through work in hospitals, she became convinced that the only way to significantly change provider birth praxis in hospitals was by creating an autonomous alternative. Consequently, Gail became heavily involved in doula work at its infancy and contributed to its founding as a formal profession. In the years since, doulas have become integrated into birth systems nationwide and have been instrumental in bringing about many of the changes in praxis that Gail had first tried to make working within the hospital.

Gail's example underlines a repeated finding in this section—both positive and negative interactions between individuals with distinct praxis can be a source of radical change. How this change is experienced in the moment and over time is highly individual, however; as individuals' expectations for their own praxis change over time in complex, non-intuitive ways. The next section examines this phenomenon more closely by exploring participants' self-identified

experiences of change and how individuals are transformed through confrontations with their own praxis and that of others during shared transitional experiences.

## Experiences of Change

I asked participants in this study if their experiences with birth changed them in anyway. Gwen, a chaplain that works with parents giving birth in the hospital, answered strongly and affirmatively that her experiences with birth had changed her. She further shared with me her perspective that birth is an experience uniquely capable of doing this for providers and parents alike. In Gwen's view, empathy and openness to learning from others can become difficult in healthcare when care providers are tired, busy, and burned out, but birth "…demands you show up with more of yourself for lots of different reasons". As she elaborated, there is something about birth that gets your attention and forces individuals to be aware of their own value systems and differences when compared to others "… because it's a life transition that you just cannot deny, you cannot ignore". Yet, Gwen also noted that not everyone experiences birth as an existential crisis.

Participants' answers about their own and others' experiences of ritualization during the birth process captures a microcosm of human reactions to change. As Gwen related:

> "I think caring for folks who are experiencing pregnancy and birth really teaches me more and more every day about the different kinds of experiences that humans have, the different kinds of contexts that humans live in, the different moods that they have, the different ways that they make meaning of things."

Responses from other participants in this study offer a small sample of these diverse contexts, moods, and ways of making meaning. While no interviewee denied any sort of impact from their birth experiences, some parents did not feel strongly that they had been changed. Certain parents expressed this was because their birth experiences were, in their opinion, largely "normal", "uncomplicated", and "non-traumatic". Notably, two of the women that felt this way had

emergency C-sections, highlighting that the impact of a transitional experience cannot be assumed. Others, meanwhile, felt having children was a significant experience that changed them more than the birth itself.

One parent, Jana, described what this change felt, “Having kids, you realize that now your heart is walking around outside of your body”. As she further explained, “I have a new capacity to love but also to fear and worry and stress. But it's all good—I mean—it all goes together and I would never trade it”. In similarly multi-layered responses to my question, parents described how birth helped them appreciate their own strengths or those of their partners. Care providers also felt that it impressed upon them what birthing individuals are capable of, but also the limits of those capabilities. As Dr. Jackson phrased it, “I think it changed me in a sense that it helped me better appreciate the vulnerabilities of the human nature and what we, in our specialty, sometimes expect and ask of our patients…”. His response illustrates that being changed by birth experiences can have wide-reaching impacts on praxis.

I was able to speak to several parents that had near-death experiences during their pregnancies and these individuals shared powerful accounts of the impact on their lives. As Felicia explained about her own experience, “I don't think there's any way that you can just almost die and not have your life really tremendously impacted by that…I think that it makes you realize maybe things that I thought were important just really aren't…”. She also shared how her experience of being faced with the choice between her own life and the life of her child gave her new empathy for parents in that situation and a different perspective on the praxis of abortion. Similarly, another parent shared with me how her experience of a miscarriage impacted her.

Lynne had complications with several pregnancies before having a miscarriage. She reflected that it was her most traumatizing experience not just because of the loss of her child, but because the procedure she underwent to remove the child she lost was the same used in abortions. Even though she knew the procedure was needed and she agreed with it, that knowledge was "gut wrenching" for her. There was an additional layer to her reaction though, as she said, "…when I found out I was pregnant with that child, at first I was mad. I didn't want to be pregnant. I was happy with six kids. And then when I lost that baby… It was just like, now you have guilt". Lynne mused that, "… one thing I've walked away with is you cannot judge somebody's experience. Even if you think you've gone through the same thing, because each birth is so different". These parent's stories illustrate how confronting the boundaries of one's own praxis during transitional experiences can prompt change in other seemingly unrelated areas of praxis.

Transitions demonstrate the interconnectedness of different experiences of change across a single individual's life. The majority of data collection for this project occurred during a transitional period when all adults had recently become eligible for the COVID-19 vaccine. Mask mandates were also in effect in many states, including Michigan and parts of Indiana. I asked parents about any direct impacts of COVID-19 on birth praxis near the end of my interviews, but I found several participants brought up this topic themselves when asked about who they avoided taking guidance from about birth. One midwife shared a particularly compelling story of how she surprised herself recently by choosing a new praxis—vaccination.

Elena, a midwife who self-identified as "anti-vaccine" related a several decades long history of questioning the use of vaccines for herself and her children. She felt concerned about the vaccine herself, but what made her choose to get vaccinated for COVID-19 was that she felt

the disease was something new that required a new response. As she explained, “I think this is a different disease and I think it is more, I think it is a pandemic. I still don't think I'll choose to ever get a flu vaccine. I mean, I don't know, I can change with that too, but I don't see this as just a simple flu”. Despite her prior anti-vaccine praxis, Elana had contacts with local public health officials through her work as a midwife and she was able to quickly access the vaccination and needed information. Other providers and parents reported less dramatic, but still notable experiences of change.

Providers and parents reported a similar spectrum of reactions to changes experienced during the pandemic as to the birth process. Many providers reported no change in praxis, with multiple midwives noting that they already took precautions if individuals were sick. Although some midwives also described having to balance their own preferences for praxis, such as masking, against the preferences of their clients. Other examples of praxis, like restrictions on hospital visitors due to COVID-19, were viewed as a positive change by both providers and parents. Meanwhile, the same restrictions actively discouraged others from hospital birth and made homebirth the more appealing option—even for those who never considered it before.

In comparing experiences of change in multiple contexts between individuals with diverse praxis, I found no way to group individuals’ experiences other than as their own unique system. That is, it was not possible to conclude that midwives have uniformly the same reactions and physicians another. Nor was it possible to reduce an individual’s entire experience to any singular reaction. This suggests to me that all individuals, regardless of praxis system, are capable of the full spectrum of reactions to change. This finding is not surprising, but it is significant given the theoretical frameworks outlined in the second chapter that present certain individuals or systems as largely having a fixed response to change. At the same time, while all

reactions to change are possible, the spectrum of easily accessible praxis narrows or widens in relation to others' reactions. In the next section, I further untangle the process that shapes individual responses to change. I analyze my own and others' experiences with Plain praxis to understand how different relationship structures between praxis systems can combat changes in praxis, and in other cases, catalyze them.

**In but not of**

Growing up attending churches in the Plain community and protestant Christianity more generally, I often heard the call to be "in the world but not of the world". At my father's funeral, I was reminded of this sojourners mentality as members of Plain churches sang familiar hymns, "Time is winging us away to our eternal home; life is but a winters day—a journey to the tomb" (Litho-Print 1988:255). Now, as an adult "of the world", my experience of the concept has changed. I find myself looking in on a system I was never quite a part of, but now firmly am outside of. This positionality leaves me ill-equipped to describe the embodiment of Plain birth praxis, but well-suited to explore personal change at the system level and what it means to be "in-between" systems more generally.

As the previous sections demonstrates, change is deeply interconnected. Accordingly, it was expected that asking if individuals were changed through their experiences with Plain praxis would indirectly reveal dynamics of change in birth praxis as well as a broader understanding of processes of change at different scales. To sort through the theory of this phenomena and to, selfishly perhaps, understand my own transformation better, I asked participants with various level of involvement with Plain individuals to share their perspectives on how they have been changed by those relationships—if at all. While providers primarily shared about their

experiences attending the births of Plain individuals, individuals shared a broad range of experiences that illustrate the complexity of ritualization and change.

Jana, a parent who identified as Christian, but not Plain, had grown up going to school with a Plain family. She spoke about a close friendship with one of the kids her age and how it helped her appreciate that members of Plain churches "are normal in a lot of ways" and have praxis in common with non-Plain individuals like going to parties, having jobs, and talking about a variety of topics. As she summarized, "I think that was a good experience to realize that there's more unity than a lot of people might think." Jana also shared how later, as an adult, this same friend became a midwife and a source of advice for her that she might not otherwise have had, "… while it's not necessarily in agreement with a lot of modern medicine as far as what my OB/GYN might say, she has a lot of good knowledge that is practical in real life and it's not just wacky or random. So I think she changed my perspective a good amount." In contrast, Dr. Hutchins explained to me why she did not feel changed by her experiences.

Dr. Hutchins identified as neither religious nor spiritual but related how her interactions with Plain individuals reassured her about aspects of her own praxis system that diverged from her colleagues. She shared with me that she had gone through a difficult pregnancy herself where her child was born very premature. Dr. Hutchins and her partner made the decision not to pursue aggressive interventions in exchange for quality of life. She reflected that this personal background shaped her reaction to members of Plain churches as, in her perception, "… we sort of share some of those values about quality of life that I think sometimes my peers feel like that would maybe be a different decision than they would make". As a result, she felt that her encounters with Plain individuals validated her own praxis as opposed to changing it. Similarly, a parent with substantial interactions with Plain church members reflected:

> "I admire their ways of life. I think they have kind of preserved things that our modern culture many times doesn't have anymore. I think that it's always this tricky situation in saying like, 'well now you have modern medicine, you can do 'x''… There's always a trade off on what you're losing. And so I think that there's some wonderful things they're still preserving in their culture that are things we could all learn from and, the older I get, the more I see it and appreciate it." (Felicia)

Sarah, a midwife and doula, made a similar observation about the value of praxis diversity. As Sarah stated, "I think for human society in general, I think it's good that there are some people who do things one way and some people do things a different way in terms of just having biocultural diversity…". She further argued, "…it's good for the culture of birth as a whole that the Amish community have home births". Dr. Caldwell, an OB/GYN, made a similar observation that, "… the loss of any cultural community is a devastating loss for humanity in general". However, as the previous chapter demonstrated, it is important to recognize that homebirth is not innately linked to Plain praxis and that change is not incompatible with Plain praxis systems.

Many participants perceived a difference in the rate of change experienced by the Plain community compared to themselves or other Americans. Indeed, of the Plain individuals I asked, none of them felt changed by individuals outside of the Plain community and some further did not feel changed by those outside of their specific church. To explore this more, I asked participants what they thought Amish, Mennonite, and Brethren communities would be like in the future.

Individuals from a variety of backgrounds responded that this topic was something they had never considered before and one member of a Plain church commented, "I'm not sure how to feel about that question" (Carolyn). I anticipated answering this question might be difficult for participants. As a midwife with Plain family members observed, "I think, ideally, the idea for

them is that they would not change very much, right?" (Lauren). In answering this question then, participants had to offer their own synthesis of the seemingly contradictory dynamics of change in Plain communities. In Lauren's case, she identified a balance where praxis for division and unity interact to maintain an overall stable praxis system:

> "I think the world is changing. It's becoming more divided. And I think that that's going to probably serve to initially divide—but ultimately strengthen—those communities in their own identity and their own self-reliance. Especially now with COVID, a lot of the communities have turned more inward, 'Well, that's not our way. This is our way and this is how we're doing things.'… But I like to think that it's going to have strengthening effects. I think the world is going to continue to become more and more divided and I guess a side effect of division is also unity."

Given the looming of presence of COVID-19 throughout my fieldwork, this was often brought up by participants in their answers to my question about the future. Two active members of a Plain church and several non-Plain members of Christian churches participating in this study saw COVID-19 as type of change that could bring harm to the Plain community via increasing interference from the government in their praxis. The consensus among these individuals was that Plain communities would not initiate change but would nonetheless be forced to change.

Lynne made her prediction with the caveat that she had limited experience with members of Plain churches, but based on her general experience with American praxis, "… if the government were to become more regulated, as far as how women gave birth, I'd find groups popping up all over the place". As she explained, it is American praxis in general to resist being told what to believe and "… there's a lot of people who would maybe become more independent in their medical choices, simply because someone dares say, 'You have to do it this way'". A midwife who identified as Plain, but not Amish, Mennonite, or Brethren, was able to add more insight to this process of deciding what to resist or accept:

> "…they are constantly reassessing how much of the outside world to let into their community. And it's very curious to me what kind of things they're allowed to do and not allowed to do. And I know that varies from district to district… So I don't know how things will look in the future. Just knowing that the Amish tend to have a lot of babies and that their communities tend to grow, I see the Plain communities as growing." (Cathleen)

Several individuals, including this midwife, commented on specific changes they had already seen due to technology. Changes in the community coming from cellphones, and in particular, cellphones with access to the internet was regarded as a major source of transition by those within and outside of Plain praxis systems. In thinking about birth only, midwives commented that this was a blessing because it allowed them to reach their Plain clients much more easily. However, Plain individuals interviewed in this study saw this praxis having wide-reaching impacts on their community:

> "It's a lot different raising children nowadays than it was when our children were growing up. The technology is so much different and bigger, broader, that we wouldn't have even thought of it being like it is today… But there's been some really good things coming out of this technology that's been helpful too, so it's not all bad. But you have to control yourself and use self-denial." (Beverley)

This Brethren parent, Beverley, felt strongly that Plain individuals should be aware of these dangers and confront them head on through conversations about risk with children and other members. Another Plain parent also saw technology, phones in particular, as a divider that changed the relationship dynamics of the community:

> "I just think everybody's on their phones and they're all by themselves and they're all these little tiny worlds out there. And that's what technology's doing for us, it's separating all of us, I think. And I'm not saying we're going to throw away our phone either. I'm just saying, we don't need each other as much." (Delia)

Delia further explained the differences she saw between her Plain community, one that allowed cellphones, and others that still had restrictions around this. She felt cellphones made the community less dependent on one another, and families less close. When I asked if she saw birth

changing specifically, she drew a connection between these changes and family size, "… if we're independent to the point of not needing each other, not having a supper table, it's going to be a lot easier to say two or three is all I need. And that's one thing that I could see changing, but it doesn't have to...". She clarified though, "I'm not being critical of smaller families. I'm just saying that's just something that could happen if we don't need each other". As far as impacts to herself, she noted that it is not a good or bad thing, but something different. As she remarked, "It's kind of the same feeling as a homebirth versus a hospital. It's just more sterile when there's not little people there… You lose families, you lose a lot". Meanwhile non-Plain providers and parents generally felt they would not be impacted if birth changed in Plain communities.

Not unlike responses to change from birth, there was an emphasis on positive changes, negative changes, or no change at all in Plain communities. However, among former members of Plain churches, I found these reactions could mix to form an overall chaotic picture as individuals tried to articulate changes in their praxis over time. One parent explained that she had very positive experiences in the church she grew up in, but after marrying into a different—but still Plain—church, her experience was "Eye-opening to the hypocrisy and the lack of empathy and compassion" (Debra). Debra found this especially true with regard to the power dynamics between men and women across the board, not just in birthing situations. She carefully emphasized though that this was not always her experience:

> "That is not what I grew up with. I saw partnership between my parents. That's what I knew. My father gave me value. He knew who I was and he encouraged me in that. So growing up in that, I just assumed that's the way life would be. Well, that's not really how life has been handed to me… Please understand that this is just fact… I'm not a bitter, angry, ugly woman. Because here's the deal, Lily. For some reason, I still have a heart for these people and a desire to relate to them. For anybody that wants to be educated, let's just put it that way. So as far as just knocking them off and walking away… For some reason there's something in me that's drawn there and I can't really explain it."

