

‘Putting the Baby Back in the Body’

How Midwives Construct Safe Birth at a Birth Centre in Germany

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degree of Doctor of Philosophy at the
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STUDENT DECLARATION FORM

I declare that while registered as a candidate for the research degree, I have not been a registered or enrolled student for another award of the University or other academic or professional institution.

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ABSTRACT

Background: In maternal healthcare, safety is commonly understood as risk prevention. To avoid risk, surveillance technologies are routinely implemented antenatally and at birth, even for women who don't need these. The negative effects that this unnecessary use can have on women and babies is often dismissed. Birth centres offer women with low risk pregnancies the opportunity to receive care that is not heavily reliant on the routine use of surveillance technology. However, despite studies showing that, for low risk women, outcomes of births at birth centres are good for mother and baby, the notion that it is risky to give birth at a birth centre permeates the discourse concerning birthplace. Alternative ways to create safety, perhaps because these are not thoroughly understood, are disregarded. This thesis explores how midwives at a birth centre in Germany, together with their clients, perceive and create safety antenatally and at birth.

Methods: Data collection occurred over a period of nine months. The methods utilized included participant observation throughout the birth centre, conversational interviews, and semi-structured interviews. Interviews were conducted with 17 midwives, 1 external midwife responsible for quality management, 27 women in pregnancy and postnatally, and 1 woman only in the postnatal period. 7 births were also observed during the data collection period.

Findings: Before the pregnant women sensed fetal movements, ultrasound scans reified the pregnancy for almost all of the women, creating a need for regular scans to check up on the baby. After quickening, at antenatal appointments at the birth centre, the midwives used palpation of the abdomen to connect the women with their moving, vital fetus/baby, thereby 'putting the baby back in the body'. Midwife participants believed that this stimulated a deeper level of perception between mother and fetus, seen as an essential aspect of safety. This re-embodiment improved subtle communication between the mother and the baby, with a consequently enhanced capacity in the mother to perceive and manifest emergent symptoms of pathology, before these were detectable through standard surveillance technology.

Conclusion: Midwives believed that embodied communication between mother and baby was crucial for safety during pregnancy, labour and birth. This profound connection between mother and baby, in addition to helping women feel safer, supported the perception that the mother-baby dyad was the unit for the focus of care.

Implications: Re-establishing the mother as the expert on her baby by 'putting the baby back in the body' provides a new critique of the silencing effect of technologically visualized and captured data during pregnancy, labour, and birth. Further, it opens up a new dimension of 'safety' that engages with the somatic, embodied experience of pregnancy and birth, providing an opportunity to extend the kind of care expressed in this study to childbearing women and their babies in other settings in future.

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LIST OF ABBREVIATIONS

Terminology in English	Abbreviation	Terminology German	in	Abbreviation
Statutory Health Insurance	SHI	<i>Gesetzliche Krankenversicherung</i>		GKV
Central Association of Statutory Health Insurance Funds	N/A	<i>Spitzenverband der gesetzlichen Krankenkassen</i>		GKV-Spitzenverband
Training and Examination Regulations for Midwives	N/A	<i>Ausbildungs- und Prüfungsordnung für Hebammen und Entbindungspfleger</i>		HebAPrV
Social Code Book V (can also be translated as Social Security Statute Book)	SCB V	<i>Sozialgesetzbuch V</i>		SGB V
Federal Joint Committee	FJC	<i>Gemeinsamer Bundesausschuss</i>		GB-A
Regional Association of Statutory Health Insurance Physicians	N/A	<i>Kassenärztliche Vereinigung</i>		KV
National Association of Statutory Health Insurance Physicians	N/A	<i>Kassenärztliche Bundesvereinigung</i>		KBV
German Federal Statistical Office	N/A	<i>Statistisches Bundesamt</i>		Destatis
Midwife-led Institutions: The name for Free-Standing Birth Centres in legal documents. I will use the term birth centre in my dissertation and mean by this a midwife-led institution in Germany.	N/A	<i>Hebammengeleitete Einrichtungen; auch Geburtshäuser</i>		HgE

CHAPTER 1. INTRODUCTION

1.0 Chapter Introduction

In this first chapter I will reflect on how I came to choose my thesis topic. I will then present some information on birth centres in Germany and introduce the aim of my study. I will end the introduction with a description of the structure of this thesis.

1.1 Reflections on Choosing a Thesis Topic

I became a state-certified midwife in Berlin, Germany in 2001. After completing my direct-entry training, I chose to work as a salaried midwife in a hospital delivery unit. I had horrendous experiences there—replete with what I considered abuse of labouring women. This included demanding that women get epidurals when they had expressly said that they didn't want them, in part because one of the hospital administrators was bothered by the toning and loud sounds that the labouring women made. Her office was directly below the delivery rooms. In addition, the head obstetrician had the policy that every woman should have an episiotomy. These were carried out by the doctors and were very difficult to contest. I tried and lost on many occasions, as did the women, who frequently shouted loudly that they didn't want one.

After finishing my contract at that first hospital, I began working at another hospital. At the new hospital, I worked with a tightly knit team of doctors and midwives who delivered humane care. Our work was woman-centred; the labouring women had choices; and the caesarean section rate was well under 25% (lower than the German average). After having worked there for several years, personnel was cut throughout the entire hospital. This meant that there were fewer midwives working each shift, while the number of births at the hospital remained the same. It was a common occurrence for me to work shifts in which I had to care for 3 or more labouring women simultaneously, as well as admitting gynaecological patients and being present with them during examinations if the doctor on duty was male. I often left work more than just exhausted; I had the feeling that it was only by chance that the birth outcomes were good. Even so, I hadn't up until that point considered working anywhere else. I couldn't imagine working with a better team.

However, after one of the busiest shifts I had ever experienced, I changed my course completely. On that particular day, I was supposed to work a 10am-6pm shift, when I got

a call at 6:30am from my midwife-colleague, asking me to come in early. She was supposed to work alone until the start of my shift, but there were 7 women in labour in the delivery unit. When I got there, we decided that we would each care for three women; the seventh woman we would care for together. This woman wasn't in active labour, but had insisted on being admitted, too fearful to go back home. We checked in on her on a regular basis, but neither of us could spend more than a few minutes with her. She and her unborn child weren't in any apparent physical danger, but she began to unravel emotionally in the early evening. In the meantime, many of the women had given birth, but more had arrived to take their place.

By the time I was able to spend more time with her, the situation was quite problematic. The late shift midwife arrived in the late afternoon and had also checked in on her. This meant that she had experienced three midwives and two doctors who were going in the room, doing a vaginal exam, and then leaving. In the late evening, she ended up having a caesarean section due to failure to progress (the head of the baby had remained above the pelvic inlet). I called her postpartum midwife two weeks later to find out how she was doing. She told me that the woman was severely traumatized. I wasn't surprised.

For me, this was a fateful moment. I realized that I could no longer work in an environment where, out of necessity, I had to choose which women to neglect. I felt that I was at the mercy of a system that didn't have at its core the best interests of those it should serve. But, most importantly, I didn't feel that I could offer safe care anymore, at least, not at each shift; nor did I feel that women who arrived in labour during busy shifts were getting safe care, which also included feeling safe.

About a year later, I began studying public health. I conducted a grounded theory study in a birth centre for my master's thesis with the title "Making Physiological Birth Possible: Birth at a Free-Standing Birth Center in Germany". I had no idea before conducting research there what birth centre birth was like. My colleagues at the hospital were stunned that I would choose that setting to conduct research. At the hospital where I worked, we occasionally admitted women as transfers from birth centres. The general tone was that birth centres were so unsafe. I spent one month at the birth centre as an intern to get an idea for a research project, and subsequently spent three months there collecting data and observing births. It was an eye- and heart-opening experience. I was a witness to safe care and to good outcomes. In addition to that, I felt safe there as a midwife.

Shortly after earning my master's degree in public health, I began working at a birth centre (in 2011) and have continued to work there in different capacities. Since that first internship at the birth centre, I have had a profound wish to be able to explain to people how risk and safety are constructed at birth in a birth centre. This is how I came to choose my research aim.

1.2 Birth Centre Research in Germany

The opposition to birth centres that I have experienced from antenatal and hospital obstetricians, and as well as from hospital-based midwives, was and still is pervasive. Through my personal contact with midwives at other birth centres in Germany, I've discovered that this is not an isolated phenomenon. This antagonism is a constant in spite of positive research results from quantitative, retrospective studies conducted in Germany (Bauer, Kötter et al., 2011; David, Kraker von Schwarzenfeld et al., 1998; Loytved & Wenzlaff, 2007). In addition, German language journal commentaries from obstetricians have been negative (Arabin, Chervenak et al., 2013; Rath & Schmidt, 2013). Rath & Schmidt wrote in an editorial in a peer-reviewed German language journal that:

In an era in which the safety of mother and child are more than ever the highest priority of obstetric care; and in that the complications during and after birth are no longer accepted by those involved as "destiny"; and safety standards have been demanded; it cannot (continue) that the discussion of the safety of mother and child stops at the respected right of self-determination of the pregnant woman to choose where she gives birth (2013, p. 2).

Moreover, research findings from outside of Germany showing that birth centres are safe for low-risk women have been rejected with the argument that the results are not transferable (Arabin et al., 2013). Nevertheless, regardless of the risk discourse in which birth centres are ensconced, in Germany, a women's right to make autonomous choices—this includes the birthplace for her child—is secured in the German constitution (*Grundgesetz*) (Selow, 2015).

1.3 Key Aims and Original Contribution

The aim of this thesis was to describe the perceptions and creation of risk and safety at a birth centre in Germany from the point of view of the midwives working there and the women registered there. The research to date on safety at free-standing, midwife-led

birth centres has focused on outcome quality as a measure of safety, as opposed to processes and process quality (Alliman & Phillippi, 2016; Birthplace in England Collaborative, Brocklehurst et al., 2011; Stapleton, Osborne et al., 2013; Walsh & Downe, 2004). My doctoral research is meant to fill that gap.

There are several consequences when outcome measures alone are utilized to evaluate quality (Donabedian, 1966/2005). This includes the unsuitability of using adverse outcome measures to the exclusion of other nuances of morbidity, including woman (patient)-defined morbidities and measures of well-being (Smith, Daly et al., 2014). Person-centred care should ideally incorporate the goals of the person, which include personal wishes for care and satisfaction with the outcomes (Snowden, Guise et al., 2018). Furthermore, when outcomes are measured only up until the completion of care, morbidities that surface after treatment are generally not captured, making it difficult to associate these with the care given (Donabedian, 1966/2005). For these reasons, outcome quality is deficient as the sole indicator for safety.

Donabedian's model to assure safety includes, therefore, not just outcome as a measure of quality, but also process and structure. Process includes appropriate decisions for procedures and implementation of care pathways arrived at through person-caretaker agreement. Donabedian explains that process and outcome inform each other: significant outcomes are reached along the way to the final outcome measure, described as "an unbroken chain of antecedent means followed by intermediate ends which are themselves the means to still further ends" (1966/2005, p. 694). Because of this, outcome should not be evaluated without considering the processes that led to the outcome.

Conducting an ethnography in a birth centre provided the opportunity for me to observe, question and discover the processes and approaches to care at the birth centre. While my research aim was broad at the beginning of data collection (open focus), I was able to hone my observations through using the cyclical process of data collection and data analysis characteristic of ethnography (Spradley, 1980). As meaningful issues emerged, my foci became concentrated on the cultural domains and situations that were specifically related to emerging themes.

In order to capture process within the context of risk and safety, as well as assumptions about outcomes, the following questions guided my observations:

- Where and in which circumstances are the terms 'risk' and 'safety' actually used at the birth centre?
- How do midwives and women discuss topics such as 'exclusion criteria', blood pressure, haemoglobin levels, fetal heart rate and other medical parameters associated with risk? What are the interactions (handlings) associated with these medical parameters?
- What are the questions, issues, fears, wishes that women bring up at antenatal examinations? If fears are spoken about, what do midwives do about this, if anything, and how do they talk about them?
- What is going on outside of the birthing room when a woman is in labour at the birth centre? What is the involvement of the other midwives who are present at these times (but not involved with the birth per se)? What are the conversations midwives have amongst themselves inside and outside of the birthing room when a woman is in labour?
- Why do women choose to give birth at the birth centre?
- How did the midwives decide to work at the birth centre?
- Describe 'spoken' care—when women and midwives talk about issues.
- Describe 'action' care—when midwives do (whatever it is they do) to women.
- Describe what women ask midwives to do (action).
- During labour, what is going on inside the room? Where is the midwife spending her time (in the room, outside of the room)? What is she doing? Saying? What is the woman doing? Saying? What is the woman's birth companion doing? Saying? Describe interactions.

1.4 Originality of Research

I searched for articles and dissertations on birth centre birth in Germany in Pubmed, CINAHL, and in a German online dissertation database. To the best of my knowledge, there has been only one qualitative study conducted at a birth centre in Germany (Stone, 2012).

To assure that I was not repeating a study that had been done outside of Germany, I searched Pubmed, CINAHL Complete, Google Scholar, and the British Library EThOS (e-thesis online service) applying the primary search terms: 'midwife'; 'midwifery'; 'risk'; 'safety'; 'birth'; 'ethnography'; 'birth centre'; 'birth center' without any limits on the date or language. In addition to this, I searched the journals Midwifery, Birth, Journal of Midwifery

& Women's Health, British Journal of Midwifery and Social Science & Medicine using the above mentioned search terms without any limits on the date or language.

I didn't find any studies that had the aim of describing the perceptions and creation of risk and safety at a birth centre, however there were two ethnographies that focused on risk and policy surrounding midwifery practice and birthplace (and included a birth centre) (Olson & Couchie, 2013; Scamell, 2011b). Differences between my research and Olson & Couchie's (2013) and Scamell's (2011) are discussed in chapter 13. These studies were chosen for comparison since they were ethnographic studies in birth centres that explored risk. Additional ethnographic research conducted in birth centres over the past 30 years did not focus on risk and safety (Annandale, 1987; Esposito, 1994; Sosa, 2016; Walsh, 2004). Two ethnographies were conducted in England in alongside birth centres (a midwifery led birth unit located in a hospital, but separated from the obstetric-led unit), a model for care that does not yet exist in Germany (McCourt, Rayment et al., 2014; Newburn, 2012).

Utilizing the methodology and methods of ethnography and the theoretical standpoint of symbolic interactionism, this thesis adds to the knowledge base surrounding the work processes that lead to the good maternal and infant outcomes at birth centres. In particular, with this research, I am adding to the knowledge of perceptions and creation of risk and safety at birth centres.

1.5 Structure of the Thesis

Chapters 2 and 3 provide background information. In chapter 2, the German healthcare system is described, as well as the regulation of the practice of midwifery and the concurrent growth of obstetrics in Germany. This chapter ends with the history of midwifery in Germany.

In chapter 3, more context is provided by specifically exploring the history of antenatal care in Germany, as well as providing information about the current German maternity policy guidelines. This chapter ends with the history of birth centres in Germany.

Chapter 4 is separated into three sections. In section one, risk will be examined through a narrative history of risk. Sociological theories of risk will be presented in section two. Lastly, in section three, risk debates surrounding birth will be discussed.

Chapters 5, 6 and 7 present the epistemological foundation and theoretical standpoint behind the choice to use ethnography as the research design. In addition, in chapter 7, the research site and research participants are introduced.

The research findings are presented in chapters 8-12. Chapter 8 takes a close look at the pregnant participants' experience with antenatal care, with a focus on the women's engagement with the results from ultrasound scans and their part in the risk and safety discourse at the birth centre.

Chapter 9 explores risk more deeply and shows how fetal movements made the pregnancy more real for the women. The midwives encouraged them to listen to their body and learn to reflect on physical sensations. This included getting to know the habits, position, and movement patterns of the baby. I observed these processes as putting the woman back in her body, while at the same time putting the baby back inside the woman.

Chapter 10 provides a description of the development of quality management at the birth centre and how this is implemented. Data for this was collected at internal and external quality management audits. This is supplemented with information from in-depth interviews with the midwives responsible for quality management at the birth centre.

Chapter 11 takes a closer look at how the risk discourse was transformed into a discourse of safety. The midwives at the birth centre accomplished this by describing to the parents-to-be the scope of practice of the midwives at the so-called 'risk' appointment, showing that for every problem, there was safe action that the midwives could take.

Chapter 12 provides descriptions of the midwives' concepts of safety, which were in large part also their reasons for choosing to work at the birth centre. For the midwives, listening to women went beyond just listening to what they had say; it also meant paying attention to non-verbal communication, and facilitating women to listen to their own bodies. The women's and midwives' concepts of safety overlapped at the perceived need for connection to create a safe atmosphere and space to give birth.

Chapter 13, the discussion chapter, brings together all of the elements of the thesis, introducing theories of embodiment and somatic awareness. In this chapter, the limitations, strengths and weaknesses are discussed, as well as implications and recommendations for practice.

Chapter 14 is the final chapter and concludes with a reflexive account of the research process and how it changed my practice as a midwife.

CHAPTER 2. BACKGROUND - THE CONTEXT AND LANDSCAPE OF MIDWIFERY IN GERMANY

2.0 Chapter Introduction

I have divided the background into two chapters. The first background chapter is composed of three sections. In section 1 of this first background chapter, I will describe the German healthcare system, since it is the context for the practice of midwifery and the operation of birth centres. In addition, it is a healthcare system that is perhaps unfamiliar to the readers of this dissertation. The German healthcare system is based on the Bismarck Model and is the oldest healthcare system in the world.

In section 2, I will illustrate the intertwining of the regulation of midwifery practice and the growth of physician-led obstetrics in Germany.

In section 3, I will explain the position of midwives in the German healthcare system, including a short history of midwifery training in Germany. The goal of this section is to show that midwifery care has not developed along strategic, deliberate lines, but as a response to the limitations imposed on the care that midwives were permitted to offer.

2.1 Section 1: The German Healthcare System

2.1.1 Foundations of the German Healthcare System

Risk prevention was at the core of the establishment of the German healthcare system. The German healthcare system was founded by Chancellor Otto von Bismarck in 1883 with the initiation of the Social Code Book V (*Sozialgesetzbuch V*) and the establishment of the Statutory Health Insurance Funds (*gesetzliche Krankenversicherung*) (Schölkopf & Pressel, 2014). In 1884, Bismarck introduced accident insurance, and in 1889, an old age pension scheme. The stimulus for the social security system founded by Bismarck was of a political nature (Steffen, 2010). Radical ideas of socialism and communism began to spread at the end of the 19th century throughout Europe, and Bismarck's establishment of a federally regulated safety net to protect workers from so-called "social risks" (*soziale Risiken*) seemed to be a solution to prevent disenchanted workers from rebelling (Zacher, 1985). The health insurance premiums were not based on the health

status of the individual, as is the case in risk-based health insurance programs, and still is not (Busse & Blümel, 2014; Simon, 2010). In the Bismarckian system, payees contribute a scaled percentage of their earnings into the allocation pool, making healthcare affordable for all and creating equal opportunities for the utilization of healthcare services.

The system has been largely decentralized since its beginnings (Steffen, 2010). The legal framework for the social insurance system is regulated on the federal level, while each of the 16 federal states is responsible for the administration and financing of hospitals. The ambulatory sector is regulated through the umbrella organization of the SHI Funds, called the Central Association of Statutory Health Insurance Funds (*GKV Spitzenverband*), together with the National Association of Statutory Health Insurance Physicians (*Kassenärztliche Bundesvereinigung*). These two associations determine the services that are covered. They also negotiate the fees for services, while staying within the ambulatory health services budget (Simon, 2010). Health insurance premiums are paid by citizens and residents of Germany; for salaried individuals, the employer pays a percentage of the premium (Schölkopf et al., 2014). This is in contrast to healthcare systems in countries like the United Kingdom and Sweden, where the healthcare system is financed through a general tax. The keystones of the German healthcare system are based on the principles of solidarity and self-governance. Dependents, as well as those not capable of paying into the Central Reallocation Pool of the SHI Funds (*Gesundheitsfonds*: the direct translation is Health Funds (Busse et al., 2014)), are covered by those who can pay.

The guiding principle and ethical underpinning of the social security system, solidarity (*Solidarität*), is, however, based on notions of risk. According to liberal notions of solidarity, society is understood as a “fabric of mutual dependencies where considerateness, help, and support are necessary; notably the socially disadvantaged should be helped by the socially advantaged” (Borgwardt, Christiansen et al., 2012, p. 284). Those members of society who are more likely to suffer illness or are vulnerable for reasons beyond their control, whether as a result of their work, their socio-economic status, or their gender (pregnant women, mothers), have a right to healthcare services should they need them. Those who carry a lower risk are meant to carry a portion of the costs of those at higher risk through their contributions (Simon, 2010). This Bismarckian model has succeeded throughout all periods of German history since its foundation by Bismarck and can be labelled a method of “social risk management” (Busse et al., 2014; Steffen, 2010, p. 156).

2.1.2 Statutory Health Insurance Funds

The payees, together with the health insurance funds, are organized into associations. These associations have the responsibility to ensure that adequate healthcare provisions are available and implemented equally for everyone. In Germany, approximately 85% of the population is insured with one of the more than 132 statutory health insurance funds (Busse et al., 2014). Approximately 11% are privately insured. Since 2009, it is compulsory for all citizens and permanent residents in Germany to have health insurance. With a population of just under 81 million, only 137,000 people were uninsured in 2011 (Herter-Eschweiler, 2012).