This parent's response was one I related to strongly. I commented honestly that, "It's definitely an interesting thing when you're a little bit on the outside, but you still care". Debra's reply articulated what I had felt for some time, that it is "quite a frustrating tension" to remain "in but not of" a system where there are real contradictions in praxis but also deeply familiar overlaps. In sharing their stories with me in this way, participants facilitated future theoretical analyses of transitions while simultaneously shaping my own experiences in real time.

Several participants in this study knew my father personally and interviews often touched on their memories of his praxis as a physician. As I first began this research intending to better understand and potentially emulate his praxis in that regard, these stories were welcomed. However, through these accounts and my own reflections, it has become apparent that my father dealt with his own tensions as he juggled sometimes conflicting expectations from the medical and Plain praxis systems he was a part of. As one knowledgeable individual commented about providers working with Plain individuals more generally, "…every one of us is walking a fine line in this and I think we each have to find our place because we don't want to burn our bridges with our community that we're serving" (Jessica). In many ways, this research has been my own attempt to find my place in that balance, and one of the most difficult realizations has been that a place may not exist for me.

During the course of data collection for this dissertation, a close family member shared with me a document published by the United States Conference of Catholic Bishops. The document described my praxis as a gay individual as "objectively disordered" and contrary to natural laws (USCCB 2006:5). While there are other systems that hold the opposite view of gay praxis, it is perhaps my greatest bias as a researcher to want to integrate these two conflicting models and find shared praxis between them that allows me to have a place in both. It is no

wonder then that I have gravitated towards a theoretical framework that explores the order in chaos and views it as a fundamental human experiences. My own experience, in combination with other perspectives analyzed here, has also led to the observation that major changes in praxis systems are not so much a choice as a reality to recognize and come to terms with.

Through this process I have come to appreciate that, while being "between" bring its own tensions, being "outside" is a far more terrifying and painful experience. To quote a description of a community that was forced to convert from their local religious praxis system to Christianity, "There were other cups of living left and they held perhaps the same water, but the loss was irreparable…The modeling had been fundamental, it was somehow all a piece. It had been their own" (Benedict 2006:22)." Likewise, as others drew lines that placed me firmly outside the Christian praxis system, I lost something that was a part of me and could not simply be substituted with another system. Another individual, in an account of her experience leaving a Plain community, captured this sense of liminality:

> "…it felt like I was in the middle of an ocean, just kicking and fighting to stay above water and grab a breath of air, and then I'd sink back down under the water and I didn't know which way to swim towards shore, and I was afraid if I started swimming in a certain direction, it'd take me on out farther and I was just lost." (Jessica)

Jessica ultimately chose to leave her praxis system, and in the process, found herself losing everything as she was shunned by her church, her friends, and her community. During this transitional period when she felt angry at the injustice of it all, Jessica found someone who had also left the community and who reassured her, "Someday, hopefully you will see the good things about the Amish community again". As she reflected:

> "And at the time I thought it was crazy. But now I can see—I have come to respect and am grateful for many things. And it was a long process… but that helped me to understand the culture that I had lived in for so long, that I'd been part of for so long, and to be able to get a different perspective on it."

Outside of her former praxis system, Jessica was lost. However, through relationships with those that had experienced the same uncertainty, she discovered a shared direction to explore new ways to relate to her former praxis. While she had lost her old place in her community, she was able to find a new balance between old and new systems. For myself, one of the first instances of this type of communitas came through reading Anthropology of Religion scholars. In particular, scholars such as Victor and Edith Turner that used anthropological theories to analyze transitional experiences within their own Catholic praxis system and to confront both the universality and individuality of uncertainty (2012). Through these explorations, I have been able to find my own "in-between" that, in blending my past and present praxis, is a new experience entirely.

An especially relevant book recommended to me during data collection was "Plain and Simple: A Woman's Journey to the Amish" (Bender 1978). The book is an autobiographical account of an artist looking to change their praxis system. Having admired Amish quilt work and Plain praxis systems from afar, the author chose to live with an Amish family for an extended time. Her experience corresponds with many of those outlined above, as she came to terms with a disconnect between her expectations and reality. Using the metaphor of quilting patterns, she found that the Amish system was not for her. However, through her experience, she also came to appreciate a more universal pattern, "Making a choice—Declaring what is essential—creates a framework for life that eliminates many choices but gives meaning to the things that remain" (Bender 1978:141).

This final section imparts that diversity, often marked by contradictions in praxis, is key for maintaining old praxis systems as well as creating new ones. Through relationships between individuals in different praxis systems, individuals can both find the limits of their praxis and

freedom from them. To be "in-between" is thus an experience of change that many seek out willingly. It is not a fixed outcome, but a living process in the present that requires constant rebalancing between praxis in the past and future. As the artist summarized, "Finding a balance I can live with—that's what I was after. The proportions need constant attention and readjusting. How much red, blue, and yellow do I need, both in my art and in my life?" (Bender 1978:129). This research has been my way of finding that balance and making the process clear to myself, but also for any others who are lost that may follow behind me.

## Analysis

> "The unknown…the unforetold, the unproven, that is what life is based on. Ignorance is the ground of thought. Unproof is the ground of action. If it were proven that there is no God there would be no religion…But also if it were proven that there is a God, there would be no religion." (Le Guin 2019:75)

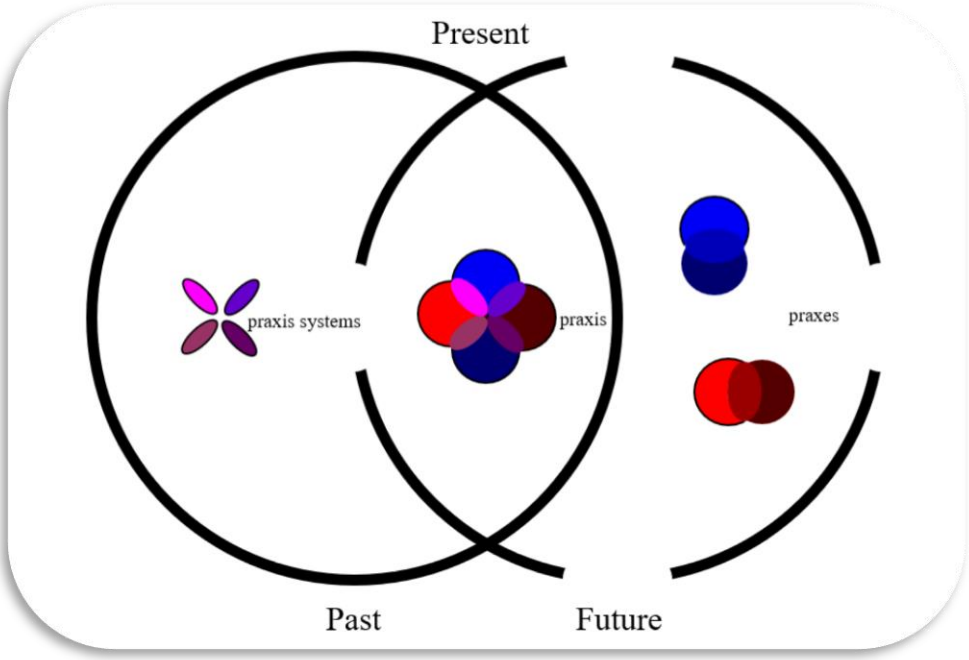
From ER physicians to quiltmakers, there is a recognition that a balance must be struck between the known and unknown. Yet, achieving that balance is complex experientially and in the abstract. Within the Anthropology of Christianity, scholars have argued that anthropologists are biased towards labeling new change based on past experiences (Robbins 2007). For example, seeing a group that has diverged from one religion as a continuation of the previous praxis system, rather than as a new one altogether. This has been labeled as anthropology's "continuity problem" (Robbins 2007). Throughout this chapter, rather than trying to label individuals' experiences myself, I have tried to understand how this problem is embodied as individuals explain continuities and discontinuities in their own praxis.

The first section of this chapter explored this when looking at the interactions between individuals within the same praxis system. The second section examined this further within the context of a singular individual and what they learn about themselves and humanity more generally through experiences of change. Finally, in the last section, both of these dynamics were

considered at once. In my analysis of this combined data, further understanding of the internal experience of change is needed. I find this phenomenology helpful to think through using the metaphor of primary and secondary colors.

If one could imagine that primary colors represent distinct praxes, praxis systems would thus be secondary colors, or combinations of praxis. Experientially though, both would be perceived as colors or distinct praxis where it is not necessarily apparent what individual praxis makes up a system. Moreover, the whole of an individual's praxis can be conceptualized as a chaotic system. Just as when mixing several colors, the differences between praxis and sets of praxis are lost when the full spectrum of an individual's praxis is viewed at once. However, in looking at specific moments in time and comparing them, individuals can isolate more manageable aspects of praxis systems and discover nuances in their own praxis. This rite of chaos can be visualized below through a colorized version of the diagram in the previous chapter.

Figure 5: Ritualization as a Rite of Chaos




During experiences of change, individuals are often confronted with novel praxis. If an individual, "purple" for the purposes of this metaphor, encountered a "blue" praxis, the experience would provide insight into continuities in their own praxis. Discontinuities can be appreciated as well, such as realizing praxes thought of as part of one's system are actually outside of it. Interactions with other individuals can also be enlightening when they expose individuals to praxes they might not otherwise have encountered. While it is possible to discover new praxes spontaneously on one's own, through relationships with other individuals, it is easy to become aware of a different praxes without necessarily having to embody them.

To use the color metaphor again, if a purple system encountered yellow praxis, the chaos upon interacting would be apparent. However, outside of transitional experiences when praxis can be isolated in novel ways, it is more likely that a purple system would encounter an orange system. Through these relationships, each individual can gain insight into continuities and discontinues into their own praxis, but also create an "in-between" bridge to praxis that might

otherwise be seen as oppositional. For example, depending on the praxis being bridged, a purple system might function as a mediator for an orange and green system.

In this specific example, the purple system offers a bridge between the otherwise discontinuous red and blue praxis of these systems. Crucially, this dynamic relationship is not fixed, as the other systems can also become mediators for different praxis as needed. Just as the trained ear of a musician picks out individual notes and instruments in what seems like cacophony to another, someone experienced in diverse praxis systems has an eye for recognizing continuities and discontinuities in their own and the praxes of others. While this color metaphor was developed purely in response to the experiences outlined in this chapter, prior anthropological research suggests color theory is an apt metaphor for praxis systems and experiences of change.

In Victor Turner's (2004) study of systems of color classification, he made a highly relevant observation. At first glance, it appeared that individuals in the community he was working in applied a binary framework of color classification to their experiences. However, upon closer examination, it became apparent to Turner that he was actually observing a tripartite classification system. In this particular case, red/white/black. He found that, in the abstract, white and black are opposites and red overlaps with white and black conceptually. However, in actual lived experiences, he found that black was often left out and instead white and red were often paired together. As he described, "Therefore, when the threefold colour classification yields to a twofold classification, we find red becoming, not only the complement, but also in some contexts, the antithesis of white" (Turner 2004: para White and Red as a Binary System). He concluded that a tripartite model is more representative of the dynamics of praxis systems cross culturally. Moreover, aside from the structural relationships represented by the model, the details

are arbitrary. These observations and my own findings can be further synthesized with Taleb's (2014) framework of expectations for change.

My data indicates that robust, fragile, and antifragile do widely capture the spectrum of experiences of change. While Taleb fixes these labels to certain categories of individuals, my findings suggest that, within every praxis system and every individual, all three reactions are present over time (2014). Likewise, Turner's study reveals that all three colors are emphasized at once during experiences of initiation. Significantly as well, it is recognized that the fractal patterns common in chaotic processes are highly dependent on initial conditions (Mandelbrot & Hudson 2004). Thus, the literature—in combination with my own findings—indicates that there is structural significance to the diversity in praxis that patterns experiences of change at different scales.

Claude Lévi-Strauss (1967) has argued that the role of the trickster is as a structural mediator whereupon any binary relationship between two terms can be replaced by a third term that contains them both. To return to the color metaphor, this would be the relationship of purple to the red/blue binary. My data suggests that a trickster relationship would also be represented by the dynamic between yellow and purple. In short, a trickster can be both "in-between" and "outside" in ways that reveal continuities and discontinuities in praxis. In this way, trickster relationships are themselves an experience of change. It is my conclusion that trickster relationships are not fixed, but rather an ever-changing and essential dynamic of systems. Across diverse experiences of change, individuals can learn how to change or maintain their own praxis through these mutually informing relationships.

## Summary

"All that you touch, you change.
All that you change, changes you

The only lasting truth is change.
God is change."
(Butler 1993:1)

This chapter explored birth as a transformative process through the spectrum of care provider and parent experiences with birth praxis. Attention to experiences of transition more generally, such as COVID-19, and interactions between individuals in different praxis systems were also analyzed. The goal of collecting this data was to develop a more rigorous anthropological framework for studying transitional experiences. The first data chapter of this dissertation presented a largely structuralist synthesis of the process of ritualization, and specifically stratification, through an examination of lived experiences within birth systems. In my analysis of the data in this chapter, I add a phenomenological layer to that framework to gain a more holistic appreciation of the same process. Informed by my own experiences and those of the participants in this study, I conclude that experiences of change are a diversifying universal. No system on its own is infallible, but through relationships that balance continuity with discontinuity, it is possible to face change together. However, as the next chapter will explore, not all systems are designed to value balanced, diverse relationships and not everyone is free to change in the same ways.

# CHAPTER 6:

# Quality and Design in Birth Systems

In 2019 I attended a national conference where a Mennonite physician couple, Joel and LuAnne Yeager, spoke about their praxis as family doctors (Health and Well-Being in Amish Society). Interspersed throughout their presentation were photos of their clinic—a retrofitted barn behind the rural farmhouse they lived in. The photos of their idyllic farm and the homey clinic reminded me of my childhood and my own father's approach to private practice (Personal Notes from Conference 2019). Patients have 24/7 access to the Yeager's; visits are scheduled fluidly with time left open for new patients and unexpected needs while the clinic itself offers many in house services, such as a pharmacy and lab (Yeager 2018). The Yeager's have called their approach "the vintage model" and have suggested it has the potential to transform healthcare in the U.S.

As is described in-depth by Joel Yeager's book *Transforming Healthcare Together: A Model for Restoring the Covenant of Trust*, an integral part of their system is a fee-for-service arrangement that does not require patients to have insurance. Yeager has proposed that this model should be expanded, with church communities taking healthcare into their own hands through the creation of cost-sharing programs that do not rely on government or private insurance. He argued that, "…the church has acclimated and acquiesced to a worldly system of healthcare for her members" (2018:215). In the concluding chapter of his book, Yeager put out the call "…to create a national network of Christian physicians… the time is here to create a counter-cultural alternative rather than attempting correction of an existing system" (2018:239). That counter-culture alternative, in Yeager's view, is the vintage model.

Sitting in the audience that day as a medical student contemplating family medicine, I took notes on the Yeagers' presentation because of a genuine interest in the vintage model. Their presentation was not my first introduction to this type of praxis system and from 2017-2021 I

was able to meet other physicians taking this approach and visit a few clinics in person. I would come to find this model of care delivery is not dissimilar to the services offered by Federally Qualified Health Centers (HRSA 2022). In terms of funding structure, this model also resembles a blend between fee-for-service and direct primary care (DPC) where a small group of patients pay a monthly, flat fee for nearly unlimited access to their physician.