The contribution rate is fixed at 15.5% of the payees monthly income. Salaried workers pay 7.3% of their income, while their employer pays the remaining 8.2% (Busse et al., 2014). Free-lancers, those with a low income, students not recognized as dependents, and social welfare recipients are able to get a monthly rate commensurate with their income or welfare payment. Dependents, such as children, are automatically insured. Since 2004, the SHI Funds have been receiving a tax-financed grant from the federal government to help cover *i.a.* family related costs (maternity benefits, sick pay for parents caring for sick children, fertility treatments) in order to avoid an increase in labour costs (Busse et al., 2014; Schölkopf et al., 2014).

2.1.3 Social Code Book

The Social Code Book (*Sozialgesetzbuch: SGB*) has twelve sections. Those concerning the Statutory Health Insurance (SHI) Funds are predominantly in the Social Code Books IV and V (Simon, 2010). The Social Code Book V, enacted in 1989, regulates healthcare, healthcare professions, including midwifery, and coverage of healthcare by the SHI Funds. Reforms to the Social Code Book V are made by the German Federal Government and are meant to protect citizens by way of controlling medical standards and regulating medical treatment, as well as protecting the practitioner through contracts made with the SHI Funds regulating remuneration (Busse et al., 2014).

Laws directly affecting the practice of midwifery can be found in four different sections of the Social Code Book (Krauspenhaar & Erdmann, 2016). These include laws concerning non-disclosure obligations (*Sozialgeheimnis*), data protection (*Datenschutz*), the permission to transmit personal data to the SHI Funds, as well as quality management regulations for all aspects of midwifery service delivery, exclusion criteria for women

choosing to birth at home or in a birth centre, and a catalogue of remunerable services (Bundesgesetz, 2015; Krauspenhaar et al., 2016). Other laws and regulations affecting midwifery practice that are not in the Social Code Books include *i.a.* the Midwife Law (*Hebammengesetz*), the Training and Examination Regulations (*Ausbildungs- und Prüfungsverordnung*), the Infection Protection Law, the Law on Advertising in the Healthcare System, the Medical Devices Law, the German Drug Law, and the Patients' Rights Law (*ibid*, p. 21).

2.1.4 Clinical Practice Guidelines

In an attempt to guide ambulatory and hospital medical practice in Germany, the German Society of Surgeons founded the Association of the Scientific Medical Societies (AWMR) (*Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften: AWMF*) in 1962. The AWMF identifies as a non-political, non-governmental organization, with the goal of promoting the scientific development of medicine and providing evidence-based recommendations for medical guidelines. In addition, the member scientific associations publish statements critiquing the publications of the FJC (Federal Joint Committee) and recommendations made by the Institute for Quality Assurance and Transparency in the Healthcare System IQTIQ¹, as well as influencing the framework and implementation of medical training in Germany. The AWMF is financed through membership fees and donations from pharmaceutical companies (AWMF, n.p.: online). This is the only association involved in the design of service delivery and creation of medical guidelines in which midwives participate actively. The German Association of Midwifery Science (*Deutsche Gesellschaft für Hebammenwissenschaften: dghwi*) has been a member of the AWMF since May 2015. The AWMF has created guidelines for obstetrics including but not limited to pregnancy induction, premature rupture of the membranes, and indications for referral of a pregnant woman to appropriate care in a level 1, 2, or 3 maternity unit. Physicians in the SHI system or those in hospitals may choose to implement these guidelines, but are not obligated to do so.

2.1.5 Summary of Section 1

In this section, I have outlined the German healthcare system. Regulations pertaining to the scope of practice of midwives can, in part, be found in the Social Code Book V. In

¹ The Institute for Quality Assurance and Transparency in the Healthcare System (*Institut für Qualitätssicherung und Transparenz im Gesundheitswesen: IQTIQ*)

addition, the training and practice of midwives is further regulated by laws particular to midwifery, as well as laws pertaining to medical practitioners, in general.

2.2 Section 2: The History of Obstetrics in Germany

In this section, I will provide an overview of the regulation of midwives and the concurrent growth of the field of physician care and obstetric medicine in Germany.

2.2.1 Regulating Midwifery Practice and Expanding Physician Care

The history of obstetric medicine in Germany is an echo of the history of this medical field in other industrialized countries (Fasbender, 1906/1964), and is also the history of the regulation by the church and state of the practice of midwifery (Frevert, 1982; Metz-Becker, 1999; Rothman, 1982/1984). Metz-Becker saw this process in Germany not as a complete collapse of midwifery care, since midwives continued to care for women at normal births, but as a process of hierarchization (Metz-Becker, 1999). Obstetricians only very gradually secured their authority, in part through the church's and state's regulation of the scope of practice of midwives (Frevert, 1982; Metz-Becker, 1997).

2.2.2 Church Edicts and State Regulations

Church and state jurisdiction over the morals and behaviour of midwives began as early as the 13th century in Germany (Metz-Becker, 1997). One of the earliest indications of regulatory control over the work of midwives was the Trier Synod of 1277, which obliged midwives to perform an emergency baptism in case of the imminent death of mother or child (Metz-Becker, 1997; Scherzer, 1988). At that time, birth, which took place in the home, was a space open only to women. Except for husbands, lay men were customarily not permitted to take part at births, not even in the case of an emergency, and priests were often unable to travel the long distances to the homes of parishioners to conduct a timely baptism, should the mother or child be in danger (Metz-Becker, 1997). Yet, while midwives were entrusted with this significant task, other areas of their practice were called into question. In the 15th century, ordinances were passed prohibiting midwives' use of herbal or medicinal treatments to influence labour and birth (Scherzer, 1988). This became the prerogative of physicians, thereby cutting midwives off from a notable aspect of their practice.

The midwives' customary practice of calling another helper to a birth, should this be necessary, was written into the Regensburg Midwife Code of 1452 and restated in the Frankfurt Code of 1573 (Scherzer, 1988). These codes specified that, should the midwife be confronted with a problem that was beyond her abilities to solve, she was first to call another midwife. Should a second midwife not be able to solve the problem or not be able to come, or the woman or child had already died, then the midwife was to call the barber surgeon or a learned doctor (ibid). This was already the usual practice, even before the codes were enacted, as each death had to be confirmed by a male person who had not been present. The prohibition of the use of instruments by midwives to assist obstructed labour or to remove already deceased fetuses made it imperative to call for assistance (Metz-Becker, 2013). Evidently, the state began to enforce the admittance of men into the birth place. The sociologist William Ray Arney in his book "The Power and Profession of Obstetrics" reports this same development in England in the 16th century, as well (1982).

2.2.3 Appropriating Knowledge and Conducting Smear Campaigns

According to the cultural historian and anthropologist Metz-Becker, physicians learned midwifery skills from midwives, but transmitted this information in print as their own knowledge (1997, p. 28). This was not only a movement recognizable between the fields of midwifery and obstetrics, but also in medical practice in general. It was common practice for physicians to prescribe the same treatments that women had been using in the home for centuries, albeit under the guise of medical authority (Frevert, 1982). Women were traditionally the healers and caretakers in the home and village, but lost this role increasingly in the 18th-19th centuries to male physicians (Frevert, 1982).

Besides the passing of laws benefitting physicians, there was also an increase in ordinances limiting the scope of practice of midwives (Fallwell, 2013). Physicians' guilds were established concurrently with the establishment of obligatory midwifery schools, introducing further regulations concerning who could become a midwife. In addition, a veritable propaganda war was waged by physicians against midwives and, in general, "crone healers" (Frevert, 1982; Metz-Becker, 1997). The battle for authority played out through the propagation of distorted statements proclaiming the perilous danger associated with women healers (Frevert, 1982). A Wurzburger medical professor at the end of the 18th century warned in his written work "Health Catechism for the Country Folk and the Common Man" of the dangerous influence that women brought to the health of family members in their attempts to heal their illnesses. His warning: "As long as

women are not allowed in the town hall, so should they not be allowed to give advice at the sick-bed” (Frevert, 1982, p. 183).

Women offered resistance to the authority of physicians by openly criticizing their work when they visited sick family members. Eventually, the deliberate transfer of authority from women to physicians was aided by emerging female/male roles during the 19th century. These portrayed women as the “ally” of the physician and caretaker of the sick, permitted to do the “dirty work”, but always carrying out the instructions of the physician (Frevert, 1982, p. 190).

While women in general were blamed for the ill health of family and village members, midwives were also widely criticised by physicians. In the most widely disseminated midwifery teaching text of the 16th century, the author and physician E. Rößlin wrote:

I am speaking of all midwives / all of which
Have no knowledge. / That through their
Foolishness / the endangerment of children near and far (ensues). /
And as a result of their lowly efforts /
Have committed murder in their post (Rößlin in Frevert, 1982, p. 28).

Texts such as these had far reaching consequences in the harm they did to midwives (Metz-Becker, 1997). Midwives were seen as incapable of logical thought in regard to the scientific and rational practice of birth assistance as it came to be understood in the evolving field of obstetrics (Fallwell, 2013). The tone of statements condemning the work of midwives remained harsh, as obstetricians took over the field and regulated midwifery training and practice. The physician and midwifery teacher Graff wrote in 1787:

To whom is it still unknown that through the considerable ignorance of midwives, a sizable number of fertile (female) citizens and properly built women, who would have been able to deliver many members to the State, have often, at the first birth, been stifled in the most brutal way possible? Who does not know that each year, a large number of innocent children, even before they are born, have been slain by the unskilled hands of murderous midwives, or, when born, have been mutilated? (Graff in Frevert, 1982, p. 193)

This practice of the condemnation of midwives, which included blaming them for the deaths of babies, continued to be carried out by obstetricians throughout the next centuries and can be found in modern day discourse in Germany concerning births at home and in birth centres (Arabin et al., 2013; Stone, 2012).

Regulations and laws limiting the scope of practice of midwives continued to be enacted throughout the late middle ages and on into the early modern period, encompassing the Enlightenment and the transition into the Industrial Revolution (Scherzer, 1988). These developments intersected with the period in which witch hunting was pervasive, making it of utmost importance to midwives to adhere to laws and regulations to avoid prosecution (Ehrenreich & English, 1973/2010; Horsley, 1979). Each limitation on the practice of midwifery was met with a transposition and transformation of a set of skills into the widening scope of physicians' practice. Nevertheless, throughout history, midwives have maintained their presence as the primary caretakers of labouring women. Metz-Becker writes:

When viewed more closely, one cannot speak of the suppression of midwives. The monopoly of the field of obstetrics by physicians has been limited to the treatment of complications during labour and at birth. The responsibility of midwives up into the 20th century over the much larger domain of "natural birth" has not been earnestly called into question (2013, p. 38).

In the 1980s, the German Association for Gynaecology and Obstetrics made an attempt to revoke the Midwife Law (*Hebammengesetz*), which requires the presence of a midwife at each birth (Wagner, 1995). This effort was unsuccessful. Thus, the custom of having a midwife present during labour and birth was upheld, even in the case of pathology when a physician is present.

2.2.4 Summary of Section 2

In this section I have sketched the intertwined history of the regulation of the practice of midwifery and the growth of physician care. The sociologist William Ray Arney writes that "the profession of obstetrics did not result from technological imperatives or the accumulation of scientific advances. It was a strategic success" (1982, p. 19). Arney asserts that, in order to achieve enduring success, obstetric professionals had to appropriate meaning and usurp power over symbols and sense-making while simultaneously transforming social practice (*ibid*). In this way, the encroachment and eventual appropriation of pregnancy and birth by the field of obstetrics was buttressed by the era in which it was formed (Rothman, 1982/1984). Women were by and large prohibited from studying medicine. Except in rare cases, they were not admitted to universities, and the women who worked as midwives were largely illiterate until the 18th century (Metz-Becker, 1997). Nevertheless, because of legislation, midwives have continued to play a significant role in the care of labouring women.

2.3 Section 3: The History of Midwifery in Germany: Training, Practicing, Regulating

2.3.1 The Training and Regulation of Midwives in Germany

Midwife training in Germany was traditionally an apprenticeship training reserved for women only (Fallwell, 2013; Loytved, 2001). The married and widowed women of a village, often women from the upper classes, selected the midwife, who was usually an older woman with grown children able to come day or night and remain in the labouring woman's home for the duration of labour and birth. Knowledge was passed on through practice, with the apprentice taking on formal duties independently only after the retirement or death of her teacher (Metz-Becker, 2013).

Before the shift from apprenticeship training to theoretical training, midwives had long been under the control of the clergy. While in some villages up until the end of the 18th century, it remained a tradition for the married women in the individual villages to select the midwife at a yearly election (Fallwell, 2013; Stenzel, 2001), the clergy still maintained control over the demeanour and conduct of the midwives (Labouvie, 2001). Furthermore, the significance of the midwife as a law-abiding, devout, and pious person remained of utmost importance up to and throughout the Nazi era, when midwives were used to implement national-socialist eugenic policies (Fallwell, 2013).

The Regensburg Midwife Code, passed in 1452, defined midwifery as a medical trade and gave administrative lawmakers, as opposed to midwives or physicians, the authority over who could practice midwifery (Fallwell, 2013). In addition to this, church ordinances from the 14th-16th centuries regulated midwifery practice: midwives were forbidden to use herbs or healing stones, both considered magic, had to refrain from any type of healing work, and limit their scope of practice to birth (Keyhan-Falsafi, Klinke et al., 1999).

By the beginning of the 16th century, midwives practicing in cities took an oath as a city official and were paid a salary out of city funds. This lasted until the beginning of the 18th century, when midwives working in cities were no longer paid out of city funds and had to set a fee schedule with their clients (Fallwell, 2013). Midwives in cities were, more than ever, subjected to the upholding of cultural mores, which included preventing abortions, notifying authorities of unmarried pregnant women, and demanding the name of the father of the child of unmarried pregnant women during the most painful moments

of childbirth (Keyhan-Falsafi et al., 1999). Keyhan-Falsafi, et al. write that the midwife was not only controlled by city officials to whom she was a subordinate, but also "directly controlled by a jury of honourable women, educated physicians, priests or guild masters" (1999, p. 23). The regulation and supervision of midwives was already splintered in this era, at a time when other professionals, tradesmen, and workers were forming associations and unions.

By the middle of the 18th century, the practice of midwifery came under the control of *accoucheurs* who taught and regulated the techniques of birth assistance. Paradoxically, the *accoucheurs* had to learn birth assistance at births with midwives (Keyhan-Falsafi et al., 1999). From this point on, midwives quickly lost the authority to determine the definition of normal and abnormal births (Fallwell, 2013; Metz-Becker, 2013). Midwives working in villages were subjected to the same regulations as those working in cities (Fallwell, 2013). Although formalized training was less organized than it would eventually become, the list of prohibitive rules for the practice of midwifery was ordered and controlled, the domain of the midwife relegated predominantly to births without complications (Metz-Becker, 2013).

Midwives were required to keep a journal of their interventions at birth, including vaginal exams and artificial rupture of the membranes, and could be prosecuted if this was thought to have been inappropriate or thought to have led to the death of the mother or baby (Siegemundin, 1690/1992). Justine Siegemundin, midwife and author of a book about midwifery and birth assistance in the late 17th century, was charged with criminal activity after it became known that she had artificially ruptured the membranes of a woman in her care, in spite of the birth having a good outcome for mother and baby (Siegemundin, 1690/1992). The way midwives practiced may have been different in actuality than the prescribed and regulated way that they were supposed to work; nevertheless, instruments of control became better organized throughout the centuries, so that the authority over 'who' became a midwife and the channels for inspecting the work of the midwife may have been an aspect of the assurance of how she would work in the private sphere (Fallwell, 2013).

2.3.2 Structured State Training for Midwives

In 1751, the first official midwifery training program in Germany was established at the Charité University Gynaecological and Obstetric Hospital in Berlin (Halle, 2009). With the growth of the field of obstetrics came a controlling body at the state and district level

that sought to regulate not only the practice of midwifery, but the complete contents of midwifery training. Older, experienced midwives were thought to be unteachable; accordingly, the preferred midwifery student was young and impressionable (Loytved, 2001). The training lasted 6 months, after which the young midwife was sent to a village or city where she was unknown. Established midwives were also required to complete a 6 month training program officiated by a physician, but often failed to pass their exams. These women were then barred from offering birth assistance (Loytved, 2001; Stenzel, 2001). This model of training spread uninterruptedly throughout Germany and eventually replaced apprenticeship training by the middle of the 19th century (Labouvie, 2001).

Changes that have been made to the length of midwifery training since its inception have included lengthening the training period from 6 months to 18 months in 1890, from 18 months to two years in 1963, and from two years to three years in 1983 (Fallwell, 2013). In 2008/2009, the University of Applied Sciences in Osnabrück offered the first bachelor studies program for midwifery sciences in Germany, then coupled with the conventional direct-entry midwifery program at the midwifery school, called a dual program of studies. At present, there are 13 colleges offering a bachelor of science program of study in midwifery in Germany. In 2016, a revision was made to the Training and Examination Regulations for Midwives (HebAPrV, 1981/2016), declaring that all direct-entry midwifery programs be affiliated with a college or university and end with the completion of a bachelor's degree by 2020.

With the exception of an 8 to 12 week external training period with a self-employed midwife, the practical training of midwives since the inception and growth of state-regulated midwifery training programs has been located in hospital delivery rooms (HebAPrV, 1981/2016). Part II §4 of the German Midwife Law gives midwives designated jurisdiction over birth, legislating that a midwife be called to every birth, (and prohibiting obstetricians from attending births without a midwife present) (Horschitz & Kurtenbach, 2003).

2.3.3 The German Midwife Law

The German Midwife Law (*Hebammengesetz*) regulates the Training and Examination Regulations (*Ausbildungs- und Prüfungsverordnung für Hebammen*) for students of midwifery, and is the legal foundation for the practice of midwifery (Horschitz et al., 2003). Before the enactment of the National Socialist German Midwife Law on December 21, 1938, midwifery laws were a matter of the individual regional states of Germany (Fallwell,

2013). With the passing of the Midwife Law in 1938, a standardized law for all of Germany was adopted. This law experienced few changes between 1938 and 1985, when it was finally reformed (Horschitz et al., 2003). A significant part of the German Midwife Law from 1938, Section II, §4, the "designated or reserved jurisdiction" (*vorbehaltene Tätigkeit*), is unique to Germany and has remained in force to this day. This paragraph states:

The practice of birth assistance, excluding emergencies, and with the exception of physicians, is reserved only for those who have been awarded the occupational title "midwife" or "male midwife" (*Entbindungspfleger*) as well as service providers as set forth in §1 subparagraph (2). The physician is legally bound to ensure that a midwife is called to each birth (Horschitz et al., 2003).

This aspect of the German Midwife Law has been instrumental in providing a legal basis for midwives providing birth assistance independent of obstetricians at home birth and at birth centres. Contrary to this, midwives working in hospital delivery rooms are expected to follow the obstetric guidelines of the delivery room in which they work; however these often diverge from the objectives of midwives who want to offer a low intervention birth to women (Bryar, 2003; Scheuermann, 1995).

A retrospective study examining the use of interventions from 1984-1999 at births in Lower Saxony revealed that only 6.7% of women who gave birth in hospitals in that region in the study period did so without a medical intervention (Schwarz, 2008). One possible reason for the elevated use of interventions is that practicing midwives in Germany have been thoroughly excluded from the process of the creation of guidelines and directives, as well as decision making in midwifery care in the German Healthcare System (Scheuermann, 1995) (See section 2.1). So, while midwives scope of practice is protected by law, their actual practice is restricted in hospital settings, where 98% of births take place (Loytved, 2014).

Table 1. Components of the German Healthcare System Affecting Midwives and Pregnant Women

Social Code Book V	<ul style="list-style-type: none"> • Regulates the SHI Funds • Regulates midwifery practice • Regulates care during pregnancy, at birth and the postpartum period
§134a of the Social Code Book V	<ul style="list-style-type: none"> • Regulates the midwifery profession • Quality management regulations for self-employed midwives and birth centres
German Midwife Law	<ul style="list-style-type: none"> • Describes the scope of practice of midwives in Germany
Federal Joint Committee	<ul style="list-style-type: none"> • Assesses and stipulates healthcare delivery • Wrote and published the Maternity Policy Guidelines
Statutory Health Insurance Funds	<ul style="list-style-type: none"> • The segment of the social insurance system in Germany that provides healthcare • Creates guidelines by way of reimbursement schedules for medical care practitioners
Maternity Policy Guidelines	<ul style="list-style-type: none"> • Directives for antenatal care
Maternity Protection Laws	<ul style="list-style-type: none"> • Laws safeguarding the health of women during pregnancy and after the birth of their child
Association of the Scientific Medical Societies	<ul style="list-style-type: none"> • Creates medical guidelines, including obstetric guidelines

(Krauspenhaar et al., 2016)

2.3.4 Health Insurance Coverage of Midwifery Services in Germany

Until 2007, midwives in Germany were included administratively within the Regional Association of SHI Physicians and sent their billing statements from each client to this association. They were then reimbursed out of their regional physicians' fund. The Ministry of Health issued the schedule of fees without a cap on volume per midwife, while the fees per service remained relatively stable throughout the years, with rare cost of living increases. Since 2007, following a change in the Social Code Book V, midwives have been responsible for their own administration and must negotiate the contents of

covered services and their fee schedule with the Central Association of the SHI Funds (Sozialgesetzbuch_V, 2007).

The SHI Funds and private health insurance companies in Germany cover the costs of government regulated antenatal care with an obstetrician and/or midwife, as well as additional appointments with a midwife for assistance with pregnancy complaints (called *Hilfe bei Beschwerden* in German) (Gross, Michelsen et al., 2018; Hebammenverband, 2016b). The complete cost of birth in a hospital, birth centre, or at home is also covered by the SHI Funds and private health insurance companies, with the exception of operating costs for birth centres, which are only covered if the birth centre takes part in an externally audited quality management program (Bundesgesetz, 2008). Because of exorbitant increases in the cost of liability insurance for self-employed midwives offering birth assistance at home, in birth centres, or in hospitals as independently contracted midwives (Wessels & Kaczynski, 2011), women are charged an unregulated out-of-pocket fee by these midwives.² In 2002, independent midwives paid 435.85 Euros per year for liability insurance compared to 2016, when rates were increased to 6843 Euros per year, an increase of 1370% (Hebammenverband, 2016a). At present in 2018, the yearly cost for liability insurance for an independent midwife offering birth assistance is over 8000 Euros.