Family physicians in general have begun championing DPC as a solution to critiques of the current healthcare system and insurance industry (Weisbart 2016). However, while FQHCs are required to serve low-income, underrepresented communities, the DPC model has been critiqued for having a similar impact as the out-of-hospital birth movement. That is, a DPC model appears to increase access and quality of care mainly to those already well-served by existing systems (Weisbart 2016). Given that Plain individuals can have barriers to care that are similar to underserved communities, such as being uninsured, I felt that there was de-stratifying praxis to learn from "vintage" healthcare systems operating in Plain communities. I was sure there was praxis to be found there that other models were missing—and I was not the only one.

A keynote speaker at the same conference argued that Plain healthcare was a mirror to the American healthcare system (Personal Notes from Conference 2019). The speaker explained that Plain individuals' rejection of praxis in their local health systems and advocacy for alternatives ultimately improved systems not just for members of Plain churches, but the communities around them as well. The combined picture painted by this speaker and other speakers at these conferences was something akin to the advertisement below—Mythical Plain healthcare: the best of the past and the future, and a sharp contrast to the U.S. medical system.

Figure 6: An Advertisement in Lansing, Michigan


The U.S. birth praxis system has the highest rate of maternal mortality of any developed country (Commonwealth Fund 2022). Moreover, as detailed in the settings and methods chapter of this dissertation, birth outcomes and access to certain praxis is highly stratified. Anthropologists have long championed natural birth, homebirth, and midwifery as counter-culture alternatives. They note that, as U.S. birth has gotten increasingly high-tech and become almost entirely hospital-based, positive outcomes and birth experiences have not necessarily increased (Lock & Nguyen 2010). The impression given by these arguments is that the U.S. birth care system, in contrast to Plain birth, is the worst of yesterday's quality and today's designs.

The data in this chapter is a test of my own and others' expectations that the healthcare model found in some Plain communities is a truly transformative alternative. This test was carried out primarily through interviews with Plain and non-Plain individuals, a review of archival documents related to plain health praxis, and a critical reflection on my own experiences with the systems of interest. Birth, as a universal transitional experience, is an ideal point of comparison for exploring the dynamics of health systems. Through a methodical focus on the

unexpected and chaotic, I was forced to confront contradictions in my own expectations for the quality and design of healthcare for Plain individuals—with implications for the wider U.S. healthcare system as well.

The data in this chapter focuses on experiences of conflict during birth generally and during specific instances of transition, such as transfer and institutional changes. In contrast to conceptualizations of the right time, place, and care presented in the first chapter, this chapter emphasizes parent experiences of the wrong place and time. In this first section, I explore the "wrong place" through experiences of provider shortages, high costs, and limited locations for care. I then examine the "wrong time" in the form of conflicts and delays during birth and related transitional experiences. Both sections contrast Plain and non-Plain individuals' experiences and those of the providers serving them, highlighting differences and similarities in praxis systems. I close with an analysis of the "wrong care", applying a blend of critical medical anthropology and chaos theory to compare the quality and design of these and other systems.

## The Wrong Place

For individuals interviewed in this study, limited options and—of the options available, little diversity—resulted in a mismatch between their expectations for their birth location and their actual experience. This was especially true of parents seeking a birth center. A common experience reported by parents in this study was finding no birth centers close by and little information on them in general. In cases where a birth center was an option, individuals reported their insurance would not cover it. In general, parents and providers from across Indiana and Michigan described struggling to get insurance providers to cover out-of-hospital birth and midwifery care.

As Lola, a Certified Professional Midwife (CPM), explained; "… 50% of all the births in Michigan are paid by Medicaid and Medicaid won't cover a midwife's fee. They wouldn't even cover a doc attending a home birth or even a birth center birth". Nichole, also a Michigan CPM, felt her clientele was limited because of Medicaid not covering out-of-hospital birth. She identified this as one reason she had not started a birth center in her community and predicted that, " …if we ever get universal healthcare or something where it is covered, then I think there'll be a lot more birth centers". Consequently, out-of-hospital birth, and birth clinics especially, are not feasible options for many parents.

Even in the case of hospital birth, parents in this study reported limited options and insurance plans that further narrowed their choices to a few institutions. This was especially true in rural areas, an unsurprising finding given well-documented maternity deserts across the U.S. Insurance tied to an individual's job was found to be particularly restrictive. As one parent described of her choices, "…I had to. I was a hospital employee and it was where I had to go to use my insurance, unless something came up of course" (Jill). Meanwhile, some parents recalled the stress of losing their job, and thus insurance, during pregnancy. However, while parents in this study frequently mentioned cost as a factor in choosing their birth location, a larger issue repeatedly identified was a lack of any options overall.

Lola reflected that "…if Medicaid paid for home births, I would be too busy. I mean, that's just a fact. I don't have the time to care for all the people who call me and then don't call back when they find out that Medicaid won't cover". Similarly, midwives in Indiana and Michigan shared with me that the surge of interest in homebirth during the COVID-19 pandemic meant that they were having to turn down new clients and even some repeat clients because they couldn't safely care for all of them at once. As a Michigan CPM who recently started practicing

observed, “There's a lot more people seeking out home birth than there is home birth midwives to serve them” (Cathleen). This burden is felt not just by parents, but also providers as they find themselves stretching their limits to accommodate the demand.

One midwife serving even a small geographic area is difficult if there is no one to assist them or provide coverage to the region if they need to be gone. Cathleen described a dearth of providers caused by two recent retirements in her region of the state. Cathleen already served a wide geographic radius of up to an hour from her home and attempting to cover the gap in care left by these midwives stretched her to her logistical limits. Considering Lola estimated there are only 70 active certified midwives working in Michigan, it can be appreciated that the loss of two of these midwives has a significant impact on both parents and other providers.

A major goal of the licensure bill passed in Michigan, as outlined in a risks/benefit statement distributed at the bill’s hearing, was to improve access to homebirth by increasing the number of trained care providers and potentially reducing the costs by making Medicare more likely to reimburse for out-of-hospital birth (Michigan Office of Regulatory Reinvention 2018). Yet, nearly four years later, care providers and recent mothers in Michigan still reported struggling with both of these issues. Meanwhile, passage of similar legislation in Indiana created new barriers.

As an Indiana midwife explained, when certified direct-entry midwives (CDEM’s) were first legalized in the state in 2013, the mandated malpractice insurance cost two thousand initially but has since increased steadily (Stacie). In the past year, the price doubled to nearly fifteen thousand with no explanation given to those paying. Of note, Michigan does not mandate malpractice insurance for CPM’s (Michigan’s version of a CDEM) and no-one I spoke with chose to carry it. In Indiana, the licensure law was described by care providers in this study as

indirectly discouraging homebirth due to the malpractice requirement and other restrictive changes.

Two midwives I spoke with that lived near an Indiana border no longer attended births in Indiana in part because of the restrictions, instead choosing to serve other nearby states with more relaxed laws (Sarah, Traci). Others remarked that, with changes in Michigan law that required more standardized and expensive education, they might not have pursued midwifery training. Put together, these experiences confirm an expectation outlined in the settings and methods chapter—stratification around birth location is highly correlated with economic status. While my data offers further insight into how this impacts providers, it also highlights resistance to this pattern and pathways to alternatives.

An OB/GYN shared how at a private practice he once worked for, "…half of the practitioners made it very clear that they were not going to see Medicaid or Medicare patients" (Dr. Jackson). This was a challenge for his personal ethics because, as he explained, "I never wanted to be a doctor who turned away people at the door who perhaps needed my help more than others". While working at this practice Dr. Jackson had to go out of his way to ensure he saw a diverse patient population. At the same time, he understood why his colleagues took a different approach:

> "It was a practice in which there were a lot of people in the community that had traditional private pay insurance plans and there was a backlog of patients wanting to get in to see docs in our practice. And so if you had the choice of seeing a patient with a full paying private insurance plan versus one that was not and didn't reimburse for your services as well—then sure. I mean, I get it."

His colleagues were less understanding of his choice, with a few going so far as to question if the practice was the right fit for him. As Dr. Jackson reflected, "At the time, I needed a job, so yeah. It absolutely is the right practice situation". His experience is illustrative of how

providers' praxes are limited by the same structures that impact parents. Nichole likewise noted that, despite her best efforts to expand who she serves, "I think most of my clientele is mostly middle aged, white families". In this way, providers also have preferences regarding where they attend birth and how, but they are not always empowered to see them realized. However, resilience can be found in models that directly address these vulnerabilities.

A family medicine physician identified the federally qualified health center (FQHC) model to me as an appealing alterative for providers like Dr. Jackson (Dr. Lin). Dr. Lin felt that, under this model, providers are freer from financial constraints when compared to working independently or in a hospital system. As she described of the typical model, there is a conflict of interest between providers needing to make money and providing care to those who are low-income, uninsured, or who's insurance pays little to providers. FQHC's resolve this tension through supplemental federal funding that helps cover the costs of serving a population paying primarily through Medicaid or Medicare. However, to be eligible for these funds clinics essentially first operate as unfunded FQHC's that provide strictly defined standards of care (HRSA 2022).

To become a FQHC, clinics must first qualify as simply Health Centers, non-profit or independent clinics that offers the same level of service as an FQHC. The centers must provide primary care to an underserved community, tailor their services to local needs, and provide supplemental support, such as transportation and translation services. One of the requirements for receiving FQHC status is also "financial stability". Thus, this model supports clinics already successfully operating in low-resource settings and may help expand their services but does not necessarily help establish those services to begin with. Of note, there are some grants available to

assist with the application process for FQHC status, but even with assistance, the overall process is intensive (HRSA 2022).

A nurse practitioner with experience working at multiple FQHC's in Indiana shared with me her experience that the initial application process for a FQHC is incredibly difficult and requires continuous, time intensive re-certification to maintain funding (Kim). Unfortunately, even if all requirements are met, politics at the national level can still delay the disbursement of money and create uncertainty around future funding levels. In the case of one Indiana FQHC, this delay took five years. Consequently, instead of stabilizing finances, the political nature of government funding generates uncertainty. This suggest that these clinics, rather than being a resilient provider of primary care in underserved communities, are actually highly vulnerable systems distributed in a stratified pattern across communities that have the resources to start them in the first place.

Ultimately, Kim chose to stop working at a FQHC because, combined with the issues described above, the center was moving away from her ideal model for primary care delivery:

> "I think that for basic care, people do really well and it's most satisfying to practice when you can see people with their other family members. You get to see them over time, you understand them and the relationship they have in their community as much as possible…The bigger the city that you live in, the more fragmented that becomes, the more challenging it becomes to have that kind of a setting."

As Kim described further, this fragmentation comes in the form hyper-specialization where "They put the kids all in the pediatric part, and the adults are all in the adult part, and then they separate their OB into a separate section. They have their women's health providers that do all the women's health stuff". In her view, this approach was antithetical to a healthcare environment where patients know their provider and their provider knows them and their whole family. This is despite federally qualified health centers supposably following a "patient-centered medical

home" (PCMH) model where services are expected to be integrated and collaborative (CDC 2022). These insights into the workings of a FQHC's suggest balance is needed between specialized and holistic care delivery.

The PCMH is a revised version of a familiar vintage model—the country doctor that does it all. The new version is a center that is a one-stop-shop for primary care needs delivered through a team-based model involving multiple providers with complimentary skill sets. As detailed though in the first chapter of this dissertation, there is tension around the expectation that providers be both specialists and generalists. Parents and providers interviewed often reported struggling to find a balance between having the resources that comes with a larger institution of specialists and the individualized attention and care that is associated with seeing a singular provider. A review of the implementation of the PCMH that compares provider experiences in Michigan and New York highlights some of these conflicts (Howard et al. 2016).

Howard and co-authors (2016) draw particular attention to the role of care managers, individuals from a variety of different specialties that maintain an "in-between" position in these centers that is imperative for integrating care. Of note, while COVID-19 made it difficult to interview public health officials and none were recruited for this study, several providers identified these individuals as serving a similar role. For example, in Michigan, public health offices bridged the gap between community midwives and government programs to ensure they had access to PPE and vaccinations. The study by Howard and co-authors highlights that providers highly value the work of care managers and their ability to function as liaisons between providers and local patient communities (2016). This approach supports a more localized, bottom-up model of care delivery and health education even in a larger institution of

specialists. At the same time, much of the work done by care managers to this effect is not necessarily billable to insurance.

Howard and colleagues found that, despite care managers fulfilling an essential role, their positions were often eliminated in funding shortages (2016). This reflects that the main driving goal of the PCMH is not integration, but reduced costs and more efficient care delivery for physicians. From this perspective, one of the most valued aspects of the care manager role is that they take over non-billable or time-consuming services that physicians have done in the past. Additionally, they can teach this skillset to patients so they can integrate their own care (Howard et al. 2016). However, the findings of the previous chapters suggest that patients may not always be looking for this responsibility. Moreover, if the individuals employed at a PCMH have no connection to the local population, equitable, integrative relationships between both patients and other institutions may be difficult to achieve.

If the right providers are not paired with the right individuals, it may always be the wrong place for care. Kim stated that a director of a FQHC that serves a large immigrant population explicitly told an employee "We don't want to cater to those Hispanics anymore". Consequently, even though it is a requirement for FQHC's to provide translation, this center did not prioritize pairing Spanish-speaking staff with clients or hiring dedicated translators. Overall, Kim's experience at these centers identified that a major flaw of this model is that it disincentives caring for communities that are uninsured, such as undocumented individuals.

Despite FQHC's being geared towards underserved communities, Kim observed that "… there's a strong driving force in the management of those clinics, for them to have a mixed population because financially they get more money from private insurance". As already discussed, government funding makes serving a large Medicare and Medicaid population

profitable as well. However, another factor that must be appreciated is that many states, Indiana included, have been resistant to expanding Medicaid. This is unfortunate as one former Indiana labor and delivery nurse pointed out, when Medicaid is expanded, birth outcomes improve (Brandi).

A lack of Medicaid expansion also contributes to a population of individuals with low-income and no insurance. From a purely financial standpoint, these individuals are viewed as undesirable because they produce little revenue for these centers. Meanwhile, because these clinics use a sliding scale based on income for fees, individuals with private insurance sometimes find it cheaper to waive their insurance and pay out-of-pocket. This further suggests, rather than being resilient to stratification, FQHC's are a major contributor. Crucially, a driver of this seems to be a lack of meaningful relationships between providers and the individuals they are intended to serve.

While it is tempting to consider the FQHC as an abstract model, this chapter emphasizes the humanness of healthcare systems. A relevant survey of providers working at FQHCs in Michigan indicates that provider satisfaction is low in these facilities and that they struggle to recruit. While the review speculates this is primarily due to poor compensation, another reason suggested is that these centers are often located in rural areas where educational and professional opportunities are limited for the families of providers (CHRT 2013). Notably, just as parents interviewed in this study identified their spouses as having a major impact on where they gave birth, providers reported their partners or spouses were a major factor in their choice of where to attend birth. Given that some of these institutions have high-turnaround because of job dissatisfaction, it is not surprising that parents may struggle to form the types of provider-patient relationships they are looking for.