2.3.5 Areas of Employment for Midwives in Germany

After the completion of midwifery training, the midwife can choose how and where she wants to work (Deutscher Hebammenverband, n.p.: online). Midwives can work as salaried employees in a hospital delivery room full or part time. Many midwives who work part time as a salaried employee in a hospital maternity unit also work part time as an independent midwife, offering care during pregnancy and in the postpartum period in the woman's home or in a practice (Gross et al., 2018). In the first 12 weeks after the birth, the SHI Funds cover up to 26 home visits, and, in addition, 8 visits from the 12th week postpartum up until the first birthday of the child (Deutscher Hebammenverband, 2016b: online).

In addition to the above mentioned areas of practice, some hospitals in Germany make contracts with independent midwives who then offer birth assistance in the hospital

² I have this knowledge as a practicing, independent midwife. Besides in internet forums for parents-to-be, I haven't found a discussion of this in the media or in peer-reviewed journals.

setting, without being an actual employee of the hospital (Ott-Gmelch & Schäfer, 2007). These are called in-patient or contract midwives (*Beleghebammen*). These midwives are responsible for procuring their own liability insurance. Their insurance rates are commensurate with those of independent midwives offering birth assistance at home and in birth centres (Deutscher Hebammenverband, 2016a: online). In Bavaria in 2016, 51.1% of the midwives working in hospital delivery rooms were contract midwives (Bölt, 2018).

There is no central registry for midwives in Germany, and thus no exact figure for the number of salaried and independent midwives in Germany in the various aspects of service delivery (Albrecht, Loos et al., 2012). The German Federal Statistical Office (*Statistisches Bundesamt*) listed the number of salaried midwives working in delivery rooms in Germany in 2016 at 9,301, without mention of full or part time employment, while the number of independent contract midwives working in hospitals was 1,776 (Bölt, 2018).

2.3.6 Working as a Home Birth or Birth Centre Midwife in Germany

Independent midwives who offer birth assistance in women's homes or at birth centres do not have to undergo any official training after finishing their program of studies (Stone, 2012). The certificate of completion is the permit to practice. Independent midwives who offer birth assistance may choose to register with the Association of Independent Midwives in Germany or the German Association of Midwives, but are not required to do so. The German Association of Midwives acts as a liaison to the Central Association of SHI Funds, as well as to the only provider of liability insurance for independent midwives offering birth assistance. Therefore, as an independent midwife, membership in the German Association of Midwives saves her the effort of making her own contracts with the various SHI Funds and the liability insurer (Deutscher Hebammenverband, 2016c: online). According to the Central Association of SHI Funds, in 2016 there were 18,032 independent midwives in Germany; 5,248 of these midwives offered birth assistance (GKV, 2017).

2.3.7 Quality Management for Independent Midwives in Germany

The obligation as a healthcare practitioner to practice according to quality management regulations is written in §135a Social Code Book V, while specific guidelines for independent midwives are written in §134a of the Social Code Book V: Attachment 3

(Krauspenhaar et al., 2016). Krauspenhaar & Erdmann (2016), in their book on quality management for midwives, list 32 laws, as well as numerous guidelines, recommendations, and standards that midwives are required to adhere to. Each independent midwife is required to maintain her own quality management files which should include links to the above mentioned laws, guidelines, recommendations, and standards. In addition to this, she must maintain a detailed record of how she structures and provides her delivery of services. Independent midwives not offering birth assistance are expected to conduct an internal audit of their own records once per year, while independent midwives offering home birth must be externally audited every 3 years (ibid). Birth centres must conduct internal audits on a yearly basis, as well as taking part in an external audit every 3 years (Bundesgesetz, 2012).

In 2007 when midwives took over their own administration, a supplementary contract was added into §134a Social Code Book V (Bundesgesetz, 2008). This supplement was an agreement between the German Midwifery Association, the German Association of Independent Midwives, and the Central Association of Statutory Health Insurance Funds regulating the reimbursement of healthcare services offered by independent midwives, including reimbursement of operating costs for birth centres³ by the SHI Funds (Sozialgesetzbuch_V, 2007). This was hailed as a legitimization through the legal system of the work of independent midwives, as well as being a legitimization of births at birth centres and in homes (Bauer et al., 2011). In 2008, an additional supplementary contract was added making an externally audited quality management system a precondition for the reimbursement of the operating costs at birth centres (Bundesgesetz, 2008), but not for the reimbursement of the birth itself. The list of risk-based criteria for selecting which women were allowed to birth at a birth centre are also a part of this list (Bundesgesetz, 2015). (See Appendix 8)

2.3.8 Summary of Chapter 2

In this chapter, I have presented a comprehensive view of the German healthcare system and the multi-faceted history of the regulation of midwifery care and the growth of obstetric medicine in Germany. I have also outlined the history of midwifery in Germany, as well as describing midwife training in Germany and possibilities for practice. Midwifery

³ In Germany, birth centres are all free-standing and midwife-led. The literal translation of the German term *Geburtshaus*, as they are called in German, is birth house. *Geburtshaus* is generally translated as midwife-led birth centre or simply birth centre. For the sake of ease, the term birth centre will be used in lieu of free-standing birth centre and midwife-led birth centre. Further, in the Social Code Book, the term midwife-led institution is used.

care in Germany is highly regulated, with the various laws and guidelines governing practice fragmented throughout the healthcare system, the Social Code Book, and the statutory health insurance funds.

CHAPTER 3. BACKGROUND - MATERNAL HEALTHCARE IN GERMANY: ANTENATAL CARE AND BIRTH

3.0 Chapter Introduction

In chapter 3, I will discuss the change over time in pregnancy from a subjectively felt experience to an objective state of patho-physiology, with the attendant perceived necessity to place the care of pregnant women in medicalized obstetric care. From this followed the institutionalization, development, and growth of antenatal care in Germany corresponding with continuing limitation and regulation of the scope of practice of midwives in the delivery of antenatal care. At the end of the chapter, I will outline the establishment of birth centres in Germany.

3.1 Announcing a Pregnancy: The Lived Experience of Pregnant Women before the Development of Obstetric Medicine

In Germany throughout the early modern period, pregnant women chose the point in time when they informed their family, community, and midwife about their pregnancy, if at all, before the onset of labour (Labouvie, 1998). There was no high certainty clinical test to 'diagnose' an early pregnancy, especially not (as in the 21st century) the first day after missing their menstrual period. Women were left with the decision of how to comprehend and deal with their physical changes and their subjective experience of being with child (ibid). Barbara Duden explains that pregnancy was a lived experience as opposed to a physical state oriented on systematically gathered knowledge about that state (2002). In German, the former is expressed as a verb (*Schwangergehen: Living/moving as a pregnant woman*), while the latter is expressed as a substantive (*Schwangerschaft: Pregnancy*) (ibid, p. 16). Duden describes *Schwangergehen* as an embodied experience—an embodied pregnancy; while *Schwangerschaft* is understood as the objective state of being pregnant (ibid). A pregnancy as a substantive can be diagnosed and seen as an extra stripe on a pregnancy test, seen as an image with a beating heart on a screen, or revealed in the results of a blood test, as is the rule today. This evidence is outside of the woman's body, making her physical sensations of pregnancy secondary to the visual proof for the physician (ibid).

3.2 The Development of Objective Diagnoses of Pregnancy and Loss of Agency

The first texts written by obstetricians in Germany in the 18th century show the reluctance that obstetricians had in believing the symptoms for or against a pregnancy as told by women, since these did not conform to rational, organized, and ordered sets, often appeared contradictory, and left them without what they considered to be absolute, objective proof (Schlumbohm, 2002). While midwives may have had the same difficulties in confirming a pregnancy (Siegemundin, 1690/1992), their involvement with women in the community showed preference to the somatic experience of women and was the basis for their relationships with them (Duden, 2002). With the development of obstetrics as a medical field during the Enlightenment, defining and ordering the somatic experiences of women was depicted as cumbersome; the very personal and individual sensations described by women were thought of as uncertain symptoms of pregnancy (Borkowsky, 1988; Fasbender, 1906/1964; Schlumbohm, 2002). The path of inductive reasoning favoured sensory verification by the observer, making the subjective experiences of the observed less substantial and, hence, of less importance (Hampson, 1968/1990). The acceptable proof of pregnancy came to be understood as the physical palpation of the uterus through bi-manual examination by the physician, vaginal and abdominal, until movements of the foetus could be felt (Schlumbohm, 2002). At that point in the pregnancy, the woman had not yet experienced quickening, her personal experience of fetal movements.

Women's somatic perceptions became secondary in importance to the physically detected indications, objective measurements, and ordered knowledge of the physician (Borkowsky, 1988; Duden, 2002; Rothman, 1987). An example of this is the gradual change in authoritative knowledge related to the diagnosis of pregnancy to calculate a due date, which was considered by obstetricians to be of paramount importance, and, in the meantime, to pregnant women, as well (Fasbender, 1906/1964). German gynaecologist and professor for obstetrics and gynaecology, Heinrich Fasbender, wrote in 1906:

There are two methods for the calculation (of the due date): one which is uncertain and based on the date of the first subjective perceptions of movements of the child, and the more certain one, based on the objective evidence of the typical growth of the pregnant uterus (palpated by the obstetrician) (1906/1964, p. 497).

These were the earliest seeds of a new way of constructing and managing pregnancy and birth that progressively privileged the sensory experiences of the physician over those of the women (Duden, 2002). Today, visual proof of pregnancy far outweighs palpation. An early ultrasound is considered the most accurate method to determine the due date, even more accurate than the "imprecise calculation based on the menstrual cycle" (Schild, Meurer et al., 2008, p. 53), thus further alienating a woman from her lived body and caretakers, obstetricians and midwives alike, from exercising hands-on skills (Rothman, 1987).

3.3 The Growth of Organized Antenatal Care and Limitation of Midwives' Scope of Practice

As the midwife's scope of practice became highly regulated and progressively more limited, her legitimation as an expert of pregnancy deteriorated (Borkowsky, 1988; Frevert, 1982; Schumann, 2009). This development can be followed in Germany from the 18th into the early 20th century. The SHI Funds paid for the treatment of pregnancy related pathology requiring medical care given by an obstetrician, but denied reimbursement to midwives for their appointments with pregnant women to review their medical history before a home birth (Schumann, 2009). District health ministries promoted visits to an obstetrician at the end of pregnancy, so women often sought out physicians in medical care centres when that time came (Baumgärtner & Stahl, 2005; Lindner, 2004). Antenatal care was wholly unregulated on a national level and thought to be the responsibility of the individual German states (Schumann, 2009). This was the case up until the 1960s when obstetricians, together with the SHI Funds and the FJC, created a regimented system of antenatal care that was to take place solely in an obstetrician's office, making it not illegal, but difficult for midwives to include antenatal care in their scope of practice (Zink & Grottian, 1985).

3.4 The Choice for Obstetricians as Antenatal Care Providers

In 1966, antenatal examinations became anchored in the Social Code Book and were thereafter completely covered by the SHI Funds, with the examinations detailed in the maternity policy guidelines (*Mutterschaftsrichtlinien*) (Schumann, 2009). Although the examinations were not and still are not evidence-based (Lüdemann, 2015; Schild et al., 2008; Stahl, 2010), the maternity policy guidelines are considered the official examination plan, and obstetricians are legally bound to follow them (Vetter &

Goeckenjan, 2013), whereas midwives are not, unless specifically detailed in the guidelines (Stahl & Hundley, 2003).

The decline in maternal and infant mortality was thought to correspond with the initiation of regulated antenatal care together with a parallel decrease in home births and increase in hospital births (Schumann, 2009). However, as the sociologist Dr. Marion Schumann has elucidated, maternal mortality in Germany decreased significantly after the advent of birth control and the development of safe abortions (2009). Schumann explains that additional determinants of maternal and infant mortality in post-war Germany up into the 1960s were social and economic inequality. In later years, the general increase in the quality of life for the whole population led to healthier pregnancies and a reduction in premature birth, thus decreasing infant mortality (ibid, p. 94).

The initial debate surrounding the best professional for antenatal care—the obstetrician as the medical specialist versus the midwife as the socially minded caretaker—seemed to fall innately into the hands of obstetricians (Schumann, 2009). One reason for this was that the midwife's scope of practice did not include authorization to draw blood or treat pathology. Obstetricians used blood tests at that time to diagnose a pregnancy, making it impossible for midwives to objectively confirm a pregnancy in the first trimester (Schumann, 2009). Continuing into the 1970s, the examinations that had become routine and expected features of antenatal care, such as ultrasound, were thought to add an aspect of safety to pregnancy and birth planning, and impeded antenatal service delivery offered by midwives, since midwives did not (and still do not) perform diagnostic ultrasound examinations (Baumgärtner et al., 2005; Lüdemann, 2015; Schild et al., 2008). In addition, it is not common knowledge that midwives provide antenatal care. This is thought to be one of the reasons that prevents women from booking antenatal visits with midwives (Lüdemann, 2015; Stahl et al., 2003).

3.5 The German Maternity Policy Guidelines

The maternity policy guidelines are comprised of a series of examinations, many of which must take place in an obstetrician's office. There are 9 points detailed in the guidelines, including:

1. Information is provided about the importance of screening for HIV and other sexually transmitted diseases, getting up to date on immunizations, and proper hygiene in pregnancy.

2. The medical history is taken. The following examinations must also be conducted: measurement of blood pressure, weight control, a urinalysis to assess for protein and glucose, and measurement of haemoglobin.
3. Information is provided concerning genetic risks.
4. The following examinations should be conducted every 4 weeks: weight control, measurement of blood pressure, a urinalysis to assess for protein and glucose, measurement of haemoglobin, fundal height, control of fetal heart activity, and control of the position of the child. In the last two months of pregnancy, examinations should take place every two weeks.⁴
5. During pregnancy, three ultrasound examinations should be conducted in B-Mode between 8 + 0 and 11 + 6 weeks of pregnancy (1st screening), between 18 + 0 and 21 + 6 weeks of pregnancy (2nd screening), and between 28 + 0 and 31 + 6 weeks of pregnancy (3rd screening).
6. Further ultrasound examinations should be offered if a risk has been detected.
7. According to the FJC and the Maternity Policy Guidelines, midwives also have authorization to conduct the examinations listed in (4).
8. Screening for gestational diabetes is undertaken.
9. Discussion of preferred place of birth takes place. (Bundesausschuss, 2016, pp. 4-8)⁵.

At each appointment, the results of the examinations must be entered into the maternal record book (exact translation is mother's passport or *Mutterpass*), which the pregnant woman should carry with her throughout her pregnancy (Tietze, 1978).

⁴ This is the only part of the maternity policy guidelines specifically designated as part of the midwife's scope of practice. See point (7) of these guidelines.

⁵ This is my translation of the original German text.

3.6 From Home to Hospital and the Growth of Birth Centres

As in other European countries, in Germany, the relocation of birth from home to hospital began in the 1920s, at which time 95% of women were still birthing at home, while only 5% gave birth in a hospital. The number of women birthing in hospitals continued to increase until the 1970s, when just over 98% were giving birth in a hospital (Schumann, 2009). Schumann attributes the steady increase in hospital births to the structure of antenatal care, since the SHI Funds' policy sent women to district health ministries as their pregnancies neared term (ibid). At these appointments, obstetricians strongly recommended that expectant mothers give birth in a hospital. Midwives in some German states fought for the right to deliver antenatal care and be paid for the services, but they lost their battles (ibid). The trend in the decline of home births continued, such that, by 1975, the rate of home births was only 1.2%. Since then, fewer than 2% of births have occurred outside a hospital. (See Tables 2 and 3)

Table 2. Births and Site of Birth in Germany: 1952-1975

Year	Births		
	Total	Hospital birth in %	Out-of-hospital birth in %
1952	816,200	47.4	52.6
1955	836,700	53.9	46.1
1960	983,700	66.3	33.7
1965	1,057,200	83.3	16.7
1970	819,200	95.1	4.9
1975	605,200	98.8	1.2

Schumann, 2009, p. 55.

Table 3. Total Births, Hospital Births, and Out-of-Hospital Births in Germany 1999-2015

Year	Total Births in Germany ⁶	Hospital births ⁷	Out-of-hospital births ⁸	Documented out-of-hospital births ⁹
1999	773,862	763,669	10,193 = 1.32%	7.433 = 72,9%
2000	770,053	759,488	10,565 = 1,37%	7.644 = 72,4%
2001	737,360	727,315	10,045 = 1.36%	8.266 = 82,3%
2002	721,950	711,458	10,492 = 1.45%	8.238 = 78,8%
2003	709,420	699,795	9,625 = 1.36%	8.586 = 88,8%
2004	708,350	695,885	12,465 = 1.79%	8.715 = 69,9%
2005	688,282	675,688	12,594 = 1.83%	8.640 = 68,6%
2006	675,144	663,979	11,165 = 1.65%	8.351 = 74,8%
2007	687,233	675,892	11,341 = 1.65%	8.221 = 72,5%
2008	684,926	674,751	10,175 = 1.48%	8.327 = 81,8%
2009	667,464	656,265	11,199 = 1.68%	8.769 = 78,3%
2010	680.413	668.950	11.463 = 1,68%	9.045 = 78,9%
2011	665.072	654.243	10.829 = 1,63%	8.828 = 81,5%
2012	675.944	665.780	10.164 = 1,50%	9.090 = 89,4%
2013	684.625	674.245	10.380 = 1,52%	8.943 = 86,2%
2014	717.524	706.874	10.650 = 1,48%	9.431 = 88,6%
2015	740.362	730.800	9.562 = 1,29%	9.366 = 98,0%

(Loytved, 2016).¹⁰ (Official statistics for out-of-hospital birth are not documented with the Census Bureau in Germany. Therefore, the number of out-of-hospital births is an estimate.)

⁶ Including transfers, twins and stillborn (Source: Stat. Bundesamt in Loytved, 2016)

⁷ Total births in hospitals including transfers, twins and stillborn (Source: Stat. Bundesamt in Loytved, 2016)

⁸ The difference from column 2 and 3 (assuming that births not registered in hospitals were out-of-hospital births). Percentage shows percent of all births in Germany.

⁹ Percent pertains to the inferred number of all documented births outside the hospital.

¹⁰ This is the most recent complete data.

3.7 The History of Birth Centres in Germany

The founder of the birth centre movement in the 1980s in Germany was Hanne Beittel, a registered nurse with labour and delivery experience in the USA (Beittel, 2010). The range of experiences that led Hanne Beittel to establish the first birth centre included having experienced trauma at the birth of her children, during which she was strapped to the bed during labour and birth and injected with unwanted sedatives. In 1980, she wrote her master's thesis in the field of sociology on technocratic birth. After meeting Sheila Kitzinger, Michel Odent, and Kitty Reid in the 1980s, she was profoundly inspired to become a natural birth activist. Beittel translated a birth centre instruction manual that she had received from Kitty Reid into German, and adapted this for the German healthcare system. Her self-help group, "Birth Centre for a Self-Determined Birth," funded by member donations and German government sources, needed 5 years to recruit enough midwives and to raise the necessary funds to open the Birth Centre on Klausnerplatz (*Geburtshaus am Klausnerplatz*). The first birth at the birth centre was on February 25, 1987.¹¹

Beittel, in an interview that I conducted with her while collecting data for my master's thesis, described to me her difficulties in finding midwives to work at the birth centre. She explained that, because the press at the time was calling the midwives at the birth centre baby murderers, the midwives decided that their only recourse to combat this was to use fetal heart monitors. Beittel said that, at the time, these were thought to save the lives of unborn babies. Beittel insisted that a second midwife be called to the birth as a safety measure, since this would encourage the practice of teamwork. She believed that having shared guidelines, upheld through the presence of a colleague, would raise quality standards, thus preventing midwives from 'doing their own thing'.

It wasn't until 1997 that the first edition of guidelines for birth centres was published by the Network to Promote the Idea of Birth Centres in Europe (Leitlinien für Spitzenverband.de, 1997). Members included midwives from Italy, France, Switzerland, Austria, and Germany. The Association of German Midwives and the Association of Self-Employed Midwives in Germany collaborated with the Network to write the guidelines. In the preamble, which references the German Midwifery Laws, they state:

¹¹ My son was their 10-year anniversary baby born on February 25, 1997, born at home because of the large celebration being held at the birth centre that day.

Birth centres (Geburtshäuser) are defined as basic amenities in a healthcare system in which responsibility for oneself, self-determination, and the promotion of health awareness have priority.

They are independent institutions in which, according to legal regulations established in the German Midwife Laws [Revision from June 4, 1985], woman-centred midwifery care is available.

The time before, during, and after the birth is understood as a natural process in a woman's life. This important phase of family-building is accompanied [by midwives] in an atmosphere of trust.

Through interdisciplinary cooperation, birth centres offer comprehensive and individual care to women during pregnancy, birth, and the postpartum period. The on-going, attentive discussion by the midwives and clients with regard to the total spectrum of care provided...provides transparency inside [the birth centre] as well as outside (Leitlinien für Spitzenverband.de, 1997, p. 6).

Birth centres were first included in the Social Code Book V in 2007, thus regulating and guaranteeing remuneration for births in birth centres (Bauer & Kötter, 2013). To qualify for this, birth centres have to maintain standardized internal quality management and external quality assurance, which includes routine internal and external audits (ibid) (See 2.3.7) and submission of perinatal results to Q.U.A.G. (*Gesellschaft für Qualität in der außerklinische Geburtshilfe e.V.*: Association for the Quality of Out-of-Hospital Birth). Q.U.A.G. is the association responsible for the collection and publication of perinatal statistics of births at birth centres and at home, as well as those that began at birth centres and at home but resulted in transfer to a hospital maternity unit (see Table 4).