Parents in this study often had a long search for the right provider. Once found, continuity could still be difficult to maintain, and many parents identified a series of providers as attendees at their birth. Rita related how her first birth was with a Certified Nurse Midwife (CNM) in the hospital, but with the second pregnancy, the midwife wasn't there, and she ended up with whatever resident was on call. By her third pregnancy, the CNM had retired and when she tried to find other options in her local area, "…it seemed like they were approaching birth or choosing home birth for different reasons than I would… they didn't strike me as Christians or Bible believing, religious people from what I read about them online", Rita said. Although Rita did eventually find a midwife with whom she felt comfortable, she suspected there were not many like this midwife. As Rita commented to me:

> "I do know that my midwife has told me that she, for many years, has wanted a partner to practice with so they could share the on-call time, but she hasn't found somebody who she feels like she can work with, in terms of coming from the same worldview, the same approach to birth, where she feels like she can be a good partner with."

As the popularity of out-of-hospital birth grows, the lack of diversity in care providers is only highlighted. As Rita further explained, when she first gave birth at home, she felt like the only one, but now, "I know probably half a dozen other people that have had home births, either that I have met since or have they have decided on a home birth since I first did…. several of them have used my same midwife on my recommendation". Rita described these people as like her, going to the same church and circles but "neither Amish nor Hippies". Elana, a CPM, shared a different, but highly relevant perspective on matching providers and parents:

> "I think the best solution is always keep it in-house… like some of my Christians, when they go speaking in tongues at their birth, I don't do that. But I can respect it, but I'll never be able to be a part of that. For some people they'll call me and they say, "Well, I'm looking for a Christian midwife." I'm not that. I have faith, but I don't have the religion aspect that they're looking for, somebody who will

> carry a certain doctrine to their birth. A Christian midwife is a valid midwife and is serving that niche of people."

While for many parents, the larger concern is finding any care provider at all, these experiences highlight that overlaps between parent and provider praxis systems are essential and diverse provider options help increase the probability of forming these relationships. Elana's comment also suggests that diversifying providers within a praxis system may be a more successful approach than expecting providers to engage in praxis outside their system. However, as one midwife and doula noted, "…the current system of training, whether it's a nurse, midwife, or a CPM, it doesn't represent everybody" (Sarah). While efforts have been made to diversify both midwifery and physician praxis systems in the U.S., high costs of education and extensive, inflexible requirements for graduation still creates unsurmountable barriers for some individuals.

Several midwives I spoke with described ways legalization made it more difficult to become a midwife. In Indiana, this was mainly through mandates that increase educational requirements and costs. Prior to legislation in Michigan midwives had a number of ways to obtain certification. One pathway long used by certified midwives is an apprenticeship model, while another is attendance at one of a small handful of accredited schools. Legalization offered recognition for both of these training pathways for existing midwives, but future midwives in Michigan must go through a petition process to receive recognition for their training if they choose a pathway other than accredited schools (Michigan Board of Licensed Midwifery 2018). This is significant because research suggests that providers from unrepresented minorities in medicine are more likely to serve members of those same communities (Cheyney et al. 2015). Sarah remarked critically on the process of limiting what providers can attend birth and the relationship between midwives and the U.S. medical system specifically:

> "They have created a scarcity of healthcare providers. I don't want to hear anyone talk about the fucking ... there's deserts of maternity care, blah, blah. It is such bullshit. They took away the providers."

The data outlined in this section supports this observation. Parents find that access to providers is limited by systems rather than expanded. Likewise, providers find themselves unable to serve their preferred patient population sustainably. In the next section, I explore Plain experiences within the birth systems described by this dissertation. The comparison of Plain and non-Plain experiences suggest the issue may not actually be the design of birth systems, but the quality of the experience as shaped by relationships between individuals with different praxis. Relatedly, when paired with proper representation, health centers can be a highly successful model.

*The Plain Mirror*

Interviews with Plain parents and providers working in Plain communities, combined with archival research, reflects a distorted picture of the same struggles non-Plain parents face. Participants in this study were asked if they were aware of differences in outcomes or inequalities among their own or other communities. Plain individuals interviewed in this study identified none, except for potentially better nutrition within their own communities. Non-Plain parents interviewed in this study, likewise, knew of no inequalities within their own communities, but were aware of discrimination towards young, unmarried mothers in the hospital and poor outcomes for minority communities in the United States.

One of the strongest affirmatives of observed inequalities came from a former labor and delivery nurse and current childbirth educator working at a health system in northern Indiana (Brandi). This region is densely populated by members of several different Plain churches, however, Brandi only noted significant inequalities for Black parents living this region. A 2018

health needs assessment conducted by a hospital system in northern Indiana provides further insight into stratification when comparing Plain and non-Plain health experiences (Goshen Health).

The assessment compares survey and focus group responses from a diversity of individuals in Indiana. The top clinical health need identified by non-Amish participants in this assessment was prenatal/early childhood care. Insurance coverage was also a top concern for these respondents, but not the Amish participants. Meanwhile, significant barriers to care that were the same across communities included being uninsured, a lack of transportation, and not enough health education. Notably, major barriers not shared by Amish respondents were struggles navigating the health system, language and cultural differences, and a lack of healthcare providers.

Perhaps the starkest contrast is found in responses to barriers to care related to policies and programs. Amish respondents identified a major issue as "patients dropped by clinic if patient discontinues regular appointments", meanwhile, non-Amish respondents noted "a lack of programs and policies in general to meet health needs" (Goshen Health 2018:32). In sum, while there are some shared barriers, this report supports findings within my own data—that both the autonomy and integration of Plain individuals within the U.S. medical system is well supported.

Reading recommendations from Plain participants in this study and a review of archival records provided me with a window into the autonomy of Plain individuals' personal health systems. A consistent finding was that Plain individuals often cross state and national lines in search of reduced fees and preferred praxis. Plain periodicals such as *Family Life, Little Red Hen News,* and self-published newsletters for Amish midwives also demonstrate a strong network of knowledge-sharing between multiple communities and a rich tradition of autonomous, self-

taught health praxis. As Elana observed regarding midwifery, “The Amish, Mennonite, they are now training people within their community”. Likewise, an Indiana midwife that served members of a Plain church remarked to me, “I'm telling you, I think in this community, if I wasn't here, they would be doing babies by themselves” (Stacie). In my interviews with Plain individuals though, it was clear that this could not happen through formal educational pathways.

One Plain individual interviewed in this study confided that, when she was younger, she had been offered an opportunity to pursue a nursing education by individuals outside her church (Lenore). Lenore turned it down though because that choice would mean leaving her church community behind. Within her church, individuals are not allowed to remain members if they pursue higher education, making a nursing degree incompatible with her life. However, members can benefit from the mentorship of certified midwives from outside their church. In speaking with Lenore and others from different Plain churches, it was apparent that relationships to providers with a praxis system different from one’s own can act as a bridge to praxis that might otherwise be inaccessible. Similarly, birth care providers may be led in unexpected directions through their working relationships with parents.

Traci, a midwife who worked for several years along the Indiana/Michigan border region, gave me a detailed history of a birth center that she helped start. It began when, after noticing hardly any Amish or Mennonite couples attended childbirth education classes she taught, she started actively trying to reach the community. She initially received pushback from the organization she taught for, with a doctor on the board telling her she was “getting enough” members of these communities. Traci was insistent, however, and went from teaching one Amish family a year to single classes of over 25 Amish couples. While she mainly attended births in hospitals at this time, she began branching out into out-of-hospital birth. From there, a birth

center was started at the request of members of local Plain churches—with one particularly wealthy Mennonite man providing the funding.

Today, the birth center continues to function as a popular location serving Plain parents from both Michigan and Indiana and the original funder has provided close oversight through the years. In addition to the example described here, several biographical accounts echo this same pattern of a resource-rich community or individual playing a crucial role in the establishment of health centers that provide services through a design not unlike FQHC's (Hoover 2004). While these centers do cater to the Plain community, it should be noted that non-Plain parents living in the same regions use these centers too. In the case of birth centers or clinics for genetic diseases, there may be no nearby alternative for non-Plain parents seeking these specialized services. Relatedly, the only birth center available to anyone in southwestern Michigan was described to me as essentially a room in a Plain woman's home. It is important to recognize though that not all Plain churches have the same resources.

Not every community has the funds to create a sustainable healthcare cost sharing plan, let alone support an entire health center. Of note, Plain individuals interviewed in this study reported relying on a FQHC for certain care. Likewise, some Plain individuals had to utilize hospital programs geared towards uninsured, low-income individuals more generally. As relayed to me by a former member of a Plain church, even with resource pooling, a community can easily deplete their funds if members have major medical expenses in short succession (Jessica). Members of these communities are still facilitated to seek care, but through the spontaneous formation of relationships with providers that find value in serving these individuals despite their limited funds. In these cases, differences in praxis help make these relationships mutually beneficial sources of change, while overlaps in praxis ensure they are sustainable.

Multiple midwives interviewed in this study reported that they offer reduced fees to Plain parents. Of the providers who did not report doing this themselves, many were aware of colleagues or hospital systems that currently offered reductions or had in the past. Old newspaper reports from Indiana, Ohio, and Pennsylvania also suggest a long history of health systems across the Midwest working out agreements for reduced fees for members of local Plain churches (Donald B. Kraybill Collection). Lauren, an Indiana midwife with a personal background attending a Plain church herself, explained that she kept her practice 50/50 conservative and nonconservative incomes because "…obviously, conservative families are single income. You're not going to make a lot of money serving them, unless you serve a lot of them. So, we can charge an English family more than we would charge an Amish family".

Lauren went on to clarify, "We don't mind charging the Amish family less because the Amish woman is such a better birther than the English girl. Cause she doesn't complain and she's used to extracting discomfort from her body just to live". Lauren shared though that she hoped this changed in the future:

> "I'd like to see more of a warrior's heart [for] some of these women who accept the pain of it as their birthright, but for some reason aren't able to accept the beauty and glory of it as well. And that I would like to see changed; that's part of our ministry in this practice."

Lauren identified as non-Plain but described having Plain family members and attending a Plain church in the past. Her experience underlines that relationships between parents and providers with different praxis can be a bridge for change. At the same time, overlaps in praxis help make this bridge a bidirectionally beneficial exchange. Rene reflected on her own praxis as a midwife without malpractice insurance, "when I have an Amish client, I am a lot more relaxed than I am with an English client". Relatedly, she explained why hospitals sometimes treat Plain patients different from non-Plain, "…they know Amish, aren't going to sue, right? They know

that the Amish understand life and death differently". (Rene). Plain individuals are thus likely to find their praxis well-represented and respected within local U.S. healthcare systems, even though the most conservative Plain individuals may not be a part of these systems themselves.

In contrast to Yeager's critique that the church has abandoned its members, my data suggests that many Plain individuals are quite well supported both by their churches and relationships with individuals outside the Plain community. In a Michigan newspaper article from 1988 titled "Plain People" the header stated "everything they do—and do not do—is a statement of their Christianity. They are West Michigan's Plain People" (Harrison 1). The article included interviews with members of several different communities, covering five distinct churches in total. Of one specific community the article described, "This is not a typical Plain church. Even they say that… in the little Dunkard Brethren Church with its 19 members, there are three degreed nurses and a doctor" (Harrison 1988:13). The article noted that the hospital this doctor practiced in was started by two Reformed Mennonite women in the 1920's. The doctor, the only surgeon at the hospital in 1988, remarked appropriately in the article, "The influence of the church in any community mirrors the people" (Harrison 1988:13).

In this section, the Plain mirror has reflected similar barriers to care and solution designs, but very different levels of success in implementation. From this data, there does not appear to be an independent Plain healthcare system any more than there is a non-Plain American healthcare system. The representation and support of Plain individuals, and the underrepresentation and stratification of others, is an outcome of the same system. The next section looks closer at the dynamics of how this system supports the autonomy of some and not others.

## The Wrong Time

An examination of experiences of the wrong time suggests that the structure of relationships between individuals with diverse praxis can impact delays in care and the adaptivity of systems. In a highly relevant example, a parent described to me how an already complicated pregnancy turned frightening due to conflicts between providers in different specialties and a breakdown in communication between providers in the same specialty (Felicia). As Felicia explained, she had three OB/GYNs that were involved in her hospital stay. The first two were involved in her initial admission and diagnoses, but then care switched to a third OB/GYN "…who had been on vacation or something, kind of out of the loop". This third OB/GYN kept suggesting she was fine and could go home until, as she recalled, "….it took me almost passing out on the floor from blood loss for him to get on the same page". The nurses, in contrast, were very concerned and disagreed vehemently with the doctor trying to send her home.

The parent remembered one nurse saying, "I'm starting an IV. I don't care what he says. He can't fire me. And this is the right thing to do". Later, the nurses shared the staff schedule with her so she would know when that OB/GYN was working. While Felicia was grateful, she also found it very unsettling to have her care providers disagreeing with one another while she was in a life-or-death situation. Likewise, for parents transferring from home to hospital, conflicts between care providers can create serious delays in care and put both parents and providers at risk.

Sarah, a midwife working in Indiana and a neighboring state, described fear and danger when transferring in a state where midwifery is not legalized. As she explained, "…when a midwife encounters an emergency at home, that midwife is putting themselves at risk when they decide to transfer the client to the hospital. There are risks that the hospital could report them and

they could end up in jail for being a midwife". She noted that, even with legalization though, providers do not always recognize the training midwives have. Other midwives also identified this as a major source of conflict during transfers of care.

Midwives in both Michigan and Indiana reported clashes with EMS (emergency medical services) professionals to be a serious source of delayed care during transfers. At the heart of these conflicts seems to be unclear procedures for collaboration and a lack of knowledge about each other's training. Midwives receive training specific for emergencies in birth and it can cause dangerous delays in care if EMS professionals are unaware of this. In one tragic example shared with me by Sarah, a midwife begged EMS to let her accompany an infant during transfer. The midwife was trained in neonatal resuscitation and was concerned because the EMS professionals were not. EMS did not allow her to transfer with them and the infant died.

Given these experiences, some midwives take the view that, "When you are calling an ambulance, you are calling a car and a driver" (Sarah). Dr. Chandler, an emergency room physician and former EMS professional added more nuance to this assessment. He explained that there are very different levels of training ranging from an EMT basic to a paramedic, but he also confirmed that, short of being a paramedic, most EMS professionals have very limited training on birth. However, he pointed out that emergencies unrelated to birth can occur which impact pregnant women, such as car accidents. For these types of transfers EMS professionals are well-suited, but due to provider shortages, it is not always possible to match skill to need.

Dr. Chandler specifically identified parts of northern Michigan as rarely having enough individuals with the most basic training available, let alone paramedic level. He pointed out that this shortage and spotty coverage was a long growing issue stemming from increasing certification requirements and reduced pay that had only been exacerbated by COVID-19. These

shortages ultimately impact parents. For example, one rural parent in this study explicitly stated that she transferred by car because she knew the ambulance would not reach her in time (Beverley). However, a CNM observed that even when a birth center is down the street from a hospital, the logistics of transfer can be "a nightmare" (Kate). This suggests that even if care provider shortages were resolved, a lack of integration between systems would still be a major issue.

Cathleen had several negative transfer experiences with her local hospital systems but offered an understanding take. She thought that perhaps, to see changes in the attitudes of hospital staff, more time was needed given how recently legislation had passed and how long midwives had previously operated in the state without standardization in training. However, Cathleen also expressed frustration over the seemingly irrational variability of hospital policies in response to legalization. For example, at one hospital she was allowed to order ultrasounds, but not labs for clients. For lab work, the hospital policy required her to have a physician sign-off even though Michigan midwifery laws do not require this. Unfortunately, the experiences of physicians dealing with the same sort of variability and restrictiveness in hospital policies indicates that more time is unlikely to resolve these issues.