Table 4. Number of Birth Centres in Germany Between 2009-2016

Year	Number of Birth Centres that submitted perinatal results to Q.U.A.G.	Number of home birth midwives who submitted perinatal results to Q.U.A.G.
2009	133	488
2010	135	469
2011	133	455
2012	128	430
2013	122	408
2014	123	398
2015	116	429
2016	112	473

From the publications at: www.quag.de (Q.U.A.G., 2016)

A birth centre must be midwife-led, but different legal structures are possible. These include: sole proprietorship, private company, partnership company, association, or limited liability company (*GmbH: Gesellschaft mit beschränkter Haftung*) (Bauer et al., 2013). In general, birth centres are either in close proximity to hospitals or located in rural, underserved areas (ibid). The Q.U.A.G. perinatal report showed that 91.6% of births in birth centres in 2015 took place within 10 km of a hospital, while 8.2% took place between 11-30 km from a hospital (Loytved, 2016). The eventual need to transfer to a hospital has been cited by German obstetricians as an untenable risk factor, and one that parents-to-be must be made aware of (Arabin et al., 2013; Berg, Techmann et al., 2010). Therefore, an aspect of quality assurance required by the Central Association of SHI Funds is that the parents-to-be receive information concerning the risks of birthing outside a hospital, comprised of explanations of all the situations that could lead to transfer, as well as being told the distance to the nearest obstetric and neonatal wards and the estimated time for emergency transfer (Bauer et al., 2013). Both parents-to-be must then sign a legally binding document after receiving this information, thus giving their consent to give birth at the birth centre (ibid). Further, birth centres must be networked with at least one hospital, as well as a neonatal hospital if the transfer hospital does not have a neonatal ward. They must also insure cooperation with a laboratory,

obstetricians and paediatricians working within the statutory health insurance system, pharmacies, and emergency and non-emergency patient transport services (ibid).

3.8 Summary of Chapter 3

In this chapter, I have described the transformation of pregnancy from a lived and embodied experience to a medically observable and measurable physical state. As pregnancy began to be perceived as a pathological state and became medicalized, antenatal care became the specialty of obstetric physicians. Care in pregnancy was eventually subsumed by obstetricians, in large part through policies enacted by the SHI Funds. In the 1960s, guidelines were established that clearly favoured obstetricians as antenatal caretakers.

In addition, in this chapter, I have provided background information about birth centres in Germany. In the 1980s, the first birth centre was established in Germany, offering not only a space for women to labour and give birth, but also a space for midwives to offer antenatal care to the women registered there.

CHAPTER 4. LITERATURE REVIEW - EXPLORING THE RISK DISCOURSE

4.0 Chapter Introduction: Risk in the Literature

In this chapter, I will explore concepts of risk chronologically, from the history of probability to the appearance of risk as a subject of debate in sociological and maternity care literature.

My original plan for this chapter was to do a literature review on risk in literature encompassing pregnancy, birth and the immediate postpartum period. I began by conducting a literature search with a librarian at the University of Central Lancashire on two occasions. We searched with various strategies and in multiple search engines, but failed to limit the results enough to make a literature review possible. The reason for this was that the keyword "risk" appeared in a sizeable portion of the literature concerning pregnancy and birth. The librarian recommended to me that I give up on this particular search, and this was then discussed with my dissertation supervisors.

Together with my supervisors, we decided that I should approach my dissertation chapter on risk differently. I instead began my search by looking for the history of risk in the fields of mathematics, sociology, and anthropology. I discovered several authors who have undertaken a narrative history of risk and probability (Bernstein, 1996/1998; Devlin, 2008; Hacking, 1975/2007; Luhmann, 2008; Lupton, 1999/2013), which I will summarize in section 1, as it is important to understanding the risk discourse in general, as well as the risk discourse in pregnancy and childbirth. In section 2, I will give a brief overview of the seminal works on risk and risk society by Ulrich Beck (1992), Anthony Giddens (1991), and Mary Douglas (Douglas, 1992/2003), as well as several essays on governmentality and risk (Burchell, Gordon et al., 1991). In section 3 of this chapter, I will discuss the risk debate surrounding birthplace. Lastly, also in section 3, I will briefly discuss risk management.

4.1 Literature Review: Approach

This chapter represents a broad overview of risk. My literature search was purposive, with the aim to understand the historical foundations and implementations of risk

calculations and to become sensitive to the vocabulary used to express risk. Furthermore, I regarded it as an academic exercise to increase my knowledge about risk theories in the social sciences.

After I was unable to limit the search for studies focused on risk and safety in pregnancy and birth, my literature search was guided by the general questions that I had about risk. The questions that I sought to answer were:

- What are the origins of risk calculations (probability)?
- Where and how are risk calculations used in healthcare?
- What are the foremost theories of risk in sociology?

The historical and sociological texts that I included are seminal texts and represent the key theories in the area of risk.

After completing the narrative of risk, it became clear that one of the predominant subject matters in the risk literature was concerned with morality and risk. The question that arose was:

- What are the moral issues surrounding risk and place of birth?

I subsequently conducted a search for articles regarding birthplace, morality and risk. I was interested in the debate surrounding birthplace as opposed to studies that presented outcomes according to birthplace. Therefore, I only included articles that discussed the moral issues surrounding birthplace and risk and were published in peer reviewed journals. I put no limits on date or language. I searched in CINAHL complete and PsycINFO using the search terms: "place of birth", 'birthplace', 'moral*', 'risk', NOT 'abortion'. Of the 545 citations retrieved in CINAHL, there was one article that discussed moral issues and risk associated with birthplace (McClimans, 2015). Of the three citations retrieved in PsycINFO, none were relevant. I then conducted a search in Pubmed using the same search terms. There were no citations retrieved when using the above search terms, so I reduced the search terms to "place of birth", 'moral*' and 'risk'. Three articles were retrieved, two of which were relevant (de Crespigny & Savulescu, 2014; de Vries, Paruchuri et al., 2013). One relevant article was added after searching through the bibliographies of the relevant articles retrieved from the search (Bogdan-

Lovis & de Vries, 2013). The chapter ends with an explanation of the rational claims of risk management.

4.2 A Narrative History of Risk from the Literature

In this section, I will give a narrative history of risk, from the first calculations of Blaise Pascal to biostatistics. In addition, I will show that concepts of probability and risk were also based on notions of morality, and the effects, negative and positive, that human behaviour could have on events. While numerical expressions give the impression of impartiality, risk and probability are often infused with opinions and emotions.

4.2.1 Towards an Understanding of Risk and Blame

Blaise Pascal's (1623-1662) interactions with gamblers in the 17th century helped lay the groundwork for the mathematical development of probability (Bernstein, 1996/1998; Devlin, 2008). The issue that captivated Pascal was that of calculating probable wins and losses. Pascal's search began with the dilemma of The Unfinished Game, the subject matter of letters exchanged between himself and Pierre de Fermat in the 17th century. The actual problem of The Unfinished Game was how to fairly split up the winnings in a game of coin toss should the game be interrupted before a winner could be determined (Devlin, 2008). The solution to the problem was found by showing all of the possible win/loss outcomes between player A and B, given that player A and player B had each already won a certain number of rounds. Further, the number of rounds that had to be won in order to claim all of the winnings was decided upon before the game began. The solution to The Unfinished Game was that the winnings should be divided according to the percentage of possible wins for each player, given the number of wins at the moment the game was interrupted. In this solution, several principles associated with risk calculations were introduced: all of the possible futures could be calculated; these possible futures were finite; and there was a definitive solution (Devlin, 2008). The discovery that finite future scenarios could be predicted minimized notions of indeterminacy.

The power and authority conferred on God over human destiny in the Middle Ages gave way during the Enlightenment. Thus, the belief that divine law determined all outcomes was challenged (Bernstein, 1996/1998). This was replaced with the notion that human action was associated with and could have an effect on events (Hampson, 1968/1990). The individual came to be regarded as an agent in making beneficial choices, thus

contributing to the appearance of human influence over future events (Bernstein, 1996/1998). An individual, as opposed to a divine being, could be held responsible for a particular outcome, attended by a feeling of regret in the case of loss (Van Loon, 2002). Luhmann calls this “the secular counterpart to a repentance-minimization programme” (2008, p. 11); whereby risk is a replacement for sin and repentance.

An example of this from the 17th century can be found in the first book published by a midwife in Germany, Justine Siegemundin.¹² In her book “The Court Midwife” (*Hof-Wehe Mutter*), the interplay between notions of cause and effect, God's will, and the impact of human action is apparent (1690/1992). Her book, published in 1690, was the first book written by a German midwife published in Germany and the last before the 1990s (Geist & Ahrendt, 1995). Before going to print, “The Court Midwife” was screened by church chaplains in Brandenburg, reviewed by medical academics in Frankfurt, and read by elected political officials in Saxony and Brandenburg in order to secure the necessary religious, medical, and political authorization before going to print (Siegemund & Tatlock, 2005; Siegemundin, 1690/1992). The book is laid out as a question and answer session between Justine and a less experienced midwife, Christina. In the third chapter, Christina asks Justine why some women have more difficult births than others. Justine's answer sheds light on her approved approach from that time.

Justine: The true and fundamental cause lies with Our Dear Lord who has everything in His hands, life and death, fortune and misfortune... Our Dear Lord alone knows best why He often forces the pious to bear crosses and allows the ungodly off more easily. Apart from that, I will tell you of the many natural causes for this that can be averted with sound science (if not entirely, then to a large extent with God's blessing) so that the birth will not become prolonged.

The difficulty passing through cannot be prevented; but the lodging of the fetus (in the womb) as well as the stretching downward of the cervix in front of the child's head, which are often the source, can likely be combatted through science, so that an unduly lengthy labour, and the danger that comes of this, will not be the result, for even all these can become a proper birth...¹³ (Siegemund et al., 2005; Siegemundin, 1690/1992)

¹² There are various spellings of Justine Siegemundin's name. In her own book, she is listed on the cover as "Justine Siegemundin, however she refers to herself in the book as Justina. Lynne Tatlock, the translator of *Hof-Wehe Mutter*, refers to her as Justine throughout her book *The Court Midwife*. For ease, I will refer to her as Justine.

¹³ I have mother-tongue proficiency in German and translated the original text from Justine Siegemund based on my knowledge of German and midwifery. It is in many ways different from Lynne Tatlock's translation, hence this footnote.

Justine's answer illustrates how, as she explains it, a person's knowledge of science can be life-saving, while still deferring to God's blessing as the deciding factor in life and death.

With the growth of mathematics, the undertaking of prognostic projections of potential future outcomes increased (Bernstein, 1996/1998). It wasn't possible to calculate every outcome, but the idea that one could attempt to influence an outcome through a particular behaviour fostered the belief that there was a correct way to act in light of the possibilities to maximize benefit. "The constants of being and the secrets of nature were replaced by distinctions falling within the domain of rational calculation," writes Luhmann (2008, p. 13).

4.2.2 Probability, Partial Knowledge, and Moral Certainty

The challenge of applying mathematical calculations of probabilities to ascertain outcomes other than those in games of chance became the project of Jacob Bernoulli (1654-1705) at the turn of the 18th century (Devlin, 2008). It was his aim to calculate more complex inferences as opposed to purely objective projections of clearly identifiable outcomes, as in throwing heads or tails in a coin toss (Bernstein, 1996/1998). From these inferences, he thought that it would be possible to make an estimation "of the whole from the parts" or to make a generalization from a sample onto the whole (Bernstein, 1996/1998, p. 118). The predicament was that the outcome of individual coin tosses are independent of each other; throwing heads does not have an effect on any of the coin tosses to follow.

However, outside of games of coin toss, outcomes of particular events can be associated in ways that are not always obvious, simple or reliable, and can often only be comprehended *a posteriori* (Campe & Wiggins, 2012). Hence, the calculation of a probability can produce only a "degree of certainty and differs from absolute certainty as the part differs from the whole" (J. Bernoulli in Bernstein, 1996/1998, p. 123). Considering that the level of certainty when looking at only part of a whole is always less than 100%, any decision made as a consequence of partial knowledge must be based in part on pre-existing opinions, which Jacob Bernoulli called "moral certainty" (ibid, p. 123). Bernstein writes that, for Jacob, "moral certainty exists when we are **almost** completely certain" (ibid, p. 123, original emphasis).

Since human behaviour came to be seen as influential on events, the conviction necessary for making a decision that would lead to an acceptable outcome while only having partial knowledge became intertwined with notions of rational decision making and moral action and was, thus, an expression of personal beliefs (Bernstein, 1996/1998; Campe et al., 2012). The mathematician Poisson wrote in the early 19th century that "The probability of an event is the measure of reasonable grounds [la raison] to believe that it takes place" (Poisson in Campe et al., 2012, p. 393). In the face of uncertainty, in spite of mathematical calculations meant to increase rational decision making and reduce doubt, action has a moral character.

Karl Popper's description of the difference between numerical and non-numerical probability and the consequent attribution of meaning given to partially certain predictions further underscores this (1935/2005). With calculations involving numerical probability, such as in the case of computing the probability of throwing a particular number when throwing true dice, the answer is not a matter of inferences, emotions, or preferences, but one of numerical values. This is an example of frequentist probability. However, the information that the answer to this problem gives, how it influences us, and how we speak about it, according to Popper, is:

a measure of the feelings of certainty or uncertainty, of belief or doubt, which may be aroused in us by certain assertions or conjectures (1935/2005, p. 135).

Understanding probability belongs to an understanding of how risk is communicated. Risk becomes an expression of opinion and emotion through probability statements; and effects human emotions before and after the fact (ibid).

4.2.3 Health Statistics: The Language of Healthcare Systems and Public Health Interventions

Risk probabilities have shaped the fields of insurance and healthcare through the use of demographics (Lupton, 1999/2013). The use of demographics became a significant aspect in the understanding of disease and the spread of disease starting in the 17th century and became the foundation for the field of epidemiology (Gordis, 2009). Epidemiology is "the study of the distribution and determinants of health-related states or events in specified populations and the application of this study to control health problems" (Last in Gordis, 2009, p. 3). One of the earliest notable collectors of demographic data was the English tradesman John Graunt. Graunt collected information

on births and deaths in the early 17th century and calculated life expectancy tables in an attempt to discover if the population in London was increasing or decreasing (ibid). He differentiated between acute and chronic causes of death, as well as variations in health status according to gender, dwelling, time of year, and age. The publications and work he left behind were forgotten for almost 140 years before being revitalized by the statistician William Farr in 1800 (Dicker, Coronado et al., 2012).

Some of the first discoveries in the field of medicine attributed to epidemiological ways of thinking about disease were Ignaz Semmelweis's discovery in the 19th century of the cause for consistently high rates of child-bed fever in the maternity unit where he worked; Edward Jenner's discovery of a vaccination against smallpox in the 18th century; and John Snow's discovery of the correlation between unsanitary water and cholera in the mid-19th century (Gordis, 2009). Since it is thought that causation of disease can never actually be observed, determinants that influence patterns and frequency of disease when no one causal factor can be singled out is the aim of epidemiological studies—an association or link between an exposure and a disease is investigated (ibid).

Biostatistics is one of the tools used in epidemiology to discover frequency of diseases (prevalence and incidence), which are subsequently translated into probabilities (including absolute risk, odds ratios, relative risk, and attributable risk) (Rothman, 2002). Statistical measures of risk are utilized to identify patients at risk for an unwanted condition with the aim of choosing the best type of preventative treatment for him or her. Odds ratios, relative risk, and absolute risk are also used to inform patients/clients of possibilities to screen for diseases, to decide which medication to use when an illness needs to be treated, and, in the case of maternal healthcare, to define outcomes associated with different modes of birth and places of birth. In addition, health statistics make it possible to manage healthcare delivery, to plan healthcare services including the number of beds necessary in a hospital, to take action during epidemics, and to single out vulnerable and underserved populations (Gordis, 2009).

However, risk statistics can be utilized, intentionally and unintentionally, to influence or coerce patients and clients of healthcare services to make decisions that healthcare deliverers and insurance companies believe to be better (Declercq, 2013; Gigerenzer, 2008; Lupton, 1999/2013). The results of studies expressed in terms of absolute risk, relative risk, and odds ratios are complicated and difficult to comprehend for those not familiar with the calculations (Declercq, 2013; Douglas, 1985; Gigerenzer, 2008). Lupton writes that epidemiology, a tool of public health governance, is just as grounded in socio-

cultural frameworks as every other scientific field (1999/2013). One reason for this is that the gathering of population data is collected in terms of categories, and these categories are difficult to define without intrinsic bias (Douglas, 1985). Hence, while biostatistics and their use in epidemiology has brought significant positive improvements to the health of populations, this may come at the cost of individualized healthcare (Lupton, 1999/2013).

4.2.4 Summary of Section

In this section, I have described the mathematical development of probability and its use to calculate risk from Blaise Pascal's initial work on probability calculations. The laws of probability over time became the tool for risk management (Bernstein, 1996/1998), which incorporate calculations of frequencies and the normal distribution (Gaussian distribution) to assess risk (Hacking, 1975/2007). Probability calculations have entered into healthcare predominantly as a method to calculate individual risk, however these risks are based on surveys of broad subpopulations and often have the effect of depersonalizing medical care when the subpopulation is not a good representative of the individual. In addition, sociologists believe that risk calculations and risk categories can be used to help, but also to influence, users of healthcare services in their decision making processes.

4.3 Section 2: Risk and Sociological Theories

In this section I will describe three approaches to risk proposed by sociologists and anthropologists. I will begin with Ulrich Beck and Anthony Giddens, continue with Mary Douglas and social constructionist views of risk, and finish the section with the governmentality approach to risk.

4.3.1 Sociological Theories of Risk

Sociological theories of risk have been grouped into five different categories by risk theorist Jens Zinn (2004). These include: risk society, cultural approach, systems theory, governmentality and edgework (ibid, pgs. 198-199). Other authors have suggested either more abbreviated or more complex outlines (Fox, 1999; Lupton, 1999/2013; Renn, 1992). For example, Nick Fox's model includes the realist approach of Beck and the culturist approach of Douglas, to which he adds his own postmodern approach (1999).

A far more complex classification of approaches to risk, that of Ortwin Renn (1992), includes the techno-scientific approaches of epidemiology, insurance, economics, and psychology. The following table shows the sociological approaches to risk according to Zinn (2004). (See Table 5)

Table 5. Sociological Approaches to Risk

Approaches to risk research	Theoretical standpoint	Major concept(s)	Main Authors
Risk society	Realist constructivism; Structuration theory	<ul style="list-style-type: none"> • Era of second modernity: the modernization of modernity. • The future is colonised with potential risks. • Those who hold the power to define risk have authority over risk. 	Ulrich Beck Anthony Giddens
Cultural theory or cultural approach	Social constructionism	<ul style="list-style-type: none"> • Risk perception is a social phenomenon. • Weak constructionist: risks are objective, but also culturally defined and mediated. • Strong constructionist: risk is not an inherent property; it is always a social construction. 	Mary Douglas Aaron Wildavsky Deborah Lupton
Systems theory	Radical constructivism	<ul style="list-style-type: none"> • Individual motives are often inaccessible, while socially institutionalized discourse has 'vocabularies of motive' (Mills, 1940 in Japp, 2014). • Thinking and acting are separate. • Differentiation between risk (system) and danger (environment). • Events or acts are structural components of social systems and not effects of them. 	Niklas Luhmann Stephen Hilgartner

Approaches to risk research	Theoretical standpoint	Major concept(s)	Main Authors
Governmentality	Critical inquiry	<ul style="list-style-type: none"> • Analyses and describes how normality and deviation are defined and how and where this occurs discursively and in practice. • While subjects become generalized, responsibility becomes individualized. • Sets norms for behaviour; expects the individual to discipline himself and behave morally. • Risk is always calculable. If it isn't calculable, then it isn't a risk. 	Michel Foucault François Ewald Ian Hacking Mitchell Dean Patrick O'Malley
Edgework	Phenomenology	<ul style="list-style-type: none"> • Research grounded in lived experience. • Risk is a form of escape from alienation. • Learned self-management (governmentality) gives actors the ability to manage their own risks. They discover the liberating effects of taking risks. 	Stephan Lyng

(Beck, 1992; Burchell et al., 1991; Douglas, 1992/2003; Ewald, 1991; Giddens, 1990; Japp, 2014; Luhmann, 2008; Lyng, 2009; Zinn, 2009).

In this section, I will discuss three of the sociological approaches to risk analogous to Lupton's outline in her seminal work "Risk". This includes the risk society, the cultural approach, and governmentality (Lupton, 1999/2013).

4.3.2 Risk Society: Beck and Giddens

Ulrich Beck and Anthony Giddens introduced the theory of the 'risk society' in the 1990s independently of one another (Lupton, 1999/2013). At the time, the detrimental effects of acid rain on German forests and the aftermath of the Chernobyl nuclear power plant disaster awakened distrust in the ability of the institutions that had led to progress, and the governments that based policies on them, to keep humankind safe. Beck's view of the risk society is a macro look at the role and interplay of institutions in creating and managing risk scenarios (Beck, 1992). Beck, as a realist, grasps risk as real, while acknowledging from a constructivist perspective that those who have knowledge and

power define risk (Zinn, 2009). For Beck, there are calculable and incalculable risks. Further, Beck distinguishes between risk and danger in claiming that:

The point of this formulation is to distinguish between decision-dependent risks that can in principle be brought under control, and dangers that have escaped or neutralized the control requirements of industrial society (Beck, 1999: 31).