Midwives are not the only ones who find themselves struggling to collaborate with hospital staff. Dr. Chandler echoed a sentiment shared by midwives in this study, that there is a need to normalize transitions of care and not treat them as a failure on the part of the individual doing the transfer. Dr. Chandler shared that he currently oversees a rural ER that does not have an OB department, but is far closer for most patients than a larger hospital. He expressed frustration that, "One of the questions I frequently get asked is, 'Well, why did they go there?'. I don't know. All I know is that they're here now and I'm trying to do the best with the resources I

have". He summarized that in his experience with consulting OB/GYN's, "…it's almost like it's an annoyance for us calling them". Dr. Chandler saw this issue as widespread across the medical system:

> "… most doctors in most fields at this point are overwhelmed and overworked. Unfortunately, in emergency medicine, whenever I call somebody I'm adding to their workload. This is an unexpected, unscheduled patient when—the vast majority of these specialties—what they deal in is scheduled patients that are fairly predictable…And so, I'm a disruption in their day."

Even in the context of family medicine though, a field that often deals in non-emergent transfers of care and consultations, there can be hostility. Dr. Bryan shared that, as a family physician that does OB, "It's important to have really good working relationships with the obstetricians at the hospital". Sadly, she had worked in places where those relationships were contentious, hard to form, and overall part of "…a really hostile environment towards family doctors doing OB… much less the idea of home birth". Dr. Bryan admitted to me that, after countless negative interactions with certain providers, she found herself hesitating to consult with them. In one specific instance, it resulted in a delay of care that "ended up being a mistake". As she reflected regarding her struggle to consult the OB, "I really wish I had been able to separate that out at the time and not be influenced by how terrible I thought her interpersonal skills were and her relationships with her patients, and I wish I'd been able to set that aside".

Dr. Bryan's story illustrates that health systems are not idealized theoretical structures, but lived experiences that reflect the strengths, weakness, and personalities of the practitioners within them. In this environment, liking who you work with is not just a perk but something that can have a direct impact on outcomes. Unfortunately, "In OB it's really hard because you get whoever's on call. You don't get to pick and choose when you have a patient in labor who your

advisor's going to be, who your consultant's going to be" (Dr. Bryan). As Dr. Bryan lamented further:

> "I think that's one of the reasons that some family practice docs quit doing OB is because they didn't have those good working relationships and it was just too distressing to have to hand over the care of their patient—who they had come to care for deeply over the course of a pregnancy—hand them over to somebody who was going to not treat them the same way, or the way we would all want to be treated."

Combined, the perspectives of midwives and physicians point to multi-layered structural flaws that are particularly visible during transfers of care at all levels of the system. Several midwives in this study explicitly described transfer experiences in which both they and their clients were criticized for their association with homebirth, leading to unnecessary delays in care and breakdowns in information-sharing. As Cathleen recalled:

> "I brought somebody into the hospital and when the nurse was doing the admission [they] said, 'Have you had any prenatal care in your pregnancy?'. And the client said, 'Yes, I've been seeing my midwife'. And the nurse said, 'Okay, so no prenatal care'. That's a slap in the face but I'm not going to stand there and argue with her, no. I can fax her chart over, I can tell her all the details that she wants and give her the health history, but if she is not going to be open to that—then it's not going to make a difference for her."

Midwives with similar experiences in Michigan admitted avoiding hospitals where providers treated them or their staff poorly, often going significantly further distances for a transfer or consult in exchange for more collaborative care. In emergencies though, when time is most critical, it is not an option for parents or providers to be choosy. However, even at hospitals where midwives reported positive experiences, there were still barriers to collaboration. For example, an OB/GYN working in Michigan that had a home birth herself and was very positive towards local midwives admitted that she found midwives' notes on pre-natal care unhelpful (Dr. Koch). Dr. Koch expected a standardized report with labs and vitals taken consistently. Instead, she found that midwives often reported sporadic data and focused on social

aspects, such as the mother's home life. This difference in communication is unlikely to be bridged, unfortunately.

While Dr. Koch personally wanted to improve the transfer process and was open to midwives making changes on their end, she admitted that the hospital she worked for would never formalize any sort of relationship with CPM's attending homebirth because of concerns around legal liability. Simply put, even though midwives and homebirths are legalized in Michigan, the American College of Obstetrics and Gynecology does not consider homebirth the standard of care and the hospital she worked for was unlikely to facilitate the work of homebirth midwives as a result. Dr. Koch's experience highlights that collaborative relationships and overlaps in praxis are not enough to change systems, autonomy is also needed. A CNM in Michigan described her struggle with this during the early 1980's and her attempts to offer waterbirth to women attempting a vaginal birth after a C-section (Kate).

Parents and midwives alike shared with me that, in their personal experiences, waterbirth can be a very effective pain reliever during labor. Kate wanted to provide this option to women in the hospital that were attempting a vaginal birth after C-section. She ended up having to get the hospital ethics committee involved, arguing to the hospital administration that it was a "non-pharmacologic, safe way to manage pain in labor". She pointed out that they offered it in the unit down the hall to women that were not attempting a vaginal birth after a C-section, "so why can't these women have it?" To convince the hospital further, Kate promised that midwives would be responsible for setting everything up and cleaning up after. She ultimately succeeded in bringing the praxis into the hospital and reflected to me, "…I'm sure that they aren't still doing it, but while I was there, we did do it. Shockingly".

Kate's comment suggests that, while she was able to bring new praxis into the system, the underlying power dynamics did not change. She identified this as largely being because the head of the OB department wanted to shut down the midwives working at the hospital and at the hospital-owned birth center even though their "outcomes were excellent". As Kate related, "You know he didn't want us to be successful. He wanted women on the monitors. He was kind of typical in some ways. But also, not midwife friendly. He didn't see the value of midwives". Thus, while hospital systems may sometimes allow alternatives to be created through transitive relationships, the autonomy of both systems must be respected for those relationships to be sustainable.

Midwives in Michigan and Indiana shared with me ways they had improved their approach to transfer and worked to build relationships with local health systems. In one example describe to me, midwives in northern Michigan have been particularly successful at improving relationships with EMS by bringing together physicians, midwives, and EMS professionals to learn more about each other's training (Rene). In northern Indiana as well, repeated informal and positive interactions during complex crises have also built mutual respect between the two fields (Traci). These relationships have led to further novel changes to the existing system in Indiana such as being able to call EMS (when they are not overloaded) to wait at some high-risk homebirths as a precaution. On a larger scale, a multi-disciplinary group including midwives and other providers collaborated to produce a standardized transfer document that is now used by individuals across the country, including in Indiana and Michigan. A closer look at other examples of the system changing for individuals demonstrates that even just one collaborative relationship between different systems can be crucial for facilitating change on multiple scales.

When comparing how midwives drove legislation in the states of Indiana and Michigan that directly changed laws around when midwives transfer and how, personal relationships made a significant impact on their success. Two Indiana midwives deeply involved in the push for legislation described how their first attempt was a grassroots movement coordinated with local midwives that made very little progress (Stacie, Traci). As Stacie related, "…what you learned in your eighth-grade history book about how government runs? That's a whole bunch of lies. It's about power and money". After nearly twenty years of unsuccessfully trying to get a bill passed, Indiana midwives realized that they had to align themselves with those who had power within the existing system. Consequently, the Indiana Midwife Association had to fundraise approximately $15,000 a year to hire a lobbyist. After five years of lobbying, they were finally successful in their goal. In Michigan, I found nearly the exact same story, but a faster timeline.

In Michigan, the legalization process was started by midwives in response to the passage of restrictive laws in other states, including Indiana. The same realization was quickly had that they would need a lobbyist. In this case though, preexisting personal relationships with local legislators and a lobbyist made the process much easier and less expensive for midwives. The result was the passage of a bill far less restrictive for midwives and a process that took six years total in comparison to over twenty in Indiana. In each of these processes, compromises had to be made, although midwives in both states expressed surprise about where these were made.

As Stacie commented, "Now in all of this goofiness, they did not mandate that we could not do twins and do births at home. I would've thought that would've been top on their list. That wasn't even close to top on their list". Instead, in both Michigan and Indiana, mandated oversight was the chief conflict between midwives and physicians. Additionally, Traci, the Indiana midwife that started a birth center in Indiana, found herself no longer legally able to attend births

there because a law was implemented that only allowed CNMs to attend at birth centers. In her view, the law was "…ridiculous because I can do a VBAC at home, but not work in the birth center where it should be, in my opinion". Traci instead took her services to a birth center in Michigan, although she still attends homebirths in Indiana. Meanwhile, Kate, a Michigan CNM living on the Indiana/Michigan border who had previously helped fill the gap in southwestern Michigan, was less available because of the demand for CNMs at birth centers in Indiana after the passage of the law. This research demonstrates that praxis cannot be thought of in isolation and changes in one area of healthcare or one state's laws can have significant impacts on birth across a large region.

In general, midwives in Michigan were much more positive about the legislative process compared to the experiences of those in Indiana, generally feeling that it had reduced barriers rather than created them. While Indiana midwives still saw the value when compared to no legalization at all, strict mandates accompanying the new law put midwives in a difficult position. As detailed in the previous section, even in Michigan where midwives can practice without the supervision of a physician, hospital policies can still undermine that independence. Meanwhile, in Indiana, midwives are mandated to have a collaborating physician, something often logistically difficult—especially in rural areas where choices are limited.

As a Michigan family physician and researcher explained to me, independent practitioners are a rarity within the current U.S. medical system (Dr. Lin). Large medical systems, rather than treating independent practices and hospitals as an opportunity for collaboration, often view them as competition. Dr. Lin noted that there seems to be an unfortunate pattern where large hospital systems that buy-out or out-compete other hospitals will then reduce operating costs by centralizing services. Expensive, unpredictably used OB wards

are often the first to go. The consequence of this is maternity care deserts where parents have limited options and face dangerous waits times for transfer. Given that hospital policies can severely restrict who can collaborate with midwives and that independent practitioners are rare, it is clear why midwives may struggle to establish good working relationships with physicians.

For midwives in both states, a hyper-fixation on oversight juxtaposed with a lack of concern about some of the praxis itself was interpreted as a lack of trust on the part of the medical system, not in out-of-hospital birth—but in midwives. These negative experiences and difficulties forming sustainable, collaborative relationships indicate that legalization did not fundamentally change the power dynamics between many midwives and their local medical systems. As Sarah observed, "…if we're not fundamentally transforming these power relationships and supporting people and communities having more autonomy, we're not actually changing what the harm is that they're doing".

Sarah shared with me her view that the current medical system is fundamentally designed to disempower women. One particularly traumatic way this happens to women is through non-consensual vaginal exams. Sarah argued from both personal experience and what she had observed with her clients, "I really, really believe that non-consensual vaginal exams are absolutely rape. I think that putting anything in someone's vagina against their consent is absolutely rape. And that happens all the time in birth. It happens so much to people". Notably, in response to these types of concerns, an Indiana family physician reported to me that he championed an approach where individuals are taught to perform their own pap smears and other invasive exams as much as possible (Dr. Allen). However, there are still situations where physicians and midwives are mandated to perform vaginal exams as part of standards of care, creating a cycle that criminalizes alternative praxis and normalizes abuse. As Sarah explained:

> "If you believe that the only way you could be safe in your birth is with someone who sexually assaulted you, you're sort of being coerced into this really, really harmful power dynamic with this system. And you're like, 'Well, I have no other choice. Yeah, maybe they sexually assaulted me, but I would've died without them'."

Sarah described herself as an "anarchist" and offered a view unique from many others I spoke with. While she recognized positive changes that stemmed from legalizing midwifery, she felt that the best thing for midwives and families was a decriminalization bill. The difference for her was that, with a licensure bill, the state mandates what praxis is or is not allowed. With a decriminalization bill, parents could be free to choose who and what they want at their birth, with the caveat that the provider does not misrepresent their services. Regardless of the exact details, her experience reflects a general sense expressed by providers and parents alike—that radical change is needed.

This section adds nuances to the findings outlined earlier and highlights that diverse praxis and the successful integration of different systems depends on autonomy. As Traci reflected, the most impactful changes often come from negative experiences, not positive ones and "…that's okay, as long as we learn from it, that's important". However, a paternalistic relationship denies learning for one party in a relationship, while not necessarily shielding them from negatives or ensuring positive experiences. The following subsection examines this more thoroughly through experiences of autonomy for Plain individuals, highlighting ethical complexities that emerge in practice and how stratification can be exacerbated by unequal empowerment.

*The Plain Mirror*

The transfer experience of an uninsured Plain woman giving birth at home in rural Indiana is a stark contrast to many of the experiences outlined previously. Carolyn's first and

only transfer experience was with her third child. As she related to me, the child was born at home without complications. However, the newborn required resuscitation shortly after and the midwife told the parents that she suspected there may be a congenital anomaly of some sorts. The newborn's vitals declined further and a few hours after birth transfer was required via ambulance to the nearest NICU—nearly an hour away.

Significantly, Carolyn described her transfer experience to me as very good. She identified the local EMS as particularly empathetic and that no one said, "You should have done this". Instead, she felt like her and her husband "…were trusted and everyone knew they weren't going to do anything bad". The child was diagnosed with a fetal anomaly and died less than a year later, "having never shown any awareness of his surroundings" according to notes from the event she shared with me. Carolyn felt, in hindsight, that she wished they had not transferred at all and instead let the child pass peacefully at home.

With her next child, Carolyn was concerned about a repeat of the transfer experience. In response, her midwife coordinated with local health officials to construct a plan in case her child was born with the same condition. After consulting with a county nurse familiar with the circumstances around the last birth, she was advised that they could either call 911 and potentially face a legal investigation or they could formulate a plan with the local coroner ahead of time to "bury their baby with peace and respect" and "avoid the emotional stress of a legal investigation". The latter option was chosen, and the midwife informed both the local nurse and the coroner of when to expect the birth and plans were made to call the coroner if the baby was born unable to breath on their own.

In a related event, my own father wrote a state senator to propose changes in Indiana law to allow members of a local Plain church to "…conclude their lives without required interference

by an anonymous state approved funeral director, who have no relationship whatever with their church or their beliefs". The response to his proposal was positive, aside from opposition from funeral directors. Initially though, there were some hesitations on the wording of the amendment. As one staffer explained on behalf of the Indiana state senator, "It was my sense that she felt any exceptions along these lines would be subject to abuse by more mainstream religions". Meanwhile, the attorney assisting my father in this process noted that the only problem with specifying exemptions by specific religions is that it is unconstitutional.

To have more success in his endeavor, my father was directed to talk to a funeral director in northern Indiana that served the Amish community and had successfully worked out a system that "…satisfied the laws of the state of Indiana, and the Church's desire for simple services…". Regardless of the outcome of his efforts, the relationship between my father and this church community had the potential to generate a new system that neither would have likely initiated on their own. This example also underlines a finding from the first chapter, that exemptions based on religious freedom are often highly stratified.

Intangible relationships, such as the one between my father and the members of the church he advocated for, are as stratified in access and distribution as physical locations. Furthermore, they are often unavoidably transitory. My father's death and the sudden breakdown of his advocacy relationship highlights how fragile and unpredictable these interactions can be. In general, an exploration of Plain healthcare experiences suggests that sustainable systems require several relationships between individuals with diverse praxis. However, individuals must be free to spontaneously form these diverse relationships and experience new praxis. The alterative to this autonomy is tragedy.

*Born Giving Birth: Creative Expressions of Mennonite Women* is a collection of feminist poetry and art produced by current and former members of Mennonite churches (Shertz & Martens 1991). The collection captures Plain women's' own reflections on autonomy and change. The poem below, written by Margaret Loewen Reimer, is particularly relevant.