While Beck focuses on disparities between risks as man-made constructs and danger as an attribute of nature, Giddens pits risk against trust (Giddens, 1990).

According to Giddens, the pervasiveness of risk increased with the changes to the modes of social life in modernity (1990). Modernity encompasses four key institutions: capitalism, industrialism (development of the created environment), surveillance (control of information and social supervision), and military power (control of the means of violence) (1990, pp. 55-63). Giddens sees these four institutions as having equally contributed to shaping modernity. Social relations in modern society, in part structured by these institutions, have increasingly entered into a *modus operandi* whereby space and place have become separated. Communication between these often occurs in what Giddens calls:

'empty space'... by fostering relations between 'absent' others, locationally distant from any given situation of face-to-face interaction (1990, p. 18).

Consequent depersonalization and disembeddedness has occurred throughout modernity through the use of symbolic tokens such as money, which abstracts that which it represents. Depersonalization is also evident in the growth of expert systems, which demand a faceless level of trust. Giddens gives the example of trusting the competency of anonymous architects and putting faith in them without personally being proficient in their skillset (*ibid*, p. 27). In fact, writes Giddens:

When I go out of the house and get into a car, I enter settings which are thoroughly permeated by expert knowledge - involving the design and construction of automobiles, highways, intersections, traffic lights, and many other items (*ibid*, p. 28).

The individual must put his/her faith in these expert systems in every aspect of life. Hence, the relationship of the individual to experts and institutions is not based on face-

to-face trust, but on an acceptance of the authority vested in the institution or expert by society (Giddens, 1991).

The theories of Beck and Giddens overlap in several areas. One of these describes how, in the risk society, the individual becomes wary of the capability of institutions to keep individuals and populations safe, since industrialization and scientization have created dangers that they cannot control (Beck, 1992; Giddens, 1991). Although humans have benefitted from scientific advancements, scientists are not able to predict all of the negative side effects that have come about through this progress (ibid). The individual is forced to make decisions for him/herself, a difficult undertaking, since modern day risks, such as nuclear fallout or contaminated water, are not detectable through the human senses (Beck, 1999). When risk and danger cannot be perceived through seeing, hearing, smelling or touching, then the individual must rely on technologies and experts to relay this information accurately.

The desire to be free from dependence on expert systems that calculate and control risks comes into conflict with the individual's desire to alleviate uncertainty. The probabilities of various imaginable scenarios are thought out and projected into the future, compelling the individual to choose that which fits best with his/her self-structured, non-traditional life (Giddens, 1991). Since traditional societies crumbled in the wake of industrialization, the reflexive project of the self replaces the stable roles that traditional life had to offer (Giddens, 1991). Anxieties abound, as the possibility to not only inhabit various futures (at least in the imagination), but also to calculate the probability of these and rule out those which are least likely, structures daily life (Giddens, 1991).

4.3.3 Cultural Theory and Risk

Before discussing Mary Douglas's cultural theory of risk, I will discuss social constructionism and risk. Social constructionist theories of risk exist on a spectrum from weak constructionist to strong constructionist approaches (This will be discussed in further detail in chapter 5). The foci of analysis are so-called "risk objects": things, activities or situations to which harmful consequences are conceptually attached" (Hilgartner (1992) in Lupton, 1999/2013, p. 30). Weak social constructionists consider hazards and dangers that inform risk calculations to be objective, while the manner in which they are understood and mediated is contingent upon society and culture (Lupton, 1999/2013). Strong constructionists understand all risks as socially mediated, and are often criticized for their relativism, since they ignore what positivists consider to be an

undeniable, objective reality where risks really exist (Lupton, 1999/2013). At the far end of strong social constructionism is François Ewald, who wrote in his essay "Insurance and Risk" in *The Foucault Effect: Studies in Governmentality* that:

Nothing is a risk in itself; there is no risk in reality. But on the other hand, anything **can** be a risk; it all depends on how one analyses the danger, considers the event (1991, pp. 199, original emphasis).

Whether weak or strong, in social constructionism, the construction of knowledge and meaning making occurs between humans in a social context. The question is not whether particular notions or objects exist, but how these are seen, defined, politicized, and given meaning and function (Crotty, 1998). Deborah Lupton writes:

We can only ever know and experience risks through our specific location in a particular socio-cultural context. This approach to risk highlights the importance of understanding the embeddedness of understandings and perceptions of risk, and emphasizes that these understandings and perceptions often differ between actors who are located in different contexts and thus bring competing logics to bear upon risk (1999, p. 30).

4.3.4 Mary Douglas: Purity, Danger, and Risk

Mary Douglas was one of the first anthropologists to write about risk (Lupton, 1999/2013). In one of her earlier publications, *Purity and Danger* (Douglas, 1966/2007), she explains how a culture comes to define particular elements as dangerous. She describes society as having a form:

It (society) has external boundaries, margins, internal structure. Its outlines contain power to reward conformity and repulse attack (ibid, p. 141).

The function of defining otherness is to enable the recognition of particular elements as dangerous or harmful (Lupton, 1999/2013). This is important to the cohesiveness of a culture, since otherness creates disorder and threatens the stability of institutions and culture (Douglas, 1966/2007). Douglas gives the example of danger in the guise of pollution—pollution being that which is considered unclean. Pollution is not always understood as an intentional threat from an individual, but must nevertheless be controlled through modes of disapproval to hinder further transgressions and the committing of sin. Paramount to Douglas is that risk is always perceived by the individual

through the lens of society. Her contention is not with the issue of the reality of risks per se, but with the politicization of risks. One must not expect that dangers will be equally treated throughout the world, whether one speaks of a primitive or a modern culture, since "risk perception is a social phenomenon" and not an individual phenomenon or a generalizable system (Douglas, 1985, p. 31).

4.3.5 Governmentality and Risk

The third approach to risk that I will discuss is Foucault's concept of governmentality. In this approach, risk and the causal path to harm must be apportioned in such a way that they can be overseen. This includes the surveillance and governing of the conduct of individuals, collectives, and populations (Dean, 1998). The sociologist Mitchell Dean writes that:

The significance of risk does not lie with risk itself but with what risk gets attached to. ... In the governmental form, risk is calculative rationality tethered to techniques for the regulation, management and shaping of human conduct in the service of specific ends. (1998, p. 25).

Technologies to manage risk and govern individuals include but are not limited to health screening programs, social welfare case-management, social insurance, and crime prevention. Risk becomes a knowledge category that is the rational creation of calculations and thus not the consequence of an intuitive or sensory process (ibid), a feature of risk which is echoed in much of the risk literature (Beck, 1999; Douglas & Wildavsky, 1982; Lupton, 1999/2013).

Individuals are expected to act rationally and exhibit self-discipline and moral behaviour (Lupton, 1999/2013; Rothman, 2016; Ruhl, 1999) "in the name of ethical ideals, political ends, economic necessity, and social goals" (Dean, 1998, p. 26). Ruhl gives an example of this in her paper "Liberal governance and prenatal care: risk and regulation in pregnancy" (1999). She writes that, in pregnancy, risk discourses are geared towards creating the appearance that autonomy and personal choices made by the pregnant woman are to be respected. However, at the same time, these discourses are replete with mechanisms fostering self-blame for transgressions. The punishment is the harm that the woman does to her fetus through her misconduct (ibid). Consequently, behaving responsibly is akin to behaving morally, and people are expected not only to be self-disciplined in health matters for themselves, but also for their loved ones. There is an age-old saying in German that pregnancy is a time of '*guter Hoffnung*' (being very

hopeful), a time of expectation and uncertainty. Pregnancy has always been a time of uncertainty, but even uncertainty has lost its excitement and been co-opted and organized into the risk discourse (Lupton & Tulloch, 2002), where "it becomes an object of management, regardless of the extent of information about probability" (Power, 2007, p. 6).

4.3.6 Surveillance and Risk: Individuals and Environments

When risk gets attached to bodies, then individuals enter into a relationship with surveillance technologies (Lupton, 1999/2013). Risk surveillance is dependent upon various techniques, not the least of which are calculations exhibiting norm values and deviations (Castel, 1991). Beginning in the twentieth century, human nature was replaced with 'normal people' through the use of statistical calculations of frequencies and the normal distribution (Hacking, 1990). Hacking writes that "society became statistical" (1990, p. 1). Whereas in primitive cultures, according to Douglas (1966/2007), traditional norms marked the boundaries between pure and impure or normal and dangerous behaviour, what society gained with the calculability of frequencies and inferences are numerical boundaries between normal and deviant in every area of life, especially in definitions used in health systems (Dean, 1998). According to Ruhl (1999) "Risk is fundamentally a way of making the implicit moral content of 'neutral statistics' explicit" (Ruhl, 1999, p. 99).

Calculations are used to create risk categories and these categories are in turn applied to the individual. Through the help and advice of experts, risk is transformed from something out there into a quality of the individual. The individual in turn discovers these risks in his behaviour, his genetics, his community, or in his surroundings and is expected to police himself and those around him, as well as to alter his environment (Backett, Davies et al., 1984; Lupton, 1999/2013). Lupton writes that:

In late modern societies, not to engage in risk-avoiding behaviour is considered 'a failure of the self to take care of itself - a form of irrationality, or simply a lack of skilfulness' (Greco, 1993, p. 361 in Lupton, 1999/2013, p. 122).

When a person is given the label 'at risk', it is not explicit that the source of the definition belongs to a fragmented part of the population to which the individual may not belong. Castel writes that:

The notion of a subject or concrete individual [dissolves], and put in its place [is] a combinatory of factors, the factors of risk. ... One does not start from a conflictual situation observable in experience, rather one deduces it from a general definition of the dangers one wishes to prevent (1991, pp. 281, 288).

The individual becomes the willing subject of—and even initiator of—interventions, hoping to mitigate risk.

4.3.7 Surveillance Medicine and De-individualization

David Armstrong is accredited with coining the term ‘surveillance medicine’ (Bauer & Olsén, 2009, p. 116). The goal of surveillance medicine is to prevent harm to individuals and populations through calculating probabilities of risk. These predictions are then used to justify interventions so that potentially harmful future diseases and unwanted outcomes can be avoided. Surveillance medicine has at its core the notion of health norms and the normal individual (Lupton, 1999/2013). Smythe writes that “Every assessment of ‘safety’ is an objectification which translates a situation into a number, a comparative measure, a depersonalized report” (2010, p. 1475). Hence, through circuitous logic, surveillance technologies create and reify what is defined as normal and safe, and use technological means to assure that these norms are met. Scamell discovered that risk surveillance during labour, rather than supporting normality, fostered uncertainty because midwives used technology to search for abnormality (2011b).

Further, through surveillance medicine, write Bauer & Olsén, “the clinical gaze is delocalized,” making the gaze “not as coherently tied to a face-to-face setting as before” (2009, pp. 116-117). In that technology mediates experiences, it detaches the observer from an otherwise direct experience of a phenomena (Ihde, 1990). Technology thus depersonalizes and abstracts, privileging technologically mediated representations and evaluations based on these representations (Lupton, 1999/2013).

When safety is defined solely through the availability and use of surveillance technologies, there is a danger that other definitions of safety may be disregarded. Olson & Couchie found in their study in one First Nation community in Canada that, for their study participants, giving birth in their community was culturally safer than being flown to a tertiary hospital in an urban setting (2013). By the same token, Smythe defines safety as a felt quality, only knowable by the labouring woman (2010). She adds to this that the act of delivering safe care is not enough to define the situation as safe, since the woman

may not be feeling safe: she may be harbouring 'unsafety', which is not visible to her caretakers (ibid, p. 1475).

4.3.8 Summary of Section

In this section I have given examples of theories of risk from the fields of sociology and anthropology. Realist and strong social constructionist views on risk differ in their point of origin of risk, whereby realists believe that risk exists in objects 'out there,' while strong social constructionists believe that all risks are socially constructed. What these approaches all have in common is the notion that risk, no matter its origin, is imperceptible through the senses. This causes reliance on technology, experts, and risk calculations to guide behaviour. Surveillance of bodies and behaviour, as well as medical interventions, offer the means to avoid harm, however these harms have not been defined by or for individuals, and may not be culturally sensitive.

4.4 Section 3: Risk and Birthplace

In this section, I will take a deeper look at the discourse surrounding birthplace and risk, especially the difficulty in finding a common language between those who oppose home birth and birth centre birth and those who support it.

In literature criticizing home and birth centre birth, one of the 'risk objects' posing potential harm to women is perceived as the birthplace (home and birth centre birth) (Arabin et al., 2013; Chervenak, McCullough, Brent et al., 2013; Wax, Lucas et al., 2010). One of the reasons for this given by the authors is that potential harm could come to women and babies through the lack of available or adequate technology at birth. Surveillance technology available in hospitals is presented as necessary to ensure safe care. For Arabin, et. al. and Chervenak, et. al., the woman and fetus are only truly perceptible or knowable through technology.

4.4.1 Place of Birth, Risk and Morality

Philosopher of medical ethics, Leah McClimans, in her article "Place of Birth: Ethics and Evidence" explains the arguments used by authors criticizing risk and safety attributed

to birthplace (2015). She differentiates between the analysis and use of empirical evidence and the underlying concerns or non-epistemic values on both sides of the debate. De Melo-Martin & Intemann assert that "policy decisions ... clearly involve non-epistemic value judgements" (2012, p. 2). Bogdan-Lovis, de Vries C., & de Vries R. assert that there are "wide-ranging and conflicting perceptions about what constitutes a "good birth" -- measured both morally and medically" (2013). A further problem underlying the debate is the inability of researchers to agree on what is considered evidence, as well as the best way to interpret it (ibid). Bogdan-Lovis et. al. call this "duelling data" (2013, p. 194).

McClimans gives an example of how observational data can be utilized to make arguments for and against the risks of home and birth centre birth, depending on whether acceptable risk as opposed to relative risk is used as a measure. Acceptable risk is defined as the notion that there is a boundary where harm is acceptable, as long as the occurrence of said harm is rare. This is called low absolute risk. Relative risk, according to McClimans, is considered "evidence of safety" (ibid, p.1). Acceptable risk turns out to be a misnomer for Chervenak, McCullough, et. al. (2013) and de Crespigny & Savulescu (2014), since these authors concur that there is no tolerable, acceptable risk to a fetus; therefore, any increased chance of a poor outcome of the new-born associated with birthplace is intolerable. De Crespigny & Savulescu state that:

At home deliveries, there are few resources to detect and manage complications. What risk of disability in the future child is reasonable to satisfy a mother's personal desires? The answer according to temporal neutrality is the same risk of present harm that she would be justified in exposing a child to [i.e. alcohol during pregnancy] (2014, p. 809).

Allowing women autonomy over decision making concerning acceptable risk to their unborn is irresponsible and never acceptable from a professional perspective. Chervenak, et. al. assert that the Birthplace in England Collaborative Study is "irrational and cannot be supported in light of the reported adverse outcomes for birth outside of an obstetric service" (2013, p. 32).

It is apparent that finding a common language to discuss evidence is fraught with difficulties (McClimans, 2015). Because there is no agreement as to the interpretation of scientific evidence, de Melo-Martin & Intemann find the conclusions of birthplace studies uncertain, and thus their subsequent use in policy making embedded in value judgements (2012). According to de Melo-Martin & Intemann, "the debates result from

implicit disagreements over social and ethical values at stake in assessing labour- and delivery-related risks" (ibid, p. 3).

Aside from empirical evidence, revealing underlying non-epistemic values that form the basis for data interpretation sheds light on deep seated differences between those who find a woman's home to be a relatively safe place to give birth and those who do not (de Melo-Martin et al., 2012; McClimans, 2015). To make a clarification in definitions, these authors all consider birth assistance offered by midwives as non-obstetric care, while, in a German context, obstetrics refers to care offered by midwives and medical doctors. Varying conclusions based on empirical data are rejected because:

...proponents and opponents of planned non-obstetric births talk past one another. Both parties offer reasons in favour of their positions, but these reasons are not recognized as good or even relevant by the opposition because they do not share the same value judgements (McClimans, 2015, p. 5).

McClimans lists four areas according to de Melo-Martin and Intemann (2012) where opinions diverge:

- 1) the weight that should be given to worst-case scenarios;
- 2) whether there are benefits of non-obstetric births that outweigh its risks;
- 3) how we should view pregnancy and childbirth, i.e. is it generally safe or risky;
- 4) what should count as optimal care during birth (2015, p. 5).

Further concerns in unwinding the birthplace debate have been thematicized by DeVries, Paruchuri, Lorenz & Vedam (2013). In their analysis of studies assessing the safety of birthplace, they separated studies into four categories. These four categories are:

- 1) studies questioning the safety of home birth;
- 2) studies questioning the safety of hospital birth;
- 3) studies finding no difference in outcomes, and;
- 4) studies that report varied benefit and risks associated with place of birth (ibid, p. 227).

The authors assert that "a researcher's pre-existing beliefs about place of birth are almost never disconfirmed by their data" (ibid, 226). In addition, researchers of birthplace

seem to "start with a conclusion and then search for data to support that conclusion" (Bogdan-Lovis et al., 2013, p. 194).

The discrepancy in values can be expressed as a different viewpoint as to the nature of birth itself (Bogdan-Lovis et al., 2013). McClimans writes:

Holowell and colleagues write that birth is generally safe because worst-case scenarios in low risk pregnancies are rare (Birthplace in England Collaborative Group 2011); Crespigny and Savulescu write that birth is inherently risky because worst-case scenarios sometimes do occur even in the context of low risk pregnancies (de Crespigny and Savulescu 2014), while Chervenak and colleagues argue further that our ability to screen for low risk pregnancies is imperfect (Chervenak, et al. 2013).

The opinions that frame recommendations are often situated in a fear of grief and guilt, should harm or death come to a baby or to the mother (Howe, 2013). For Howe:

People have an almost irresistible urge to blame themselves when a calamity occurs, so long as there is any plausible way that they think they could have prevented it (1985, p. 177).

Birthplace thus becomes an issue about the nature of birth (Bogdan-Lovis et al., 2013), as well as the environment necessary to ensure the best outcomes for mothers and babies, or for some critics, first and foremost for babies (Chervenak, McCullough, Grunebaum, et al., 2013; de Crespigny et al., 2014). A woman's autonomy to choose the birthplace of her child is set against the minimal risk of harm that could come to her baby that is attributed to planned births outside of a hospital. The emotions attached to the recommendations become buried under the surface of risk calculations that can be employed to support various points of view.

4.4.2 Risk Management and Patient Safety

When a claimed path to harm is agreed upon by researchers and policy makers, then risk management can lead to the creation of rationally constructed policies, institutions, and structures to prevent harm based on this legitimised path (Power, 2007). The focus of risk management in healthcare in its inception was to safeguard the financial assets and reputation of hospitals, but has evolved into claims about what can or must be done to ensure patient safety, even though absolute safety is considered unachievable

(Carroll, 2011; Kuhn & Youngberg, 2002). In this sense, the 'risk object' as a cause of harm must be insured (Knights & Vurdubakis, 1993). An explosion in malpractice claims and lawsuits in the 1970s made risk management necessary as a means to protect individual healthcare practitioners and institutions offering healthcare from suffering financial loss (Hoppes, Mitchell et al., 2013; Kuhn et al., 2002).

The risk categories vital for risk managers include "patient care-related risks, medical staff-related risks, employee-related risks, property-related risks, and financial risks" (Carroll, 2011, p. 8). The student edition of the *Risk Management Handbook for Health Care Organizations* explains that the fundamental goals of risk management in healthcare are "patient care or clinical risk management, including information gathering, **loss control** efforts, medical professional liability risk financing, and claims management activities" (Carroll, 2011, pp. 9, original emphasis).

Risk management relies on bureaucratic reflexivity to maintain patient safety systems, which is described by medical law specialist and consultant obstetrician and gynaecologist Leroy Edozien in the following way:

Apart from general knowledge about principles of accident causation, healthcare providers need to know about hazards and risks in their areas of practice, and how these can be contained. This awareness is informed by patient-safety data and by lessons learned from safety incidents. It, in turn, informs the design of interventions that contain hazards and prevent accidents (2013, p. 484).

In gathering information about harm done, the source of harm ('risk objects') can be managed, contained, and the safety of the patient guaranteed (Card, Ward et al., 2015; Edozien, 2013). Risk management geared towards patient safety focuses, above all, on the reduction of preventable patient harm caused inadvertently by individual healthcare practitioners (Hoppes et al., 2013) and has been extended in recent years to include risk management of systems and teams (Kuhn et al., 2002). One of the major dysfunctions recognized by Kuhn & Youngberg affecting patient safety negatively is:

...debilitating fragmentation: because the components of the healthcare system share no clear alignment of goals, no common terminology and no overlying communication system to facilitate the pursuit of common objectives, lack of coordination among constituencies is the norm, resulting in astounding inefficiencies and poor quality of care" (2002, p. 161).

Risk management can create a dynamic and 'generative' safety culture when individual behaviour regarded as safe has been assimilated into cooperative networks in the organization or institution (Westrum, 2004).

4.4.3 Summary of the Chapter

In this chapter, I have given an overview of risk beginning with Pascal's Unfinished Game to the modern-day utilization of risk management to safeguard the well-being of individuals and populations. In this overview, I have included a review on contemporary theories in the social sciences on risk. In addition, I have presented the issues surrounding birthplace, risk and morality. The safety of birthplace in literature critical of home and birth centre birth shows partiality to the notion that proper surveillance of birth can only be assured through technology available in a hospital setting. However, when safety is narrowly defined as dependent on a particular setting, it may overshadow other definitions of safety, namely cultural safety and the individual's sense of being safe.