To Margaret Friesen

[In December 1976, a story appeared in Windsor (Ont.) *Star* describing the sentencing of a twenty six year old Mennonite woman to three months in a psychiatric institute for beating her fifteen-day-old baby to death with a baby bottle. Upon her release, she was to serve nine months probation even if she returned to her native Mexico. The report said simply, "Mrs. Friesen was described as having had a difficult life, raising seven children in seven years."]

Your whispers of despair
Unheard amidst the groans
Of childbirth

Burst forth in a
Final frenzied shriek of anguish

Seven children in seven years,
And only a child yourself.

Demented, torn,
Wasted before your life began,
You walked, in your woman's way,
To the edge of hell.

You are not alone—

The centuries have borne
The shrieks and curses
Of demanded mother-love

Of you,
Too much has been required.
I thought the world was different now.
(Shertz & Martens 1991:40)

The story of Margaret Friesen illustrates that individuals are never without power, but they can feel like they are without choices for where to direct that power—with tragic

consequences. At the same time, the existence of this poem in a collection of feminist reflections by Plain women highlights that, while perhaps not always changing in all the ways wanted or expected, the world is different now for many Christian women.

In 2021 while I was attending a conference on Plain healthcare, individuals representing Amish and Mennonite communities were asked what they felt were the biggest issues facing their communities. This launched a discussion of how the "me too" movement was sweeping across Plain communities. Plain individuals within this study also shared their experiences with these topics and that increased discussions were happening within their own communities. A former member of a Plain church confirmed to me what was reported at this conference as well—that social media is contributing to a level of sharing and coordination among Plain individuals that is changing these communities from the inside out (Jessica).

These accounts highlight that when individuals are given autonomy over their relationships with others, systems are changed but also often sustained overall. However, it can be difficult to support individuals making choices different from one's own and, furthermore, believe that they really are choices. Robert, a therapist who has worked extensively with members of different Plain churches, offered his insights into this struggle:

> "It's one thing to talk the talk, it's another thing to walk the walk when it comes to respecting viewpoints that you can't necessarily accept…When it comes to women's bodies and what rights women have to their bodies, it's difficult. It's difficult to deal with that and to work with that and to really respect that this is a choice that anyone Amish makes—be they male or female—and that I have to respect that. It may not be what I accept in terms of how I want to see women treated, how I want women to value themselves, but it's what Amish women make a choice to do, and that's very humbling for me. That's very humbling to have to step back and say, 'Okay, they are living the lives they want to live, and I'm not in the position to tell them that they're wrong'.".

I asked Robert if, in his opinion as a therapist, it is even possible to know if someone else is freely making a choice. Robert replied that it was the same question raised by several Amish

rights groups, particularly around "…for example, stopping education at eighth grade, and how much does that just automatically create a limitation that people can't get away from if they're going to be raised Amish". On this topic, Robert went on to say that he had no answers. He felt there were things done in some church communities that were horrible and he could not ignore, but that was true of "any culture on the face of the earth". However, this type of existentialist approach is not incompatible with intervention on behalf of another or identifying negative aspects of systems. As Simone de Bouvier has philosophized in the *Ethics of Ambiguity:*

> "A freedom which is interested only in denying freedom must be denied… the existence of others as a freedom defines my situation and is even the condition of my own freedom. I am oppressed if I am thrown into prison, but not if I am kept from throwing my neighbor into prison." (2018:97)

The experiences of another individual cannot ever be completely embodied and understood. Yet, if individuals are within systems that support diverse options and the ability to change systems or create a new one altogether, then there can be some assurance that their choices are at least free by design. Advocating for the autonomy of some but not others, however, can also lead to further stratification. The following story of a highly reported on case of contested child abuse is a complicated example of that.

As detailed through archival records of local news articles published during the case, a Plain couple was suspected of abusing their infant child based on physical signs found during a visit to an ER (The Donald B. Kraybill Collection). The parents' other children were initially taken away and reports suggested the parents were struggling to navigate the legal system. However, things changed when an influential physician and researcher serving Plain communities, Dr. Morton, became involved in the case.

Dr. Morton, regarded as an expert on Plain healthcare, argued on the parents' behalf that a rare genetic disease—not abuse—was the cause of the physical findings. In one article he was

quoted as saying, "I'd never assume abuse couldn't happen… But knowing what you know about these communities, you just know there would be a more likely explanation" (The Donald B. Kraybill Collection). In light of the discussions outlined in this chapter and growing research on abuse in Plain communities, this statement has aged poorly (Cates 2014). However, Morton's willingness to explore alternative explanations specific to Plain communities and to advocate on their behalf should not be faulted. The issue highlighted by this chapter, rather, is that this advocacy is not uniformly extended to individuals across these communities or outside them.

This section captures the dynamics of how one individual's praxis system begins at the limits of another's. In the transitional space between, where praxis overlaps, something new can be created. This balance depends on autonomy, however, and the acceptance of others' limits and differences. A system that appears robust and stable from the outside, such as seven straight years of childbearing, may actually be on the verge of shattering. A sustainable system is thus a balance of diverse relationships that facilitate individuals to both maintain and change their systems. In the analysis section that follows, I will apply a combination of theoretical models to the data in this chapter to help evaluate these dynamics in systems.

## Analysis

Out of 41 interviews with a diverse mix of parents and providers, all reported instances of the wrong time or place during their experiences with birth. This finding was expected, as Bourgois and colleagues have concluded, "… all individuals live within diverse but identifiable power relationships and hierarchies that can limit access to resources and can shape their decision-making and behavior in ways that are sometimes beyond their capacity to control or change without extra support" (2017:4). As Catherine Panter-Brick has also noted though, studies that prioritize assessing risk or vulnerability are limited to asking questions about

health outcomes and risk exposures (2014). A resilience framework, in contrast, encourages "… asking more complex questions regarding wellbeing, such as when, how, why and for who resources truly matter" (Panter-Brick 2014:438).

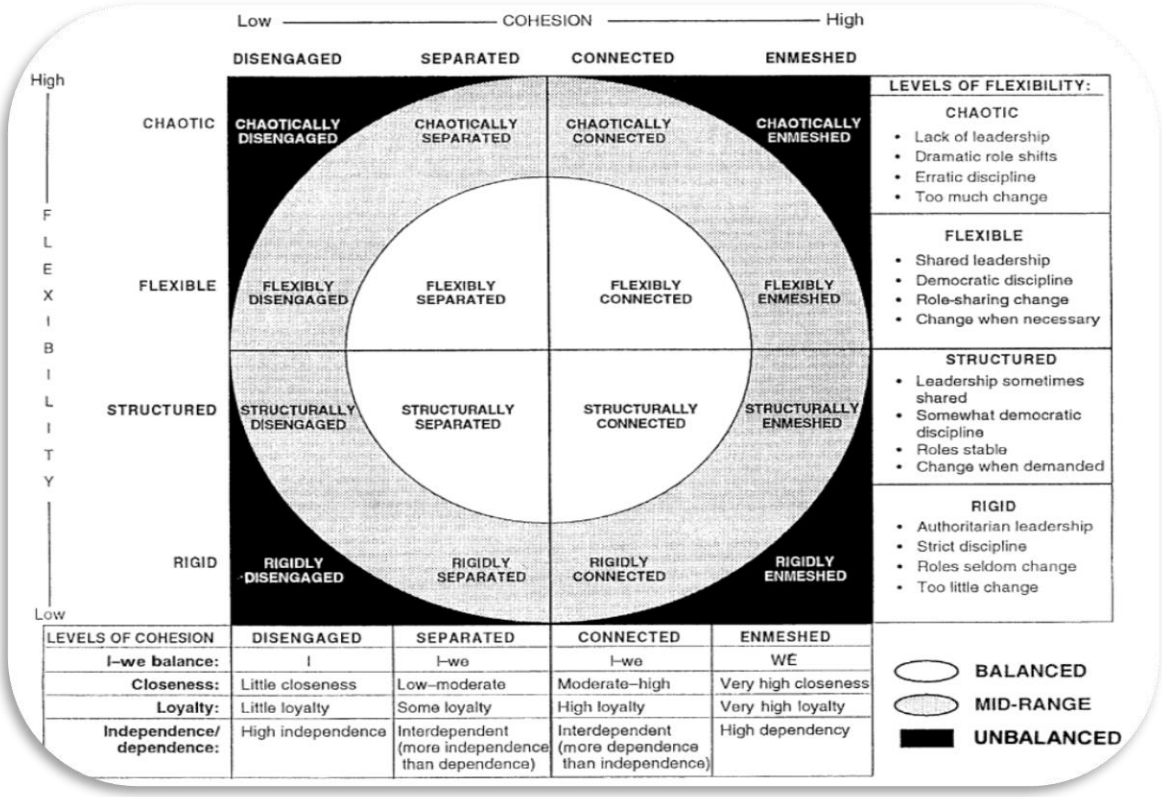
In an effort to gain a holistic view of birth praxis systems, this chapter has examined the extremes of both vulnerability and resilience. However, resilience has been critiqued as a vague notion of quality in system (Hudson & Vissing 2013). A framework that more clearly articulates resilience in terms of both system dynamics and individual experiences can be found in the work of chaos theorists. Taleb's concept of antifragility, systems that improve in response to change, is a particularly relevant intersection (2014).

As a framework, antifragility acknowledges the subjective, experiential aspects of resilience alongside the more tangible dynamics of change at the system level (Taleb 2014). The last chapter focused on the embodied experiences of change, demonstrating that no system is always robust in response to change, and all individuals are capable of a diversity of reactions to change. This chapter, meanwhile, explored the dynamics of change at the system level and illustrated that robusticity can be sustained through balanced relationships between diverse systems. Being able to change these relationships freely is what maintains these systems and, in turn, maintaining these relationships changes systems. It can be appreciated then that the "right care" changes over time and is specific to each context and the "wrong care" is simply a system that does not allow for this level of adaptivity.

A relevant model for evaluating adaptivity in systems is the circumplex model of marital and family systems. As describe in a research study using the model, "The Circumplex Model of Marital and Family Systems was developed in an attempt to bridge the gap that typically exists between research, theory and practice" (Olson 2000:144). This is a goal that aligns well with the

applied approach of critical medical anthropology and the model helps interpret the data in this chapter. It is a diagnostic approach intended to evaluate cohesion, flexibility, and communication within a family system. Integrated together, these three variables can be used to describe the quality, design, and balance of relationships within a system.

Figure 7: The Circumplex Family Model (Olson 2000)




| LEVELS OF COHESION | DISENGAGED | SEPARATED | CONNECTED | ENMESHED |
|---|---|---|---|---|
| I–we balance: | I | I–we | I–we | WE |
| Closeness: | Little closeness | Low–moderate | Moderate–high | Very high closeness |
| Loyalty: | Little loyalty | Some loyalty | High loyalty | Very high loyalty |
| Independence/ dependence: | High independence | Interdependent (more independence than dependence) | Interdependent (more dependence than independence) | High dependency |

This model can be easily adapted to describe the data presented in this chapter. The I-We balance can be understood as the distribution of the same praxis at different scales, such as comparing local and national rates of a health outcome. Closeness can be conceptualized as literal spatial-temporal closeness, being in the same place at the same time. Loyalty, meanwhile, is the level of praxis overlap between different systems. Finally, independence/dependence can be conceptualized as the system's level of autonomy, or the nature of its relationships to other systems. These terms represent parameters for quality in a system, while the model's definitions of flexibility describe design. From the circumplex model, it can be appreciated that robusticity

is achieved as a byproduct of balancing extremes in experiences and, like good communication, it requires constant work to maintain.

By the standards of the circumplex model, none of the systems overviewed in this chapter are balanced. Parents and providers described extremes of both ridged disengagement and chaotic enmeshment, but rarely the in-betweens. However, the success of Plain birth centers in the same environment where non-Plain centers struggle legally and logistically is a tangible indication that some in-betweens are possible. First-hand accounts further suggest that the creation of these systems is spontaneous, but highly facilitated by pre-existing relationships between diverse systems. Although the outcomes of these relationships cannot be predicted at their initiation, each represents an opportunity for change in the future. In this way, the design of a balanced system is like the transition point in a chemical reaction. The products and reactants may change, but the process has the same basic structure. A robust system is a collection of relationships where both parties can shift roles, or reactions to change, without creating net change within the system. Consequently, robust systems harbor enormous potential for future net change, with interactions between systems often determining this shift.

The "edge of chaos" is a related concept that has been applied to healthcare systems and interactions between individuals with different praxis within a system, such as parents and providers (Hudson & Vissing 2013). As authors of one research study explained, health systems operate, "…in a dynamical regime referred to as the 'edge of chaos', where systems adapt and thrive only when there is a fine-tuned balance between periodic and chaotic processes" (Hudson & Vissing 2013:1). Significantly, the authors argued that sustainability should not be the goal of health programs and systems. Instead, systems should fail and change as needed in response to health needs (Hudson & Vissing 2013). It follows that robusticity is not something that can or

should always be achieved in a system, but rather, it is an ephemeral state created and lost at the edge of chaos. These conclusions are aligned with chaos theorists' arguments about change in systems more generally and they hold important implications for models of healthcare delivery (Taleb 2014).

This research highlights that the cost of healthcare is a shared, unavoidable vulnerability that both parents and providers must respond to. However, an altruistic system is also a resilient system. Adapting to members with diverse needs and, in turn, learning from those needs, improves the system for everyone in the face of shared vulnerabilities. A health system design that would fundamentally reorder power relationships in the most stratified environments would not only pay providers for their work, but also patients for their illnesses. The goal of this type of system would not be sustainability, but transformation and the creation of a system that values vulnerability as much as resiliency. In contrast, awarding supplemental funds to centers in communities that demonstrate "financial sustainability" further exacerbates stratification and inequities for communities that do not have these resources. My data suggests one way to de-stratify birth care in America is the establishment of centers that are a balanced relationship between resource-rich and resource-poor communities.

A health center has the potential to be an investment in health praxis autonomy and diversity. In addition to bringing together diverse praxis systems in the same space, these centers could also contribute to de-stratfiying healthcare by providing pathways to training in both local and non-local praxis systems. In an ideal model, the cost of care, including provider salaries, would be covered by government funds and would correlate with the extent of health needs in a community. However, through agreements with local providers, government funded individuals could be replaced over time with locally supported sources of care (as directed by the patients

themselves). This process might be catalyzed by paying patients for seeking government funded care with the caveat that those funds must be spent on local, non-government funded providers that have been chosen by the patient population.

If these centers ever became profitable once staffed by local providers, ideally, any profits would be split between funding a new center in a location chosen by the local patient population and replenishing the funds used for the original investment. The overall outcome would be a self-replicating system that balances forces for change at different scales through a direct governmental investment in individuals' health and an indirect investment in local health systems. This system could also be implemented by non-governmental resource-rich communities. As the circumplex model implies, this proposed system is just one of many possible combinations for delivering less stratified healthcare. The key takeaway is not the details of this specific example, but that any successful balance will require communities to value diversity in vulnerabilities as well as resilience.

In a critique of the relationships between Plain churches and the U.S. legal system, one scholar has used the analogy of a canary and oyster (Kraybill 2003). He argued that, rather than viewing Plain praxis systems as a canary for indicating vulnerabilities in religious freedom, they should instead be viewed as oysters that, when faced with conflicts, produce resilient pearls. This chapter demonstrates, however, that the pearls produced by relationships between Plain and non-Plain Americans do not always extend to every member of a Plain church, let alone those who are not Plain. Likewise, experiences of vulnerability and resilience and are not unique to Plain communities, but Plain communities are often facilitated to sustain a robust balance between the two.