CHAPTER 5. METHODOLOGY – EPISTEMOLOGY AND THEORETICAL PERSPECTIVE

5.0 Introduction to Chapter

In chapter one, I outlined the German medical care system and the place that midwives occupy in that system. I also provided a brief history of the midwifery profession in Germany and outlined the history of birth centres. In the chapter on risk, I provided a narrative description of the history of risk calculations, sociological theories of risk, and risk in terms of ‘risk objects.’ Further, in addition to elaborating on the assumption that birth in a hospital maternity unit is the safest option for women and babies, I provided two examples that illustrated additional ways to understand safety at birth.

In this chapter, I will reiterate my research aim and explain in depth the epistemology and theoretical perspective that underlie the methodology and methods that I chose.

5.1 Research Aim

The aim of this thesis was to describe the perceptions and creation of risk and safety at a birth centre in Germany from the point of view of the midwives working there and the women registered there. In chapter 1, I explained my reasons for choosing this research aim and listed the questions that guided my observations during my initial periods of data collection at the birth centre. These questions included, but were not limited to:

- Where and in which circumstances are the terms ‘risk’ and ‘safety’ actually used at the birth centre?
- How do midwives and women discuss topics such as ‘exclusion criteria’, blood pressure, haemoglobin levels, fetal heart rate and other medical parameters associated with risk? What are the interactions (handlings) associated with these medical parameters?
- What are the questions, issues, fears, wishes that women bring up at antenatal examinations? If fears are spoken about, what do midwives do about this, if anything, and how do they talk about them?
- What is going on outside of the birthing room when a woman is in labour at the birth centre? What is the involvement of the other midwives who are present at

these times (but not involved with the birth per se)? What are the conversations midwives have amongst themselves inside and outside of the birthing room when a woman is in labour?

- Why do women choose to give birth at the birth centre?
- How did the midwives decide to work at the birth centre?
- Describe 'spoken' care—when women and midwives talk about issues.
- Describe 'action' care—when midwives do (whatever it is they do) to women.
- Describe what women ask midwives to do (action).
- During labour, what is going on inside the room? Where is the midwife spending her time (in the room, outside of the room)? What is she doing? Saying? What is the woman doing? Saying? What is the woman's birth companion doing? Saying? Describe interactions.

While I showed in chapters 2 and 3 that midwives' loss of scope of practice was part of a wider societal movement that disenfranchised women, I also believe that because very little has been published describing different perceptions of safety and how safety is constructed at births (Olson et al., 2013; Smythe, 2010), these misconceptions are difficult to challenge.

5.2 Epistemology: Social Constructionism

Epistemology, or the study of the nature and acquisition of knowledge, is the foundation for the justification of knowledge claims (Crotty, 1998). The epistemological belief system of the researcher should be transparent, so that the reader can be aware of the rationale used by the researcher for choosing the methodology and methods for their study. In addition, according to Lincoln and Guba, through this transparency, it is easier to make "...an assessment of the extent to which the phenomenon is described in terms of (is biased by) the investigator's own posture..." (1985, p. 40).

Since an aspect of my research aim was to discover the manifold meanings that my research participants had of risk and safety, I chose social constructionism as my epistemological foundation. According to Burr, one of the fundamental beliefs of social constructionism is that taken-for-granted knowledge is questioned (2003). There is not one right way to do things, however the way we do things often seems to be the way that makes the most sense. This kind of common sense thinking is ingrained in the *Lebenswelt* of human beings and is historically located (Berger & Luckmann, 1966). For Burr, the concepts of historicity and cultural relativism also belong to key social

constructionist ideas (2003). Hence, what is considered to be true will vary in different cultures and sub-populations and change throughout history.

A further social constructionist belief outlined by Burr is that knowledge and meaning of phenomena have their origin in social processes and interactions (2003). Phenomena are so wholly embedded in these processes, that they seem to exude meaning independent of humans. Because of this, it can seem as if inherent truths exist at the core of all that is, and that this truth is just waiting to be discovered (Berger et al., 1966). Berger and Luckmann regard consciousness as being intentional; it always intends or is directed towards objects. They write:

This is so regardless of whether the object of consciousness is experienced as belonging to an external physical world or apprehended as an element of an inward subjective reality (1966, Loc 531, Kindle edition).

Hence, according to social constructionists, what is considered true is learned through social interaction and experienced in social processes (Burr, 2003). Here it is important to note that, in constructionist thought, the consciousness and knowledge that people bring to interactions has been created in and emerges out of the interactions. In contrast, constructivism argues that knowledge is a construct of the mind (Gergen & Gergen, 2004).

Burr's final building block of social constructionist beliefs proposes that social action emerges out of socially constructed knowledge, which contributes reciprocally to the definition of conditions or situations. She gives the example of the change historically in the knowledge, attitudes, and subsequent action taken towards alcoholics, from imprisonment in the 19th and 20th centuries, when alcoholism was thought to be a moral character defect, to the present-day belief that alcoholism is a disease and should be treated as such (2003, p. 5).

In addition to Burr's description of social constructionist beliefs, Berger and Luckmann write that knowing how to act or how to understand the actions of others becomes manifest in intersubjective spaces (1966). In intersubjective space, each person acts according to his or her understanding of the interaction, thus sustaining a taken-for-granted reality that appears to exist apart from human beings (ibid). Crotty reminds us that individuals do not develop common sense knowledge in a vacuum, but rather are "born into a world of meaning" that seems to have always been there (1998, p. 54).

5.2.1 Social Constructionism: Weak and Strong

As briefly discussed in chapter 4.2.3, social constructionist thought is considered to be either weak or strong (Lupton, 1999/2013). What both weak and strong social constructionism have in common is the belief that meaning is not inherent in people, places, and things. The meaning we give to things is learned. However, to the extent that there may actually be phenomena outside of ourselves with intrinsic meaning other than what we give to them, is a notion propounded by weak social constructionists. In weak social constructionism, there is the belief that, while meaning is created through humans interacting with others and with the environment, there remains the possibility of an objective or universal reality beyond these interactions, a so-called truth-out-there (ibid). In addition, phenomena can be real, while the knowledge and meaning of these is concomitantly socially constructed (Crotty, 1998). According to critical realist thought, the capacity for humans to possess absolute knowledge of processes in the natural world is unattainable. That which is known is a fragment of the whole, and thus cannot be apprehended in its entirety. From a critical realist perspective on risk, Lupton writes that “phenomena that are labelled ‘risks’ exist whether or not we apprehend them, as do those potentially harmful phenomena that we choose not to call ‘risks’” (1999/2013, p. 42). Thus, there are phenomena that exist apart from human being’s knowledge of them. This knowledge of particular phenomena is culturally located and has been in a constant process of modification throughout history, not because the phenomena itself changes, but because the understanding of them does.

5.2.2 Strong Social Constructionism

In strong social constructionism, there is no external, unwavering truth out there to be discovered; human interaction creates and reproduces reality (Lupton, 1999/2013). There is no truth beyond what humans construct through their interactions (Bryant & Charmaz, 2007), and, if there would be, it would be too obscure to discover (Burr, 2003). This relativistic approach has been criticized as being void of morals, since it would appear that there is no unifying reality to substantiate action (Burr, 2003). Consequently, all actions could potentially be justified in the context in which they are taken (Gergen, 1999/2015).

Reality is believed to be formed through discourse—discourse is composed of language—and language is always referring back to itself (Gergen, 1999/2015). Burr writes that “since we can never have direct access to a reality beyond discourse, we

cannot concern ourselves with its nature” (Burr, 2003, p. 90). This refers to reality, but it also references language, which can only describe what is experienced subjectively, not what actually is. Gergen, as a relativist, describes his form of realism as “essentially situated” (1999/2015, p. 424). He explains:

...it (realism) is located within a historically and culturally circumscribed tradition or form of life. To describe a process of reference as I do is not to say anything about some transcendent domain of the real. It is to speak of the real in the same way that a constructionist might understand the doctor speaking of lung cancer or a priest of the presence of the holy spirit. In both cases there is reliance on local conventions of sense making (‘what we mean together by these words here and now’) (ibid, p. 424).

Consequently, sense making and action are based on what people, during interactions, believe to be real; there is no transcendent reality. Berger and Luckmann write that “... all symbolic universes and all legitimations are human products; their existence has its base in the lives of concrete individuals, and has no empirical status apart from these lives” (1966, Loc. 2403, Kindle edition). For this thesis, I have taken the position of strong social constructionism.

5.3 Theoretical Perspective: Symbolic Interactionism

Knowing the researcher’s theoretical perspective is key to comprehending the choice of methodology and methods. The methodology utilized to conduct the research is indicated by the chosen theoretical perspective and acts as a set of “procedural rules” that the researcher adheres to (Brewer, 2000/2005, p. 4). As such, the theoretical perspective is the justification for the methodology (Crotty, 1998). The theoretical perspective I have chosen is symbolic interactionism. Herbert Blumer, who coined the term symbolic interactionism in an essay published in 1937, based his approach on that of George Herbert Mead (Denzin, 1992). Blumer identified three basic principles of symbolic interactionism:

(1) ...human beings act toward things on the basis of the meanings that the things have for them; (2) ...the meaning of such things is derived from, or arises out of, the social interaction that one has with one’s fellows; (3) ...these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters (1969/1986, p. 2).

As opposed to realism, where an object is believed to have an inherent meaning independent of the observer, according to a symbolic interactionist approach, objects acquire a meaning only through human interaction. Indeed, “objects are a product of symbolic interaction” (ibid, p.10). Objects include physical objects, people and the roles they play, as well as abstract objects.

In symbolic interactionism, human behaviour is neither understood as biologically determined, genetically dependent, nor wholly dependent upon or emerging from social structures. Robert Prus in his book *Symbolic Interaction and Ethnographic Research* writes:

Objectivity, thus, is not innate to any state or conditions of the world, but reflects the intersubjective consensus attained within particular community contexts with respect to this or that aspect of the life-worlds to which particular sets of people attend. (1996, pp. 88-89).

The researcher reduces her likelihood of projecting conjectural theories and pre-set notions onto human activity through the observation and analysis of human interaction on its own terms in lived situations (Maine, 1997). Blumer borrowed Cooley’s notion of “sympathetic introspection” to emphasize that the role of the researcher is to interpret lived experience by becoming a part of the production of social interactions and activity (Prus, 1996, p. 74). Blumer criticized mainstream social science in his time for ignoring the processes by which people come to cooperate or to resist meaning-making in lived experience. For Blumer, interviews with research participants aid the researcher in understanding an individual’s experience of a phenomena, particularly when the researcher cannot observe and participate in areas of an individual’s life which belong to the research aims. However, Blumer believed that interactions should be the focus for the interpretive study of lived experience; he did not see the individual as the main component of study in symbolic interactionism (Prus, 1996).

5.3.1 Structures and Symbolic Interactionism

Structures do not act upon people to make them behave in a certain way (Prus, 1996), but rather people, who have internalized the structures, interact in and act upon the structures through the roles that they take on (Blumer, 1969/1986). Low writes that:

...Blumer argues that 'it is inaccurate and misleading to regard dynamic relations as predetermined or controlled by culture or structure' because 'the organization of a human society is the framework inside of which social action takes place and is not the determinant of that action...' (Blumer 1969b87-88 in Low, 2008, p.332).

Blumer sees institutions as networks or systems of joint action that were formed around established actions and shared meanings. The actions associated with the institution are, at a later date, then seen as emerging from the institution itself, especially in the case of long established institutions, but only because they have been removed from their historical context. Blumer writes that:

A network or an institution does not function automatically because of system requirements; it functions because people at different points do something, and what they do is a result of how they define the situation in which they are called on to act (1969/1986, p. 20).

The unit of analysis in symbolic interactionism is thus human interaction, and not the structures or institutions per se in which the interactions take place. For this reason, I chose ethnography—with its methods of participant observation and interviews—to describe perceptions and creation of risk and safety at a birth centre.

5.4 Summary of Chapter

In this chapter, I have introduced my research question, as well as the epistemology and theoretical standpoint on which this research is founded. Since I believe that maternal healthcare, as well as notions and attitudes towards pregnancy and birth, are socially constructed, this epistemology was best suited for me to conduct research concerning the perceptions and creation of risk and safety at a birth centre. Further, symbolic interactionism as my theoretical perspective laid the foundation for my use of the methods of ethnography for data collection and analysis. Symbolic interactionism supports an inductive approach to data collection, making the personal interactions at the birth centre the substance for meaning-making and for understanding the construction of risk and safety.

In the next chapter, I will discuss my methodology—ethnography, as well as the methods of ethnography that I utilized for this study, namely participant observation and interviews.

CHAPTER 6. METHODOLOGY - ETHNOGRAPHY

6.0 Introduction to Chapter

In this chapter, I will outline the history of ethnography and its relationship to symbolic interactionism. I will also talk about the methods of ethnography that I utilized for this study, participant observation and interviews.

6.1 From Travellers' Tales to Ethnographic Research

The field of anthropology was established by the four so-called fathers of anthropology, Franz Boas, Bronislaw Malinowski, Alfred Radcliffe-Brown and Marcel Mauss (Eriksen & Nielsen, 2013). They established research practices that included fieldwork, participant observation, and the writing of the ethnographic text. An ethnographic text is a compilation of observations and experiences in the field, including notes and in-depth descriptions, not only from the outside looking at, but also, when possible, from the perspective of those under study (Van Maanen, 2011). Both Boas and Malinowski grounded their data collection in participant observation, demanding of their students that:

... they spend time enough among their interlocutors to acquire a sense of what Malinowski called 'the imponderabilia of everyday life,' and both have demanded that they attend to what their interlocutors say, to what they profess to believe and value, and to what they actually do" (Faubion, 2001, p. 39).

While Mauss never spent time in the field, his analyses of the ethnographic texts of his contemporaries were ground-breaking (Leacock, 1954). Anthropological research and ethnographic studies were primarily conducted in primitive societies until the 1920s, when the study of local urban culture became the focus of sociologists at the University of Chicago (Emerson, Fretz et al., 2001).

6.2 From Over There to Here: Ethnography Close to Home

In the 1920s, social scientists at the University of Chicago began conducting research in non-rural, western environments. Urban society became the focus of case studies, with the goal of discovering the role that urban ecology played in the structure and evolution of cities (Hammersley & Atkinson, 1995). From gangs (Frederic Thrasher) to Jewish ghettos (Louis Wirth), Chicago School sociologists conducted fieldwork in communities and sub-populations (Robben & Sluka, 2012). These predominantly symbolic interactionist studies described pockets of society that had been overlooked, holding a magnifying glass to situations and interactions in problematic areas of society. For Chicago School symbolic interactionists, participant observation was the preferred method for data collection, and was often, but not always, supplemented by semi-structured interviews, and, in the beginning years, statistical data (Deegan, 2001).

Beginning in the 1960s, ethnographic studies in western urban and rural environments burgeoned (Hammersley et al., 1995). The turn to understanding ethnography as the production of text was the notion promulgated by Clifford Geertz, who encouraged 'thick descriptions' (Clair, 2003), a notion that Geertz borrowed from Gilbert Ryle (Geertz, 1973). For Geertz, the ethnographic text should explain in depth from various perspectives the experiences of the research participants, while at the same time giving more than just a voice to them. Skimming the surface is not enough; the ethnography should be a conversation between the researcher and those she is researching (Hammersley et al., 1995).

As the ethnographer settles into the situations she is researching, she is able to learn what the others know and understand—grasping meaning-making as opposed to just repeating what has been heard. This view from within is called the 'emic' perspective, which the researcher can grasp by immersing herself into the culture she is researching (Wolcott, 1999). The researcher should "attend to what an individual must know to behave acceptably as a member of a particular group", refraining from projecting her own meanings onto the perceptions and actions of the research participants (ibid, Loc. 1887, Kindle edition). In addition, the researcher must be receptive, cautious not to force meanings into ready-made categories (Geertz, 1973). According to Geertz, "Anthropologists do not study villages ..., they study *in* villages" (1973, p. 22).

The 'etic' perspective is the perspective of the observer or researcher. Wolcott contends that researchers move between the two perspectives of 'emic' and 'etic,' and warns the

researcher to be attentive to the many different 'emic' perspectives that can exist within the group or groups that are being studied (1999). There are many voices and multiple ways of seeing and doing things—not just one way. When taking field notes, for example, the researcher must take care to write down the language that is used by those being observed so that their speech is privileged (Keating, 2001). Understanding the lived meanings that research participants give to phenomena, in large part, in intersubjective spaces, is the objective in such studies. Most importantly, the researcher must be aware that her observations, field note writing, and analysis are influenced through her own perspective, thus becoming “an integral part of the ethnographic account” (Hugill, 2016, p. 145). Hence, the importance of reflexivity throughout the entire research process (Emerson, Fretz et al., 2011).

6.3 Summary of Chapter: The Birth Centre as Context for Ethnographic Research

Ethnography was, in its beginnings, a research methodology practiced in far-off locales foreign to the researcher. The Chicago School sociologists used the methods of ethnography, participant observation and interviews, to research urban sites. The research site chosen for an ethnographic study, whether in a foreign country or in a place that is familiar to the researcher, is always a part of a larger context and not isolated from the culture in which it exists (Hammersley et al., 1995). For Blumer, the founder of symbolic interactionism, when an ethnographer studies in institutions, she is not researching the institution per se, but the institution as the context or space for interaction (1969/1986).

I began this dissertation with a description of the context and history in which birth centres are located in order to make clear the structures within which midwives work. Neither from a medical-healthcare perspective, nor from an historical perspective are midwives and women at birth centres permitted to construct a set of operational guidelines outside of the healthcare system as a whole. However, conducting an analysis of the laws and guidelines that form the basis of the practice of midwifery would not provide the descriptions of how midwives and women interact at a birth centre, how they make sense of the risk discourse, and how they together construct risk and safety. This is the justification for using ethnographic methods to conduct research.

In the next chapter, I will illustrate the methods of ethnography, participant observation and interviews, describe fieldwork, data collection and analysis, and introduce my research site and participants.

CHAPTER 7. METHODS – FIELDWORK: PARTICIPANT OBSERVATION AND INTERVIEWS

7.0 Introduction to Chapter

In this chapter, I will justify my choice of ethnography and explain the methods of ethnography, in addition to how I implemented these in this study. In addition, I will also introduce my research site and research participants.

7.1 Justification for the Research Design

My research aim included the goal to describe how women registered to give birth at a birth centre and the midwives who work there not only perceive risk and safety, but also construct these. While it is possible to ask people what they believe and ask them to describe how they transform their beliefs into action (thus constructing their reality), what people say they believe and do and what they actually do is not always the same. One reason for this is that many of the things that people do and their reasons for doing them are taken for granted (Spradley, 1980). Furthermore, Spradley writes:

The essential core of ethnography is this concern with the meaning of actions and events to the people we seek to understand. Some of these meanings are directly expressed in language; many are taken for granted and communicated only indirectly through word and action (1980, p. 5).

Being present 'in the field' at a research site makes it possible to enter into the lifeworld of the research participants and understand more deeply the meanings that the participants bring to interactions, activities and objects. Perhaps most significantly, midwifery tasks are centred around the body, touch being one of the ways that midwives communicate with women and gather information (Davis-Floyd, 2018). Therefore, ethnography with the methods of participant observation and interviews was chosen as the most appropriate approach to data collection to permit an understanding of meaning making in practice (Emerson et al., 2011; Spradley, 1980). One of the many benefits of conducting an ethnography is that the researcher is able to learn from the research participants how things work, and, in learning this, meaning-making can be ascertained (Wolcott, 1999). This is possible through the cycle of data collection, data analysis, and

a return to the field with the information gained through data analysis (Emerson et al., 2011).

Data collection in an ethnographic study typically commences with unstructured observations, eventually becoming more structured after initial data analysis and time in the field (Emerson et al., 2011; Spradley, 1980). Semi-structured interviews with research participants provides an opportunity to delve deeper into personal views through narratives based on lived personal experience. While I chose the lens used for focus before going into the field, (risk and safety, specifically in terms of process and interactions in context), I entered the field without fixed categories or classifications for risk and safety, as this was an inductive study.

7.2 Methods of Ethnography

Ethnography as a methodology is not only a way of conducting research, but also implies the methods utilized to collect data (Wolcott, 1999). In addition, writes Wolcott, ethnography is a “process” and a “product” (1999, Loc. 509, Kindle edition). Some of the established methods for collecting ethnographic data include (but are not limited to) observation, participant observation, video and audio recording of events, ceremonies, or rituals, conversational or informal interviews, and in-depth interviews (Hammersley et al., 1995). In the following section, I will describe the ethnographic methods that I used to collect data, as well as my instruments for data collection, the research site, and the research participants.

7.3 Doing an Ethnography: Fieldwork and Participant Observation

Fieldwork is the term referring to the participation of a researcher in, for example, a community, subculture, or institution, whether it be rural or urban, foreign or familiar; while ethnography is the collection of data at a research site, and the subsequent analysis and concomitant production of texts (Robben et al., 2012). Doing fieldwork implies action and direction: going somewhere and spending time observing what people at the research site or ‘in the field’ do, without implying a particular object of study or the level of immersion of the researcher (Emerson et al., 2011; Van Maanen, 2011). Wolcott writes that “...ethnography is synonymous with fieldwork, particularly in the sense of a researcher present, in person, to gather data” (1999, Loc. 542, Kindle edition). The researcher’s activities in the field can lead to insights, however Atkinson cautions that:

The field is produced (not discovered) through the social transactions engaged in by the ethnographer. The boundaries of the field are not 'given'. They are the outcome of what the ethnographer may encompass in his or her gaze; what he or she may negotiate with hosts and informants; and what the ethnographer omits and overlooks as much as what the ethnographer writes" (Atkinson, 1992, p. 9 in Emerson et al., 2001, p. 354).

There are various methods for collecting data, non-participant or participant observation being two of these. Yet, while participant and non-participant observation can be used in studies that are not considered ethnographic in nature, doing an ethnographic study implies some form of observation (Dykes & Flacking, 2016; Wolcott, 1999). Spradley describes 5 different types of observation when doing fieldwork (1980). These range from non-participation to complete participation, with passive, moderate, and active participation in between. As a non-participant observer, the researcher remains in the role of observer and does not get involved with the people at the research site. Spradley explains that this form of observation can be undertaken by a researcher too timid to engage or interact with study participants; when the researcher believes that she will corrupt the data through participation; or when conducting research that is purely observational, such as researching televised sports events (1980, p. 59).

In passive participation, the researcher will find a "research post" from which to observe, where she "occupies (the role of) 'bystander,' 'spectator,' or 'loiterer'" (Spradley, 1980, p. 59). In moderate participation, "the ethnographer seeks to maintain a balance between being an insider and an outsider, between participation and observation", while as an active participant, the researcher begins in the role of the observer, but eventually does what the others are doing, in an attempt to "learn the same behaviour"(ibid, p. 60) . Spradley writes that "Most ethnographers can find some areas in their research where active participation is feasible and even a limited use of this technique will contribute to greater understanding" (ibid, p. 61). Lastly, as an example of a complete participant, Spradley gives the example of Howard Becker, who, as a professional piano player active in the musical world in Chicago, conducted research on jazz musicians in the 1960s (ibid).

To reconnect briefly with my theoretical perspective, for symbolic interactionists, participant observation is the favoured method for data collection. Rock writes that:

Interactionist research hinges on participant observation: *participant* because it is only by attempting to enter the symbolic lifeworld of others that one can ascertain the subjective logic on which it is built and feel, hear and see a little of

social life as one's subjects do ... but *observer* because one's purposes are always ultimately distinct and objectifying (2001, p. 32).

Collecting data as a participant or non-participant observer gives the researcher access to individual and group conduct in the context in which it is experienced and produced. Data is collected that includes descriptions of the convictions, assumptions, and sentiments that underlie the interactions and responses of the research participants (Bryant et al., 2007). Learning how to do what those one is researching do adds a depth to discovery (Van Maanen, 2011). Van Maanen writes that:

Fieldwork asks the researcher, as far as possible, to share firsthand the environment, problems, background, language, rituals, and social relations of a more-or-less bounded and specified group of people. ... To portray culture requires the fieldworker to hear, to see, and, most important for our purposes, to write of what was presumably witnessed and understood during a stay in the field. Culture is not itself, visible, but is made visible only through its representation (2011, p. 3).

This approach allows the researcher to gather information concomitant with the lived experience of the study participants (Prus, 1996). In addition, Miles and Huberman assert that the researcher is a witness to "chronological flow, (seeing) precisely which events led to which consequences and derive fruitful explanations" (1994, p. 1).

In the field, the participant observer must become more attentive to her surroundings, making sure not to block out what she takes for granted. One does this by bringing into awareness situations which one would under normal circumstances not pay attention to (Spradley, 1980). Furthermore, categories and meanings are not chosen before a study is commenced, in order to avoid missing the meanings that participants themselves use (Prus, 1996). Wolcott writes that "...preconceived categories can blunt the keen edge of observation, ignoring differences important to those in the scene while giving undue importance to categories of less consequence" (1999, Loc. 1853, Kindle edition).

When I began my field study, I was quite briefly a passive observer, moving quickly into the role of a moderate observer after one day in the field. Throughout all the phases of fieldwork, but especially at the beginning of data collection, the midwives and I exchanged hospital and birth centre birth stories with one another. This enhanced our mutual trust in one another, as well as the team's acceptance of me as an experienced colleague. I believe that, because of this, I was integrated early on into various aspects of delivery of care.

Midwives often included me in antenatal appointments and births at the birth centre, sometimes intentionally, at other times unintentionally. For example, at antenatal examinations, I was asked on occasion to palpate the uterus after the midwife to reaffirm the position of the fetus. I was also asked on a few occasions to connect women to the fetal heart monitor and to interpret results of the printout together with the midwives. I also had to take on the position of second midwife at two births when the second midwife had not been called to the birth early enough to be present. In these instances, the midwives told me afterwards that they were so comfortable with my presence, that they felt that the second midwife was already in the room, hence their delayed phone call to the second colleague on-call. I didn't feel that I changed the outcome of any of the situations in which I participated; in fact, I felt that I greatly benefitted from these experiences. They allowed me to better understand the women and the midwives through being sensorially and physically involved in events. In addition, I never acted independently; when doing midwifery work, I only carried out the tasks that were directly requested of me by the midwives. For ethical and juridical reasons, I had liability insurance for antenatal care and birth assistance for the entire period that I was in the field.

Deciding where to be a participant observer at the birth centre arose out of the process of data collection and data analysis. After each period of time in the field, I analysed my field notes. In this way, as themes began to emerge, I was able to choose specifically the kinds of appointments that I wanted to observe, and where I wanted to sit at the birth centre if I was not present at an antenatal appointment or at a birth. For example, at the beginning of data collection, I often sat in the kitchen or break room. After many periods in the field, I realised through the discovery of emergent themes concerning births that sitting in the hallway just outside the birthing room allowed me to collect data that I couldn't collect anywhere else at the birth centre. Moreover, the sounds at the birth centre, and sounds in general, were an important type of data that also justified the significance of choosing ethnographic methods to fulfil my research aim.

In addition to the above-mentioned participation, in order to contribute to the workload at the birth centre, I accomplished menial tasks when needed, as I saw the other midwife-colleagues and non-midwife colleagues at the birth centre do. I often filled and emptied the dishwasher, made tea for the women attending ante- and postnatal classes, straightened up the table, and picked up 'to go' food for the midwives.

7.4 Fieldwork: Interviews

Formal, semi-structured interviews and informal, conversational interviews also belong to ethnographic methods (Spradley, 1980). I used both these types of interviews to deepen my understanding in regards to my observations and experiences in the field. In the formal, planned, semi-structured interviews with the women, I asked open-ended questions and contrast questions, so that I could expand my understanding of meanings gleaned from observations. These also served the purpose of gathering background information (Spradley, 1980). In conversational interviews, I asked research participants in the moment that an event was occurring or directly afterwards for their opinion, interpretation, or assessment of the event (Heyl, 2001).

Heyl writes that, in ethnographic interviewing, the researcher should commit herself to these fundamental goals:

Listen well and respectfully, developing an ethical engagement with the participants at all stages of the project;

Acquire a self-awareness of our role in the co-construction of meaning during the interview process;

Be cognizant of ways in which both the on-going relationship and the broader social context affect the participants, the interview process, and the project outcomes; and

Recognize that dialogue is discovery and only partial knowledge will ever be attained (2001, p. 370).

Observation and interviewing go hand in hand, each data collection method informing, augmenting, and enriching the other, in that “what is seen informs what is asked about and what is heard at interviews informs what is looked for” (Dykes et al., 2016, p. 10).

7.5 Data Collection

I primarily used field notebooks at the research site. For the most part, I did not take notes during observations; I wrote them up between or after the periods of observation. During times when the birth centre was less busy, and I was alone in the kitchen or sitting with a midwife who was busy with documentation, I chose to type up fieldnotes on my password protected laptop. Otherwise, I felt more comfortable writing in a notebook,

since it seemed to me that the open laptop blocked me from interacting openly with the others. I separated entries which were descriptive and those which included my thoughts about and reactions to what I had witnessed or experienced.

I used a digital device to record the semi-structured interviews, which were all done in German with the exception of one interview. I transcribed the interviews verbatim. I have translated all of the excerpts in my dissertation from German to English myself, as I am fluent in German, and English is my native language.

7.6 Data Analysis

In this section, I will explain how I conducted analysis of the interview data and data collected during periods of observation. Analysis begins even before the researcher enters the field, existent in the conversations that one has during the planning phase, the writing of memos, and the plan for the structure of and number of observations and semi-structured interviews (Hammersley et al., 1995). Analysis then proceeds ideally as data is collected, since the concomitant analysis is necessary to guide further observations. Periods between observations are thus spent reflecting on and analysing data, allowing “a dialectical between data collection and data analysis” (Hammersley et al., 1995, p. 205). This is referred to as an iterative process. I often had periods of 7-10 days between observational periods and interviewing at the birth centre. This gave me time to transcribe interviews and analyse them together with the observational data.

7.6.1 Data Analysis: Interview Data

I analysed the interviews using thematic analysis with an inductive approach (Boyatzis, 1998; Braun & Clarke, 2006). This type of analysis is data-driven, as opposed to approaching the data with preconceived or established theories. Boyatzis describes thematic analysis as “a way of seeing” (1998, p. 1). Lincoln and Guba write that inductive data analysis is “a process for making sense of field data” (1985, p. 202). Boyatzis adds that “Recognizing an important moment (seeing) precedes encoding it (seeing it as something), which in turn precedes interpretation” (Boyatzis, 1998, p. 1). These are the three steps in the process of thematic analysis:

- 1) Perception of a pattern: ‘*seeing*’;
- 2) Classifying or encoding the pattern: ‘*seeing as*’ ;

3) Interpreting the pattern (ibid, p. 3-4).

After transcribing each interview, I searched for patterns in the first reading, as Boyatzis recommends. During the second reading, I labelled sections of text according to content, termed a “unit of coding” or “codable moment”, and continued this process through multiple readings (1998, p. 64). In this way, I could exclude sections or units of coding in the interviews from analysis, since they were not related to the focus of my research. An example of this from my data can be found in the semi-structured interviews with the midwives. I had asked each midwife at the beginning of the interview to tell me about her training here in Germany as a way to set them at ease by telling an autobiographical story. I pointed out where my training was similar or different, and this broke the ice even further. Some aspects of these stories offered information on perceptions of risk and safety from their training, or from previous work experiences in maternity units, but, for the most part, I could set aside the content of this part of the interview. In addition to reading the transcriptions, I listened to the recorded interviews again in later stages of data analysis to hear the interview as a whole, since listening and reading prompt different impressions (ibid).

After coding the content of the interviews, I began a deeper analysis of the data, also called by Braun & Clarke latent thematic analysis, whereby the researcher codes without pre-arranged categories (2006). Latent thematic analysis is aligned with a social constructionist epistemology, whereby “patterns are identified as socially produced” (Braun et al., 2006, p. 81). One of the decisions I had made before beginning the semi-structured interviews with the pregnant women was that I would ask questions oriented on the pregnancy itself instead of asking questions about risk and safety. An example of this is that, although I was focusing on the topics of risk and safety, I made a resolute attempt throughout the antenatal interviews to steer clear of direct questions such as: “How do you define risk?” or “What does safety mean to you?”, waiting until the end of the interview to ask “What do you need to feel safe?” if this had not been clearly answered in the stories that the women had already told. In many interviews, I didn’t need to ask the final question, for they had already discussed this in detail.

In addition, by using their mother’s record book to talk about each antenatal appointment with them, I heard stories from the women full of abundant descriptions of antenatal care. They told me how they chose the birth centre; they talked about their relationship to their unborn baby, partner, family, midwives, and obstetrician, and, lastly, they told me their wishes for their birth. With the rich descriptions in my interview data, latent thematic

analysis allowed me to remain focused on the data and discover the women's definitions of well-being, risk, and safety, while having a comparison at the end of the interview between their stories and their description of what they felt they needed to feel safe.

To further exemplify my use of thematic analysis, according to Braun & Clarke, "a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (2006, p. 82). An example of this from my data is one of the themes that showed up in the code 'stories that women told me regarding their pregnancy'. One theme in this code was concerned with the relief they felt after sensing the first fetal movements. This was furthermore associated with a sense of safety. I hadn't asked a direct question about fetal movements, but rather had asked them to tell me about their pregnancy. Feeling relieved after sensing the first fetal movements turned out to be a meaningful finding, so that, in the later interviews, I made a point of asking the women for descriptions of the first fetal movements and made focussed observations at the birth centre regarding fetal movements in general.

Following this, as recommended by Boyatzis, I compared the themes in the different interviews, looking for similarities and discrepancies (1998). As the themes were crystalizing through this iterative process of data collection, analysis, and subsequent data collection, I shared these findings with the midwives at team meetings. I also had ample opportunity to share my findings from different stages of data analysis with the midwives in the kitchen (the break room). Moreover, I saw most of the women whom I had interviewed on several occasions, at the latest at their postpartum interview, where I shared my discoveries with them and listened to their feedback. When certain themes did not resonate with the research participants, I went back to the data again to incorporate their perspective into my reading and analysis. If going back to the data did not clarify an issue, I looked for further examples in the field and in interviews so as not to rule out that I had perhaps discovered something new, something that had been hidden from awareness. In addition, I reflected on and discussed my data analysis and findings with my supervisory team.

Additionally, attitudes related to specific topics, places, and people were organized into themes to better understand perceptions, practices and expectations under specific circumstances. These themes included but were not limited to "hospital," "birth centre," "antenatal care," "ultrasound," "baby," "risk," "safety," and "birth". Lastly, to integrate the interview data into the observational data, I augmented the taxonomies that I made using

observational data (see next section) with the interview data, comparing explanations with observations. To summarize, the semi-structured interviews facilitated the process of getting to know the study participants better, aided in building mutual trust, gave me information that I could not have gotten from observations at the birth centre, and presented me with a context for better understanding my observations in the field.

7.6.2 Data Analysis: Observational Data

Notes written on my laptop and in field notebooks while at the birth centre were jotted down in a shorthand form. In the findings chapter, the laptop fieldnotes are denoted by “FN”. The excerpts from my handwritten field notebooks are denoted by “Field notebook”. I often wrote down names and events I wanted to remember in Hebrew, knowing that no one else at the research site would be able to read these. To further guarantee that my notes would remain confidential, I put my notebook away when I wasn’t writing in it. Occasionally, midwives asked me what kinds of things I wrote down, and I freely told them, keeping names confidential. At the end of each day of observation, I wrote up fieldnotes in my laptop with lengthier descriptions of events than was possible in the field, as well as my own perceptions and feelings about what I had experienced. Reflexivity is an essential aspect of ethnography and fieldnote writing (Hammersley et al., 1995). Where I felt there was a conflict between my own practice of midwifery and that of the birth centre midwives, or perhaps with a study participant, I made additional notes to reflect on my criticism of the situation as I had perceived it. After reflecting on events directly, I began making domain analyses (Spradley, 1980). In addition, I began writing memos on specific topics and experiences in the field, and continued with this throughout the research process (Hammersley et al., 1995).

As in thematic analysis, Spradley writes about searching for the discovery of cultural patterns in data (1980). To accomplish this, the researcher moves from observing, experiencing, and perhaps participating in a social situation (when participant observation is being done), to using analysis of the gathered data to learn how the parts of the social situation are organized, thereby revealing taken-for-granted patterns. Doing a domain analysis is one way in which the researcher discovers categories of meaning or cultural domains. “Domains, as cultural categories, are made up of three basic elements: *cover term*, *included terms*, and *semantic relationship*” (Spradley, 1980, p. 89). Further, Spradley notes that “the number of semantic relationships in any culture is quite small, perhaps less than two dozen” (ibid, p. 92). Nine of these semantic relationships, according to Spradley, are: “strict inclusion, spatial, cause-effect, rationale,

location-for-action, function, means-end, sequence, attribution” (ibid, p. 93). While making domain analyses, I was sensitive to remaining linked to the data, noting, for example, when a rationale was one that I believed to be there, or one that was clear in discourse and/or actions.

Spradley discusses the importance when compiling domain analyses of cataloguing the terminology according to its origin (1980). These domains include: ‘folk domains’ (the terms that come from the study participants); ‘mixed domains’: (a mixture of folk terms and terms for which there is not yet a label); and ‘analytic domains’ (domains that can be clearly observed by the researcher as displaying a “pattern of cultural behavior” for which there are no folk terms) (ibid, pp. 90-91). Nonetheless, as Van Maanen cautions, the ethnographer must be cognisant of the fact that she “cannot represent others in any other terms but (her) own” (2011, p. 12). The ethnographic record, the analyses, and the final written ethnographic document are always a creation of the researcher (Hammersley et al., 1995).

Because I regularly formulated domain analyses after each visit to my research site, I was able to, at different points in data gathering, hone in on cultural domains that were more pertinent to my research aims than others. This is an aspect of making focused observations. For example, attending team meetings, participating at antenatal appointments, or sitting outside the door of the birthing room while a woman was in labour were more significant events for me in terms of risk and safety than watching the administrators at the birth centre do the billing or attending a postnatal exercise class for the pelvic floor. Spradley writes that researchers “study a few selected domains (an ethnographic focus) in-depth, while still attempting to gain a surface understanding of the cultural scene as a whole” (1980, p. 101). Hence, making a focused observation does not mean that nothing beyond that is observed from that point on, but simply that particular events, spaces, interactions, and people move into the foreground.

While all aspects of the research process continue concurrently, the analytical process becomes more specific with the addition of taxonomies (Spradley, 1980). Examples of taxonomies from my study included, but were not limited to ‘reasons women give for coming to the birth centre’ ‘tasks that midwives carry out (and in which room and context),’ ‘kinds of risk discussed at the birth centre,’ ‘reasons given for a (particular) examination,’ ‘places at the birth centre where only midwives go,’ ‘shared spaces at the birth centre,’ and ‘information shared by midwives about pregnant or labouring women’. From doing taxonomies, I was able to deepen my understanding of issues at the birth

centre, as well as to increase my understanding of those aspects of risk and safety that were new to me. Taxonomies also led me to the situations that were most pertinent for my research aim. This is called selected observation. When conducting selected observations, it is important to pay attention to situations that are similar to or contradict existing data (Emerson et al., 2001; Hammersley et al., 1995).

Through working with this process, connections between the domains began to emerge, and the perceptions and creation of risk and safety by the midwives and women became clearer. I will write more about this in the findings chapters.

7.7 Research Site

The research site was a free-standing birth centre with over 130 births per year in a German city. The birth centre is owned, operated, and run by midwives. There are no obstetricians on staff, nor is it a requirement for a free-standing birth centre in Germany to have an obstetrician oversee a birth centre. The interdisciplinary relationships to other medical professionals are supported by this particular birth centre through regularly planned meetings that take place at the birth centre. In addition, the transfer hospitals are visited on a routine basis to discuss particular cases and procedures. While there are over 100 birth centres in Germany, they vary in organizational structure. In this sense, the term 'birth centre' does not refer to the inner workings of the structure itself, but only refers to the location of birth centres within the medical system in Germany and the medical and billing guidelines that must be adhered to. The regulations and guidelines for birth centres in Germany can be found in various laws and documents, as I wrote in chapter 3. This particular birth centre has a different inner structure than the birth centre where I work. This was a conscious choice on my part to conduct research in a structurally different space than what I had grown accustomed to so that I could avoid the trappings of familiarity, "sometimes referred to as feeling 'at home'" (Hammersley and Atkinson, 1995, p. 115 in Dykes et al., 2016, p. 8). Thus, while I work at a birth centre, I was challenged with a level of newness that aided in my ability to steer myself away from preconceptions (Hammersley et al., 1995).

7.8 Issues of Access

While in the planning phase of my fieldwork, I met several midwives at conferences who either worked at or had friends working at a birth centre. I spoke with four different midwives, all open to offering me access to their birth centre for conducting research. I

settled on a birth centre that was a manageable distance from my home city. In order to introduce myself, I attended a team meeting where I presented my research proposal. They understood that their personal participation was their own choice, and each midwife was given the opportunity at all stages in the research to withdraw her participation.

In the beginning, I was the not so strange stranger at the birth centre (Hammersley et al., 1995). I had ample opportunities to observe and participate at antenatal appointments, however, one problem I encountered in observing births was when a new midwife colleague-in-training was present. During my data collection period, three new midwives commenced work at the birth centre. The training of these new colleagues and their presence at births took precedence over my presence, so that even though research study participants (pregnant women) had invited me to their births, I was not summoned on three occasions. I was able to discuss this issue with the team, and we came to the agreement that, should a woman have extended an invitation to me to be present at her birth, that I would be called first to be in attendance at the birth, should I be in close enough proximity to the birth centre for a timely arrival.

7.9 Recruitment of Research Participants

As I noted above, before I began the study, I attended a team meeting at the birth centre and gave a presentation outlining my aims, proposed methodology and methods for data collection, and planned course of research, including issues surrounding participant inclusion criteria, ethics, and data protection. The midwives decided as a team to allow me to be present for research purposes, and each midwife gave individual consent before I began. The women were recruited in two phases over a period of nine months. In the first phase, convenience sampling was used to recruit participants.

In order to avoid being intrusive and speaking to every woman who entered the birth centre to ask if she was registered to give birth there, I had asked the midwives to initiate interactions for me with women who met my inclusion criteria. To circumvent having the midwives only choose women whom they thought would cooperate, I asked them to ask every woman who had an antenatal appointment on days when I was present if I could come along and observe the appointment.

If a student-midwife or a new colleague-in-training was present on a day that I was present, then the new colleague took precedence, and I wasn't invited to come to the appointments. However, since, on most days, midwives were offering antenatal

appointments concurrently, I almost always had the opportunity to come along. Even when I couldn't attend the appointment, the midwives asked the women at their antenatal appointments if I could share information with them about my project after their appointment.

In the second phase, midwives approached all of the women registered to give birth in a 4 week period and asked them if they would agree to an interview with me. I met many of these women. However, in this phase, purposive sampling was conducted to assure variation in backgrounds and previous experience of study participants based on emerging data from the first phase of the study.