Stratification cages communities and creates a power dynamic where one system can perpetually improve off the vulnerabilities of another. The data in this chapter suggests, however, that there is far more to be gained from supporting the resilience and autonomy of systems. A canary that is given the chance to fly away can still signal a warning and from its freedom even more can be learned. Vulnerabilities should thus not be artificially created, but neither should they be avoided. Relationships between diverse, autonomous praxis systems with different vulnerabilities and resiliencies should be sought out as transformative challenges to both systems. Resource rich systems, where vulnerabilities are more likely to already be known and addressed, have the most to benefit from the establishment of healthcare relationships with underserved and underrepresented communities with unknown vulnerabilities. These relationships should not be seen as monetary investments that are expected to have a profitable return, but rather should be viewed as an investment in ritualization for the future.

## Summary

This chapter compared Plain and non-Plain experiences to elucidate a method for evaluating different praxis systems and improving current birth experiences within the American medical system. In the first section, I detailed how a lack of certain birth options, especially access to birth centers and a choice of provider, were common barriers identified by parents in this study. Through parent and provider accounts, I highlighted how even solutions to these barriers often created additional restrictions on praxis. I noted that sustainable systems are balanced systems, requiring overlap in praxis but also relationships between individuals in different systems.

In the next section I expanded on these observations through accounts that served as a reminder that praxis systems are made up of individuals with their own unique personalities and

preferences. I explored how diverse relationships facilitate the spontaneous creation of new praxis systems as needed, while also helping support the autonomy of existing systems. In my closing analysis I examined the dynamics of health system sustainability and argued that successful examples of healthcare in Plain communities is not unique to these communities. Rather, it is an outcome possible for any community that is given the same opportunities.

What can be learned from Plain praxis is what can be learned from comparing any diverse praxis—a broader understanding of the spectrum of human experiences. The analysis in the last chapter especially emphasized this finding, but in this chapter that observation is grounded by the reality that some experiences are undoubtably preferred over others and some individuals have more power to see that realized. It is my conclusion that praxis systems grant individuals the power to change in expected ways, but the essential balancer of that power is to have those expectations changed through diverse relationships within and between systems.

# CHAPTER 7:

# Conclusion: The Future of Healthcare

When Victor Turner first proposed communitas as an object of study, the world was not ready. As his wife and co-researcher Edith Turner has reflected, "…in the fifties America was reconfirming triumphalist individualism… when the idea of communitas was first broached in the twentieth century, it needed time to flower and develop as an acceptable concept" (2012:6). Nearly forty years later and in the wake of a divisive global pandemic, the world may still not be ready for communitas; but I do believe it is ready for chaos.

In what would come to be a portent example, Nassim Taleb conjectured in 2010 that epidemics are black swan events that can have significant, transformative impacts on human systems. In 2020, that fragility in the face of the unexpected was on full display. Without a shared sense of direction, many found themselves feeling liminal. The deepest divide between families, friends, and neighbors was not whether change was happening, but how to react to that change. As one interviewee in this research predicted though, out of this division came communitas as individuals eventually coalesced around new models for the future that could accommodate their experiences of 2020 and beyond. In 2021, one magazine outlined an improved future for American health systems and declared that "Creating a 'new normal' for American Health Care is a daunting challenge—but also a tremendous opportunity..." (Time Magazine 98). In looking at past examples of these types of efforts though, it is clear that knowing what changes should occur in a system is not enough to ensure transformation.

Over twenty years ago, physicians, midwives, policy experts, and researchers came together as part of a summit exploring the legalization of the practice of midwifery in the United States. Their findings and recommendations were published in a brief titled *The Future of Midwifery* (Dower et al. 1999). In many ways, this dissertation serves as an update to their work. A summary of their recommendations begins with the statement that "Midwives should be

recognized as independent and collaborative practitioners with the rights and responsibilities regarding scope of practice authority and accountability that all independent professionals share" (Dower et al. 1999: 2). Other pertinent recommendations included the integration of physician and midwife care, the standardization of hospital policies in relation to midwives' scope of practice, increasing the diversity of midwives to better reflect the U.S. population, creating accessible direct-entry pathways for individuals from a variety of educational backgrounds, and broadening public health data collection to include detailed midwifery statistics on different communities. The findings in this dissertation illustrate that many of the issues identified by the summit are ongoing and my analysis echoes the conclusions of the authors of the report. However, this indicates a lack of change in the U.S. healthcare system more than prescience on the part of the authors.

As Taleb has cautioned in his work, it is easy to undervalue prevention (2010). Accordingly, it must be recognized that the summit certainly facilitated progress and likely prevented a great deal of harm by creating a reasonable plan for the future. Yet, the question remains how to move from transition to transformation. In the aftermath of COVID-19 and amidst calls to build a better, more resilient healthcare system, research on praxis change has relevance not just for the future of birth—but the future of healthcare in the U.S. more widely.

In this final chapter, I outline a broad picture of the applicability of chaos theory as an interdisciplinary framework. I revisit major findings from the data chapters of this dissertation and refine the theoretical synthesis proposed in chapter two. Throughout this chapter I highlight a need for autonomy in health praxis, the utility of chaos theory for understanding complex experiences, and key takeaways for health system design. I argue that transformation happens

when individuals are free to exist outside systems and, in the uncharted space between, create something new.

*The chaos of birth*

One of the recommendations made by the summit was that there should be widespread acknowledgement of "…the benefits of teaching the midwifery model of care" (Dower et al. 1999:4). As the Midwives Alliance of North America outlines on their website today, that model of care "…is based on the fact that pregnancy and birth are normal life events" (MANA 2020:1). The data in this dissertation illustrates, however, that chaos is also part of normal life. In the first chapter I outlined this finding alongside parents' and provider's accounts of two different experiences of birth managed by two different systems of expertise—obstetrics and midwifery. Conceptually, these models appear complimentary. In practice though, there is often conflict between obstetrics and midwifery over a central tenant of the model of care—the minimization of technological interventions.

Providers interviewed as part of this research offered insights into the source of this conflict, noting that they are often expected to be highly specialized but also able to make choices that require knowledge from outside their praxis systems. They are asked to be in-between but also firmly not. Parents, likewise, described struggling with their birth being labelled as entirely normal or not normal when their actual experiences often involve a mix of both extremes. Furthermore, parents perceived serious risks with each praxis system. For some, interventions were seen as cascading harms, while for others, the possibility of no intervention was catastrophic. These critiques have been noted long before this research.

In 1981, Dr. Howard Brody observed during his family medicine residency a "maximin strategy" employed by obstetrics (Thompson). He described it as a military concept that, when

applied, means preparing for the worst possible outcome even if it has a low chance of occurring (Brody & Thompson 1981). Later research by others would go on to refer to the downside of this strategy as the cascade of intervention (Brody & Sakala 2013). Taleb has noted that these types of studies can be understood as iatrogenic, or the study of harm by the healer (2014). In healthcare this often takes the form of a root cause analysis that looks to the past to find causation—with many confounding factors complicating the findings. Alternatively, prospective research can be done, such as randomized controlled trials. However, this type of research is not always ethically possible. As some individuals in this research observed, the result is a standoff when it comes to evaluating the safety of certain birth praxes. However, chaos theory takes some fundamentally different approaches to risk that may help end this.

Taleb has argued that health care should be approached with empiricism and non-linear responses (2014). He qualified that, by empiricism, he does not mean looking to the past for evidence. Rather, he means a type of empiricism that recognizes benefits are often small and visible while the costs are large, delayed, and hidden. His takeaway from this observation is that one does not need evidence to suspect an intervention is harmful. Taleb's approach ultimately does not pit the maximin strategy against a strategy that minimizes interventions. Instead, he has argued for a spectrum where potentially harmful interventions are employed minimally with healthy individuals, but for those who are already at risk due to their health condition, there is open access to whatever interventions offer even the smallest benefits (Taleb 2014). However, interviews with parents and providers revealed significant confusion about when the transition between these complimentary strategies should happen and who should determine it.

In the first chapter of this dissertation, interventions were often mentioned when parents and providers were asked about the concepts of control and prediction. Interventions were seen

as a fulcrum point between normal and not normal birth, at times helping put the birth process "back in the box" of normal and at other times, pushing it "out of the box". Interview responses indicated these elements of the birth process were experienced differently depending on one's role within it. Through these responses, an intervention can be understood not as control over the birth process, but its own process altogether.

As one OB/GYN observed in chapter one, once begun, there is no way to know for sure what would have happened if an intervention had not been performed. A cesarean-section is not simply an intervention in the birth process then—it is its own birth process that, once started, is governed by its own set of predictions. This chaos can still be experienced as control, however, when it is a choice consciously made. A relevant concept that came up during this work is the model of "shared decision making". This model asserts that, through the process of explaining each of their understandings of the available praxis systems, patients and providers can bridge the gap between their preferred choices to settle on a satisfactory in-between (Elwyn 2001). The issue highlighted by this research though is that, in many cases, the compromise is actually heavily weighted towards care providers' praxis systems.

As Taleb has argued, when dealing with chaos, what is not known becomes much more impactful than what is known. In this space, models that are loose approximations are not useful and can be downright harmful. This is the transition point between different strategies, or praxis systems for birth, and it is a major finding of this research that parental and provider knowledge of what they do not know in this space is critical. According to many parents' accounts their knowledge of what they do not know is often lacking and underdeveloped because they receive minimal ritualization in birth processes. Therefore, an equitable "shared decision" appears

impossible when parents are largely unaware of all the systems available for birth or outright cannot access others.

Interactions between parents and providers has the potential to generate new praxis systems for birth that aligns with the expectations of both parties. However, a new system is an intervention that comes with risks and rewards. In weighting the outcome of this decision towards providers' decision-making, parents are protected from the rewards but not the risks. The result is a fragile system that avoids experiences with chaos instead of seeing them as opportunities for learning. As birth researchers have noted, "A journey that is self-consciously about safety is very different to one that is about exploration and discovery" (as cited in Downe 2004: 53). It is the experience of making a prediction for oneself, taking on the risk of being wrong by choice, that enables change.

It is thus a conclusion of this dissertation that there is no singular "right" praxis system for birth other than one freely chosen by the individual giving birth. As a chaotic process, it is not possible to predict the exact details of a birth experience a priori. Once the process has begun there may certainly be indications of a pattern, but the individuals with the most up-to-date, direct knowledge of the process are the ones experiencing it. Practically, these individuals are the parents, as providers cannot spend 24/7 with the birthing individual at every stage of the process. Parents often have the least indirect knowledge with which to contextualize their experiences though—unlike providers. Although providers can be lacking in exposure to experiences outside their particular praxis system, parents benefit from them having this knowledge. Just as the summit recommend over 20 years ago, it is a major finding of this dissertation that there should be improved exposure to diverse birth praxis systems for both parents and providers. This requires an environment where diverse praxis systems can exist, however.

Individuals must be safe to be in-between systems before they can change systems or create new ones. Therefore, I argue that widespread decriminalization of birth praxis in the U.S. should be pursued so that parents can choose their own interventions in the chaotic process of birth. The existence of Plain out-of-hospital birth praxis—and instances where midwifery systems thrive more generally—demonstrates that having multiple systems for the same transitional experience is not a threat to the overall robusticity of the U.S. healthcare system. In many cases, it can even be a source of resilience. However, for this to be uniformly true, autonomy must be paired with transitional spaces where these diverse systems and individuals have the opportunity to interact. Individuals must also understand and be adept at manipulating their own praxis. The next section will discuss how individuals can learn to recognize patterns in their own praxis and the final section will explore how to use that knowledge to co-create equitable systems.

*The chaos of life*

On a phenomenological level, chaos theory gives structure to nebulous anthropological theories regarding transitional experiences. This framework was particularly helpful in chapter two of this dissertation for exploring individuals' experiences with praxis change in a variety of contexts. As an interdisciplinary framework, chaos theory also creates a conduit between major research on praxis change happening outside anthropology and more esoteric concepts such as ritualization and communitas. One potential area of connection that has relevance to the dissertation can be found in the work of BJ Fogg, the founder of Stanford University's Behavior Design Lab. The principles explained in Fogg's (2020) book, *Tiny Habits: The Small Changes that Change Everything*, help refine some of the most abstract findings of this research into applied methods for changing praxis through ritualization.

Fogg has presented a model that suggests praxis change happens when there is a balance between motivation and ability. Motivation can be understood as largely unchangeable internal experiences, such as sensory reactions, feelings of social cohesion, and expectations for the future. Ability, meanwhile, includes external factors such as resources, time, environment, and relationships with other individuals. Paired together, these effectively create the limits of an individual's praxis system in the present. Praxes that fall outside of these boundaries, such as experiences that an individual has little motivation and ability to embody, are unlikely to occur. An important theory underlying this observation is the concept of "Flow".

Research on flow was begun by the psychologist Mihaly Csikszentmihalyi (2008), a contemporary of Victor and Edith Turner. In 1978, the Turners described flow as:

> "The merging of action and awareness, the crucial component of enjoyment…there is no dualism in flow…flow is made possible by a centering of attention on a limited stimulus field, by means of bracketing, framing, and often a set of rules." (254)

The Turners argued that flow is closely related to communitas and a common experience across human praxis systems (1978). A simple example of Fogg's work and the flow concept together would be the process by which an individual changes the limits of their physical strength. They could begin by lifting a small weight for a short time, ensuring the praxis is within the limits of their current motivations and abilities. The time and weight also serve as the bracketing that makes flow possible, but to maintain flow, the exact numbers must change with one's limits. If the weight is too much or the time too long, the individual may hurt themselves and potentially end up worse off than where they started. If it is too little of a challenge, they may lose interest and not improve at all. Fogg's work also recommends that if exercise itself is a new or difficult to maintain praxis, flow can be created by bracketing the praxis itself with other

praxis that indirectly alters ability and motivation (2020). In essence, creating a transformative rite of passage through the careful choice of praxis that comes before, after, and during.

This process of praxis system creation is a fractal where the same structure is displayed at the level of a "tiny habit" and the overall system that maintains that habit. In learning to manipulate one type of praxis, a generalizable skillset for ritualization is thus acquired. This skillset is honed through repetition, but also games and other forms of play that allow for risk taking and testing the limits of one's own and other's praxis in a controlled environment (Turner 1982). Exposure to others' praxis is especially helpful for deciding what praxis to make part of the past and what to work towards for the future. However, this requires a great deal of self-awareness. An individual's praxis system, the entire spectrum of praxis they have done in the past, are actively doing in the present, and expect to do in the future, can be hard to articulate in full even to oneself. Carl Jung's (1990) research in psychology offers further insight into this process as well as a general roadmap for individuals trying to decide what praxis they should change.

In chapter one of this dissertation I suggested that ritualization is a bidirectional process. In one direction, it is a process of categorization and simplification; in another, it is a process that unpacks these models and returns them to holistic, undifferentiated states. Jung's theory of individuation is relevant to the internal experience of this process. In Jung's view, there is a tension between the subliminal and supraliminal. The subliminal represents aspects of one's own praxes below the threshold of conscious awareness, while the supraliminal are the praxes known to oneself. Individuation is the process by which an individual constructs a supraliminal understanding of themselves out of the subliminal. As there is constant transition between conscious and unconscious praxis, this is a never-ending process of learning. In essence, it is the

process of continually rearticulating one's own praxis system to oneself. It is also a way to confront stratification on the personal level.

The contradictions between one's own expectation for their praxes and their actual praxes is known in Jungian psychology as "the shadow", and it functions as a personal trickster. It is an element of the unknown within oneself that is revealed by making predictions about one's own praxes and having them challenged. Unconscious areas of contradiction are a source of potential dissonance but also transformation. Again, there is fractality in this process. Jung argues that there is a "collective unconscious" that is characterized by archetypical thought patterns, such as the trickster, that are shared across all humanity (1990). Self-discovery, therefore, is a chaotic and universal process for humans.

Anthropologists, notably Claude Lévi-Strauss (1967), have long been fascinated with the possibility of universal, shared structural patterns in human thought. The findings of this research—that individuals' reactions to change fall into three general types of fragile, antifragile, and robust responses—supports this persistent anthropological idea. The theories outlined above further compliment the analyses of the data chapters and present a promising avenue for exploring the dynamics underlying these different reactions. However, it is not the goal of this work to psychoanalyze participants or argue for a singular ontological view of human experiences. Instead, it is the aim of this dissertation to contribute to an interdisciplinary framework for studying diverse ontologies and creating methods for knowledge exchange between them. Thus, a more relevant applied application is efforts to incorporate patients' religion and spirituality into medical practice.

There have been many calls for medicine to consider the impact of religion and spirituality on health, but no unified framework for how (Koenig 2015). Even simple praxis

changes, such as asking about individuals' religious affiliation, have struggled to find widespread adoption (Koenig 2015). This may partly be because asking only about religious affiliation and not specific examples of praxis invites fetishized assumptions about praxis systems as opposed to initiating a process of learning between individuals and their providers. Through pilot work I discovered the complexities of this topic myself, but this question was still asked of participants in this research to illustrate the flaws with this method. Better approaches to this topic are found in medical questionnaires that prompt individuals to identify specific medical praxis that may be impacted by their beliefs, as opposed to simply asking individuals to broadly identify their religious affiliation. However, I argue this question should be reframed even further so that it can be asked of anyone.

There are two separate but related goals to asking about spirituality and religion in the context of medicine that are described in the literature. One is to uncover shadows or tricksters in the form of disconnects between individual expectations for care and the praxis of the present health system. The other goal is to include aspects of spirituality and religion within medical practice itself (Koenig 2015). I believe chaos theory can provide useful inspiration for both aims. Asking questions about what individuals perceive to be unknowable, unpredictable, untestable, or unchangeable is an effective way to find the limits of motivation and ability in any individual's praxis system. Focusing on these more generalizable experiences may also help bridge gaps in understanding between individuals with very different praxis. For example, by providing a way to discuss nebulous concepts such as "faith". Additionally, engaging in shared decision making around experiences of the unknown has the potential to promote equitable ritualization as providers experience their own limits and vulnerabilities alongside their patients.

This method for approaching the provider-patient relationship supposes that shared uncertainty must be reached before shared-decision making is possible. Experiences of chaos are an essential source for that process, serving as unifying spaces to test predictions and build bridges between systems that otherwise have no overlap. As anthropologist and obstetrician Claire Wendland (2007) has argued, one bridge that is needed is between midwives and physicians who see themselves as experts in distinct birth processes. These specialists in normal and not normal birth "preach only to the converted" and "Neither group creates a world the other recognizes as real" (Wendland 2007: 227). Wendland calls for a more balanced view that can "…acknowledge the sometimes perilous unpredictability of birth and simultaneously explore the costs…of technologically mediated 'safety'" (2007: 227). I believe chaos theory can facilitate that balance, and in the next section, I will highlight key takeaways for healthcare system design.

*The chaos of systems*

In addition to inspiring new approaches to studying experiences of change, chaos theory holds implications for applied anthropology. Merrill Singer (1995), in his call for anthropologists to use their theories to create positive change in the world, warned that anthropologists must be careful to not link themselves to any one system of praxis in particular. Rather, he argued for an approach he called "systems challenging praxis", a method by which the fetishisms of all systems and the power relationships that structure change can be unveiled. Research on equity in healthcare system design is one example of this approach, however, there is no clear framework for critically evaluating healthcare system design (Singer 1995).

As this research has reiterated many times, when dealing with chaos, predictions based on a flawed model can be worse than none at all. An example revealed by this research are unaddressed areas of uncertainty in myths about Plain praxis and the design of robust healthcare

systems. In this chapter, I have turned to examples of praxis theory outside of anthropology to illustrate alternative praxis frameworks that incorporate chaos in some form. Project management, like research on habits, is a method driven field that helps illustrate the tangible applications of some of the more abstract findings discussed throughout this dissertation.

Project managers can be thought of as praxis masters that specialize in ritualization; or the creation, maintenance, and alteration of systems. Their methods can be applied by a singular individual to achieve the transformation of their own praxes as well as a collection of individuals attempting to create something together. While the exact details and goals of the systems vary, there are shared dynamics that apply across contexts. Chaos is one of the dynamics project managers must account for in their system designs, and a review of project management theory suggests some very practical areas of focus for future critical applied research in medical anthropology.

It is impossible to design a system that anticipates all obstacles. Thus, one project management method encourages designing a system around what information is known and, rather than predicting chaos, leaving space for it (Goldratt 1997). A simple application of this would be to patient scheduling in a primary care setting. Rather than attempting to design a perfectly scheduled system that covers the whole workday and anticipates delays, project management theory points to an alternative design where only half the workday is scheduled with expected visits and the rest of the time is left open for unexpected needs. The key idea here is that work fills the space it is given. By only allowing half the workday to be scheduled, efficiency during these periods is maximized. Yet, time is still available for unexpected delays and problems that will invariably arise. The efficacy of this design can again be conceived of as an experience of flow.

A robust healthcare system design is one that allows both patients and providers to experience flow. The time a visit takes is just one small area where flow can be disrupted, but project management theory helps identify the widely applicable principles that underly this experience. Within project management, expectations can be understood as a "critical path" whereas the actual praxes that occur are the "critical chain". Comparing these two, the prediction and the outcome, can help identify areas of fragility within a system but also potentially areas for antifragility or improvement (Goldratt 1997). This process is essentially the system level-analogue to ritualization and the concepts discussed in the previous section.

This theory is highly relevant to an analysis of the patient centered medical home model (PCMH). The PCMH describes a critical path where the primary care office and providers there are ideally the starting point for all other sources of healthcare for an individual. However, this research has revealed a critical chain during the birth process where parents are always the starting point for healthcare decisions, and they do not necessarily take an idealized path through the healthcare system. Accordingly, a patient centered model would try to accompany patients on this journey, not try to redirect it. The result would likely be a healthcare model where most care takes place in patients' homes instead of in the workplaces of providers. Of course, this does not mean other models should not be explored.

Project managers are tricksters in a way, attached not to the details of any one system so much as a method of revealing its efficacy, or lack thereof. This dissertation has strived to highlight the lived experience and complexities of occupying this role in a community or institution. Overall, the findings of this dissertation serve as reminder of the humanness of medical systems. While healthcare systems can be discussed in the abstract, their actual functioning is dependent on relationships between individuals with unique motivations and

abilities. Accordingly, there is not one singular system design, but many different balances that reflect the limits of the individuals involved. One of the first steps in creating that balance is recognizing on a personal level what combinations facilitate flow and what break it.

For my father, flow was found within the boundaries of the practice of family medicine. As he wrote in his application to residency training:

> "In today's fractionated sub-specialized medicine, I feel that the family physician plays a vital role in being one of the few care providers who can truly deliver comprehensive care…by being able to provide care for all members of the family, the family physicians has the unique opportunity to see and help meet the special needs of the family and thus help support and preserve the family as an ideal in today's society." (Collected Documents-Residency Application 2021)

The third data chapter of this dissertation supported this view of a fractionated medical system where holistic, integrated praxis must be consciously maintained in the space between specialties. The archetype of the family also proved useful for understanding balanced power relationships and systems more generally. As the family is itself a diverse unit made up of individuals with different praxis, a health system capable of meeting the needs of each member of a family is also well-equipped to care for a singular individual over their lifetime. Likewise, meeting the needs of diverse individuals from different families improves the ability to care for a singular family through all the possible transitions they may encounter. The relationship of the individual to the family is also an appropriate metaphor for other dynamics, such as the relationship between praxis and the praxis system.

An individual within a family has their own system of unique relationships with every other individual in a family, but it is the sum of all of these systems and the interactions between them that collectively determines the dynamics of a family. It follows that experiences of liminality and communitas, or fragile and antifragile praxis, are at once their own unique systems of relationships and part of a larger system of chaos. Relatedly, just as an individual cannot be in

two places at once, a specialist cannot engage in both fragile and antifragile praxis at once. In belonging to a family or a praxis system, however, it is possible to simultaneously benefit from the skills of many. At the same time, the ability to leave a system to create a new one and the opportunity to interact with unrelated systems can also be a source of resilience.

An ideal healthcare system design is not defined by any specific praxis, but rather a structure that brings diverse praxes together and facilitates transition in and out of systems. In this way, the system persists beyond any individual member but is also always a reflection of the current individuals within it. An important facilitator of this is a shared space, such as a hospital. In a hospital, patients and providers come together, but also volunteers and learners from inside and outside the local community. Furthermore, extremes in praxis, such as birth and death, are brought into one space. An issue highlighted by this dissertation though is that this pattern is not repeated at scale in all communities. Instead of healthcare systems serving as the transitional roadways that reflect an individual's journey from life to death in the actual location it occurs, individuals are expected to make pilgrimages to the health systems themselves. A notable exception is when communities are facilitated to create their own local health systems.

Like a tiny habit that changes everything, if diversity can be supported at the smallest scale of a social system in a community— such as the family; in a universal context, such as birth—there is a potential for this to generate fractal transformations across scales. However, when praxis is unfamiliar or oppositional, it can be difficult to recognize and facilitate those structures. This is a major reason why representation is important in systems. My positionality makes it easy for me to relate to the health praxis of Plain individuals despite other differences in the boundaries of our systems. This research highlights that I am not alone in this experience. However, chaos theory asserts that even unpredictable systems have structure and, accordingly,

praxis systems that do not fit other's expectations cannot be dismissed as "chaos" unworthy of autonomy.

For those hoping to transform the American healthcare system, I argue they need not look further than the every-day examples of extremes in praxis in their own local communities. Trickster relationships can be found in any relationship that prompts us to see beyond the individuality of our own experiences to recognize shared patterns in the transitional spaces we universally occupy. From these experiences, a broader skillset of facilitating autonomy and integration can be built. No fixed ideal system can be designed, but flow can still be found in simply attempting the journey between point A and B and accepting that the roads that take us there will have to be continuously remade and—when they no longer reflect the journeys being made—allowed to fail. As one activist for social change has reminded:

> "Death is a natural part of every life cycle. Our bodies will die. Our organizations will die. Our movements will die. Likewise, the specific conditions that oppress our families and communities will also come to an end. Endings are not to blame. Loss is simply an element of change." (Devich-Cyril 2021:74)

My own journey through this research is a testament to this observation, beginning with loss and ending with something that only could have been created in the space left behind. It can be easy to appreciate the value in experiences of communitas. Yet, this research has emphasized that just as much can be learned from its absence. In finding the limits of our own certainty and venturing into the unknown beyond them, it becomes possible to expand the imagination. For the future of healthcare to involve genuine transformation there will likely be grief as we leave behind our current systems of certainties. Out of that loss though, new pathways can open up to areas of uncertainty that can be explored together.

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Figure 7. Olson, David

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## APPENDIX: EXAMPLE INTERVIEW TEMPLATE

| Question Template for Parents |
| --- |
| To start, can you tell me how you learned what you know about birth?<br>-do you consider yourself an expert on birth in any way?<br>-is there someone or something you consider an expert that you seek guidance from about birth?<br>-is there anyone or anything you avoid taking guidance from about birth? |
| Have you ever been in a situation related to birth where you didn't know what to do? How did you react?<br>-Do you think that your experiences with birth have changed you in any way? Explain.<br>-Do you think what happens in birth can be controlled? Explain.<br>-Do you think what happens in birth can be predicted? Explain. |
| Do you know of anything different about birth in Amish, Mennonite, or Brethren communities as compared to other communities? Explain.<br>-Do you suspect or know of any differences in Amish women's birth outcomes when compared to other women?<br>-what about Mennonite or Brethren women?<br>-what about differences in outcome patterns for other communities or among the women you know?<br>-do you think your experiences with Amish, Mennonite, or Brethren communities has changed you in any way? Explain. |
| What places have you personally given birth at?<br>- do you have a preferred place to give birth at, either generally or a specific place? Why?<br>-do you have a preferred care provider, either a specific individual or general category? Why?<br>-in general, do you have preferred individuals to have involved in the birth aside from you and the mother? Why?<br>-do you feel you had lots of options to choose from in the form of different birth locations and care providers?<br>-Are you aware of any differences in birth options if you are in Indiana vs. Michigan? |
| Where there ever any conflicts or barriers that stopped you from choosing your preferred birth options?<br>-Any difficulty becoming pregnant?<br>-hid disagreements between you and your partner, care providers, friends/family or other individuals ever occur?<br>-did financial concerns ever impact your options?<br>-did any specific laws or policies around birth ever impact your options? |
| Overall, what had the most impact on where you ultimately gave birth?<br>-do you feel it was more of a decision that you made on your own, that you made with someone, or that someone or something else made for you? |

| Appendix Cont. |
| --- |
| Have you ever received advice from a care provider on where to give birth?<br>-what is your impression of birth at home vs. in the hospital, and or at a birth center?<br>-do you think mom's receive different advice from care providers about where to give birth? Why?<br>-do you think they should give an Amish woman different advice on birth versus a non-Amish woman? Explain.<br>-how do they identify if someone is Amish? |
| In general, do you know of anyone that makes adjustments for Amish/m/b women's births?<br>-are they treated the same when transferring from home?<br>-Is the payment model the same?<br>-Same laws followed? |
| Have you ever been involved in a transfer at…(location they have experience with)? Describe.<br>-how is the decision to transfer typically made, is it standardized?<br>-did you ever make a plan for transfer before the birth?<br>-In general, how much did you plan for events like transfer before birth? |
| What would you change about how mothers are transferred, if anything?<br>-did you or anyone you know of have a bad transfer experience from…(location they have experience with?<br>-did you or anyone else involved change anything because of that experience?<br>-was anything every changed due to a good transfer experience? |
| Has COVID-19 changed anything about your approach to birth?<br>-Any changes you think you will keep doing? |
| What do you imagine Amish, Mennonite, and Brethren communities will be like in the future?<br>-do you think birth in these communities will have changed? How or how not?<br>-do you think you or others will be impacted if birth in these communities changes? Explain? |
| Can you recommend me any books, resources, or organizations that have impacted how you think about birth?<br>-Anything specifically related to transfer, maybe a protocol or document you can share with me? |
| Is there anyone you know who might have a different perspective that you think would be willing to speak with me? |
| **Demographics** |
| Year of first birth and year of last birth. total number birthed and attended. |
| Do you identify as spiritual or religious?<br>-Are you a member of any religious or secular communities? |
| Age |
| Gender |
| Ethnicity |
| Education and/or certifications obtained over your lifetime?<br>-homeschooled, private, or some other alternative type of schooling? |
| Are you currently employed? |

| Appendix Cont. |
| --- |
| Self-employed?<br>Average household income? |
| Do you have insurance? |
| Do you have a partner or spouse?<br>Anything significantly different about their answers if asked the same questions? |
| Lastly, do you have any feedback for me about this interview or things you wish I'd asked? |