7.9.1 Inclusion Criteria for Research Participants: Midwives

The inclusion criteria for the midwife participants were that they worked in some capacity at the birth centre and gave their consent to participating in the study, which included being observed and possibly having a semi-structured interview with me. Midwives were given study information and asked to sign a consent form if they agreed. At the birth centre, midwives work in different capacities, including administration, antenatal care, birth assistance, class instruction, and management. Some of these roles overlap, for example, all midwives who attend births are expected to carry out administrative duties, while there are several midwives working in an administrative or management capacity who do not attend births. Hence, I asked all of the midwives working at the birth centre, regardless of their job description, for their consent.

The number of midwives working at the birth centre during data collection fluctuated, so that I always asked midwives new to the team if they would consent to participating in my study. Only one midwife declined to be interviewed, but all agreed to being observed.

7.9.2 Inclusion Criteria for Research Participants: Pregnant Women

Inclusion criteria were women who were registered to give birth at the birth centre, were over 18 years old, and were ≥ 34 weeks of pregnancy. The particulars of exclusion criteria follow from the inclusion criteria listed above. Women were excluded from the study if they were under 18 years old. If the husband or partner of the woman did not want me to attend appointments or the birth, then the woman was excluded from the study. Women brought the study information home so that they had time to discuss participation with their partner and offer mutual consent. All participants were given a

minimum of 24 hours to agree to take part. Women who did not speak German or English were not approached to participate in the study.

7.10 Recruitment

In the first phase, 18 women were approached and offered information on the study and 17 agreed to take part. In the second phase, the midwives asked all the women who had their due date in a particular 4 week period if they would be interested in participating. I met many of these women and chose those who seemed different than the women in the first group (multigravida as opposed to primigravida; women over 40, for example). 25 women received information about the study and 11 agreed to take part. For all of the women, the interviews were conducted between the 36th and 41st weeks of pregnancy (n = 27), as well as 6-8 weeks postpartum (n= 28).¹⁴ I asked each woman after her interview if I would be allowed to attend her birth. They had time to discuss this with their partner at home before giving me an answer. Twenty-one women extended invitations to me to attend their birth; I was able to attend 7 births.

All of the midwives and student midwives working at the birth centre agreed to be observed, however, one declined a recorded interview. I interviewed the midwives throughout the research period. In addition, 2 interviews were conducted with the midwives who implement the quality management system at the birth centre.

To summarize the participants and observation periods:

- Women
 - 27 interviews in the antenatal period
 - 21 "invitations" to be present at birth
 - 7 births (non-participant and participant observation)
 - 28 interviews postpartum
- Midwives
 - 14 midwives offering e.g. birth assistance
 - 4 midwives with administrative positions
 - 3 midwifery students

¹⁴ Two study participants had consented to an antenatal interview but gave birth before our appointments. One of them moved away shortly after her birth, so that I couldn't interview her postpartum. The other woman sent me an email after her birth offering to take part in a postpartum interview, which I agreed to.

- 2 additional interviews with the midwives who were responsible for quality management at the birth centre (1 QM midwife was external, hence not present at the birth centre on a regular basis)
- Total observation days/nights
 - 64
- Total observation hours at the birth centre
 - approx. 520

7.11 Structure of Observations

My observations were almost all connected to the midwives in their work processes at the birth centre. Hence, I did not spend time in the areas that were specifically created only for the women, such as the lounge area. The birth centre has an open lounge area akin to a waiting room with a sofa, several armchairs, and a coffee table, which opens out from the entrance. The lounge area or waiting room was used by the pregnant women who were waiting to attend educational courses and antenatal exams. With courses going on throughout the day and evening, the waiting area was mostly occupied by women waiting to go into one of the two course rooms. I did not sit in the waiting area unless I was speaking with one of my study participants, since the women in the waiting area were not a part of my study, had not given formal consent, and did not directly have anything to do with the aim of my research.

In addition to attending antenatal appointments and births, as I noted above, I regularly attended the once-weekly team meetings and took part in trainings offered to the midwives (i.e. suturing, hypnosis, resuscitation). Being at the birth centre also meant that I often heard births, as the layout of the birth centre made that possible. My "observations," as such, were not only visual, but also auditory.

7.12 Additional Sources of Data

The other ethnographic data sources that I utilized were information from women's files¹⁵, as well as quality management documents and thank-you cards sent by the families to the midwives.

¹⁵ With permission from the women.

7.13 Ethics and Data Protection

Ethics approval was given by STEMH at the University of Central Lancashire. The women and midwives were given written information describing the study aims and methods. In depth explanations concerning study goals were given in person. No minors were included in the study, nor any other people who were not able to give consent on their own. After reading the study information, the participants signed a letter of informed consent. All study participants mentioned in this article have been given pseudonyms, and their personal data has been removed. This also includes specific ages and professions of study participants and precise details concerning the midwives in the study, including years of experience, place of midwifery training, and years of experience at the birth centre. Because drawing the layout of the birth centre would make it recognizable, I have not included this, since the birth centre could be identified from this.

7.14 Summary of Chapter

In this chapter, I have introduced the ethnographic methods that I utilized to gather data at the birth centre, namely participant observation and interviews. I connected the methods to my theoretical standpoint, symbolic interactionism, and explained my approach to data analysis. Further, I described my research site, my research participants, as well as my approach to their recruitment. Lastly, I confirmed that I obtained ethics approval before commencing data collection at the birth centre.

CHAPTER 8. FINDINGS - RISK AND THE ALLURE OF THE BABY ON THE SCREEN

8.0 Introduction to Chapter

Chapter 8 is the first of five chapters of the findings of this study. The findings chapters represent my journey of discovery in the field. Through the process of data collection, analysis, re-entering the field for further data collection and the continual repetition of this process, I was able to use emergent themes to move from an open focus to focused observations. Moreover, the findings are presented in large part in the order in which I discovered them through the process of data analysis from both participant observation and interviews. For this reason, they are not separated under headings such as 'Pregnancy', 'Birth', 'Midwives' or 'Women' (service-users). For an overview of this journey, see Figure 1 on the following page.

In this chapter, I will describe the registration process for women wanting to give birth at the birth centre, followed by descriptions of antenatal appointments. In addition, although ultrasound scans are not conducted at the birth centre, the results of the scans that the women had at the obstetrician's office were regularly a part of the discussion at appointments during pregnancy at the birth centre. After these introductory sections, beginning with section 8.3, I will describe the women's experiences of ultrasound scans. My observations in this section are complemented with information gathered from conversational and in-depth interviews with the pregnant women and midwives. A list of interview participants (women registered to give birth at the birth centre) can be found in Table 6. There is no table included with the names of the midwives who participated, since any descriptive data would make them identifiable. Therefore, the data excerpts from interviews, conversations, and participant observation with the midwives is labelled with the title 'midwife' and the pseudonym of the midwife.

Figure 1. Overview of the Findings

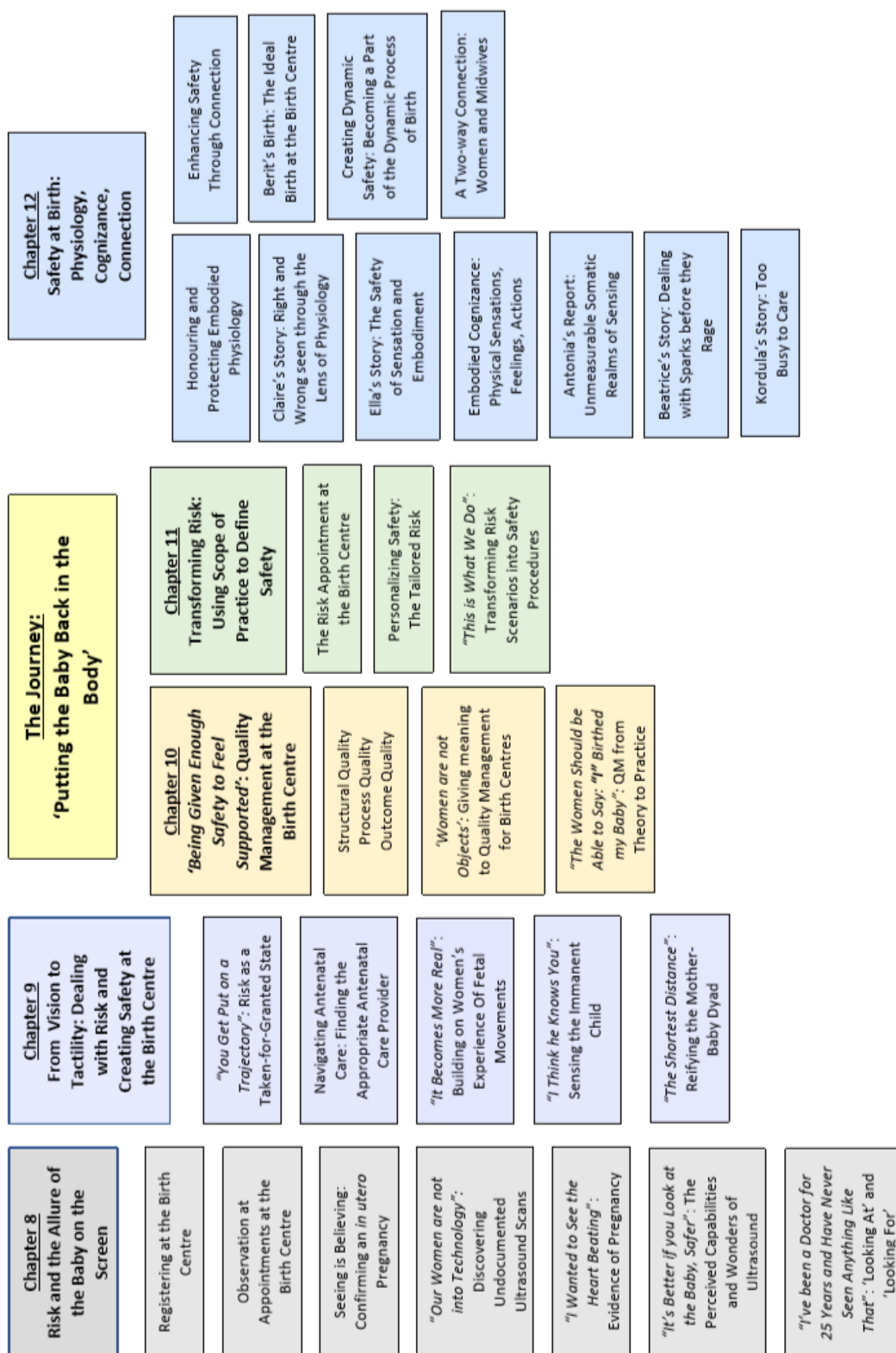


Table 6. Interview Participants (Women Registered at the Birth Centre)

	Pseudonym	Scans	Appts. Total	OB	BC	Birthplace / Mode of Birth
1.	Dora	4	20	5	15	Birth centre
2.	Jessika	5	9	4	5	Birth centre
3.	Nina	8	15	12	3	Transfer, vaginal birth
4.	Saskia	12	18	14	4	Transfer, vacuum extraction
5.	Kordula	7	13	10	3	Induction at hospital, vaginal birth
6.	Ingrid	5	14	1	13	Birth centre
7.	Louisa	8	10	8	2	Transfer, vaginal birth
8.	Annika	11	10	5	5	Birth centre
9.	Kaethe	5	14	6	8	Transfer, C-section
10.	Monique	6	12	8	4	Birth centre
11.	Nadia*	(50) 6	12	5	7	Birth centre
12.	Berit	4	19	9	10	Birth centre
13.	Rachel	8	13	5	8	Transfer, vaginal birth
14.	Amelie	2	11	0	11	Birth centre
15.	Yvonne	7	12	5	7	Birth centre
16.	Henny	3	9	4	5	Birth centre
17.	Magda	6	10	5	5	Birth centre
18.	Frida	3	10	3	7	Birth centre
19.	Lilly	10	15	5	10	Birth centre
20.	Vanessa	6	12	6	6	Unplanned home birth
21.	Marie	8	11	9	2	Birth centre
22.	Jeannette	8	17	8	9	Transfer, C-section
23.	Greta**	4	16	10	6	Birth centre
24.	Regina	8	16	8	8	Birth centre
25.	Tamara	11	10	5	5	Birth centre
26.	Frauke	7	13	7	6	Unplanned home birth
27.	Natalie***	9	17	8	8 (+1)	Induction at hospital, vaginal birth
28.	Simone	6	10	6	4	Transfer, vaginal birth
29.	Eva****	8	10	8	2	Transfer, C-section

Total refers to the total number of antenatal care appointments.

OB refers to the number of antenatal care appointments with an obstetrician.

BC refers to the number of antenatal care appointments with a birth centre midwife.

* This participant had access to ultrasound and estimated her number of scans outside of the obstetrician's office at 50. Her obstetrician did 6 scans.

** no antenatal interview, no postnatal interview

*** one of the antenatal care appointments was with a midwife who did not work at the birth centre

****no antenatal interview

8.1 Registering at the Birth Centre

The birth centre where I gathered data was filled to capacity, with at least 3 times more women wanting to give birth there than were places to accommodate them. Because of this, women generally had to reserve a place before they were 12 weeks pregnant, while the actual registration took place after the 13th week. The midwives explained this trend as being connected with the closing of smaller maternity units in favour of the enlargement of those that have a capacity to expand and service more women, without, however, increasing personnel. Apparently, the media regularly published stories of women who had been sent away from full maternity units while in labour only to have to drive to the next one and possibly the next one before being admitted. In addition, it had become common knowledge through publicized television and newspaper interviews with midwives that it was the rule rather than the exception that women often laboured in hospital maternity units without a midwife present in the delivery room. Hence, according to the midwives, the early search to secure a place to give birth that assured one-to-one care.

In order to register, a woman must have attended an informational open-door evening, unless she had already given birth at the birth centre. There was a waiting list for those who had not procured a place, since it was a routine occurrence that women who had registered between 8 and 10 weeks into their pregnancy would call to cancel their first appointment due to having had a miscarriage, or, later in the pregnancy, due to a maternal or fetal risk factor or exclusion factor that had surfaced and been diagnosed. In order to progress through the appointments at the birth centre, the pregnant women had to have a low-risk pregnancy. This meant that they did not have a medical condition or diagnosis that was included on the list of exclusions—something that would risk them out. (See appendix 8)

One of the two required appointments at the birth centre considered compulsory by the midwives was the so-called first appointment, where the midwife took a medical history and checked the mother's record book that had been issued by the obstetrician. At this appointment, the midwife asked a battery of questions aimed specifically at detecting any risk factors from the woman's medical history or early pregnancy that were on the list of exclusion factors listed in §134a SGB V (See appendix 8). Any other issues that were not on the list but seemed equivocal to the midwife conducting this appointment were discussed in-depth with the team at the weekly team meeting. The purpose of this first appointment was to ensure that the woman was a good medical fit for the birth

centre; the woman's reasons for choosing the birth centre were not at issue, although this was often shared. The woman received several documents at this appointment to take home, one being a list of questions that included asking about her motives for choosing the birth centre, as well as her fears and wishes concerning her birth. She was expected to reflect on these questions at home, write down her answers, and bring this back to the birth centre at her next appointment where it would become a part of her file.

The so-called 'second' appointment, which only referred to its significance and not to its actual numerical position in visits to the birth centre, was also called the 'risk appointment.' At this appointment, the woman and her partner/husband or birth companion learned about the situations that could occur during labour that could precipitate a transfer from the birth centre to a hospital. After this appointment, the woman and her partner or birth companion had to sign a legally binding informed consent form accepting what are considered the risks of giving birth at a birth centre. These included but were not limited to:

- the knowledge that the birth centre had no operating theatre and no possibility to perform an assisted delivery (vacuum extraction or forceps);
- no physicians present at birth;
- no possibility for epidural anaesthesia;
- and the knowledge of the average time of transfer to the nearest hospital in an emergency situation.

After this appointment, the woman signed a contract with the birth centre and was required to pay an out-of-pocket on-call fee. In addition, the woman and her birth companion, in most cases her partner/husband, signed the birth centre risk consent form.

8.2 Observation at Appointments at the Birth Centre

The midwives all knew how eager I was to attend appointments, which took place every weekday throughout the day and sometimes on the weekend with different members of the two midwifery teams, team A and team B. Whenever I was at the birth centre, I set myself up in the kitchen, making myself visible and available to the midwives. They congregated in the kitchen before and between appointments, did their documentation there when assisting a woman in labour, or simply spent some moments there when they stopped by the birth centre to check the schedules or do an administrative task.

I oftened watch the women as they arrived through the open door of the kitchen, but did not personally approach the women to ask if I could sit in at their appointments. The midwives and I had decided that it would put less pressure on the women if I wasn't present when they were asked. The midwives did not pre-select whom they asked; they asked whomever was scheduled for an appointment. Later, in focused observations, however, I specifically asked to go to 'second' appointments or to appointments with women whom I had already interviewed.

One of the first appointments that I observed was Rachel's. Rachel arrived at the birth centre radiant, eyes wide open, large smile, and flushed cheeks. Renate, the midwife conducting the exam, asked her if I could come with to observe. She had come alone and replied with a yes and a resounding laugh that filled the waiting room. I explained my study to her, gave her study materials to read over while she waited for her appointment to begin, after which I asked her if she had any questions. She understood that she could ask me to leave the room at any time, and that allowing me to come to her appointment did not mean that she was consenting to an in-depth interview or to my observation at her birth. This was my procedure with every woman whom I spoke with at the birth centre.

When Renate was ready to begin, I followed both into a room that doubles as a room for appointments and as a room for labour and birth. I asked Renate where I should sit. She slid the chairs around the table, setting them up a bit differently than usual. Instead of having me sit next to Rachel in the chair set up for her partner, she moved the chair over next to her and slid her chair over. Sitting next to Renate, I now had the perspective of the midwife for the appointment and was sitting opposite Rachel.

Rachel, whose due date was two weeks away, was a giggler, smiling and relaxed. She was meeting with Renate for the first time. She was at the birth centre for an antenatal exam, which included i.e. a urinalysis, blood pressure, and external palpation of Rachel's abdomen. The appointments at the birth centre, documented in the mother's record book, serve as an antenatal examination and, at the same time, as an opportunity for the woman to meet the midwives who could potentially be present at her birth. The goal at the birth centre was that each woman will have met all of the midwives before she goes into labour, so that the midwives and women would be familiar with each other. From my field notes:

Rachel laughs a lot in a jovial way, her laughter coming out in explosions. Renate is mostly talking to her and doing her check-up as if incidentally—not making the measurements the focus of the dialogue. Instead, she is asking questions of a more personal nature that don't seem to have anything to do with the actual examinations. There's a flow to it, as if the measurements are a backdrop to what Rachel has to say. Among other things, Renate asks her how she's feeling and then asks her how the baby is feeling. Rachel answers that she is feeling good, and that her baby is doing well. He's moving around a lot and responds to her touch and to the voice of her partner.

I was deliberating while I was listening how often I have ever asked a pregnant woman how her baby is *feeling*. (Field notes, record 2)

Renate continued with the appointment and finished with the external palpation of Rachel's abdomen. Before beginning, she asked her if she knew what position her baby was in. Rachel, without a second thought, showed us where the back was using her left hand, and used her right hand to show us where she felt the most kicks, saying that the feet must be there. From my field notes:

After this, Renate put both hands on Rachel's abdomen and waited. But for what? Why isn't she beginning the examination? As I sat there wondering, I suddenly heard both of them exclaim: "Ah, there he is!!" Both laughed, made eye contact with each other, and smiled. Renate had been waiting for Rachel's baby to move. When it was time to listen to the heartbeats, Renate used a wooden tool called a Pinard horn. (Field notes, record 2)

A Pinard horn is a hollow horn, in this case made out of wood, with one end shaped like the end of a trumpet. Only the person using the horn can hear the heartbeats. While listening, Renate tapped out the beats of the heart on Rachel's leg. When she was finished, she asked Rachel if she would like to listen to them with the fetal heart monitor. Rachel said that she didn't need to hear them out loud because her baby was moving around as usual—that being proof enough to her that her baby was doing well.

My immediate thought was that Rachel was anti-technology. There is a stereotype amongst midwives here in Germany, including those whom I trained with and worked with in various hospital delivery rooms, as well as myself, that women registered to give birth at birth centres are opposed to the routine use of technology during pregnancy and at birth, are into alternative therapies, and are rejecting of all medical procedures. I might have conjectured after this appointment with Rachel that she perhaps belonged in the category of 'people who reject medical procedures', since she didn't want the midwife to use the fetal heart monitor to listen to heartbeats. However, I had the chance to talk to her personally, since Rachel agreed to have an in-depth interview with me. I'll start the

next section with her experiences at the beginning of her pregnancy, as well as the stories of other women whom I interviewed.

8.3 Seeing is Believing: Confirming an *in utero* pregnancy

Rachel described the beginning of her pregnancy as emotionally challenging, since she had had a miscarriage a few years back and seemed to be persistently disquieted and fearful that she could have another miscarriage. She had more than the usual number of antenatal appointments and ultrasound examinations in the first few weeks of pregnancy, hoping for reassurance that she wouldn't have another miscarriage. She said:

To me, in the first months of pregnancy, I was grateful that I had my obstetrician. I can't say anything bad about this. Somehow, it was really important to me in the beginning to watch the ultrasound screen and have the pictures, and to see, okay, the heart is beating and it's moving and it's growing and everything is good and as it should be. (Antenatal interview; Rachel)

Rachel's experience of feeling at risk at the beginning of her pregnancy and her need for reassurance, turned out to be the experience of just about every woman I spoke with at the birth centre, even those who had not experienced a previous miscarriage. Following are descriptions of the beginning of pregnancy and the use of ultrasound in general throughout pregnancy from the point of view of my pregnant participants.

8.4 “*I Wanted to See the Heart Beating*”: Evidence of Pregnancy

For the women at the birth centre, missing their period was their first sign that they could be pregnant, but testing positive on a self-bought pregnancy test was their first piece of reassuring evidence. Their next step was to set up an appointment with an obstetrician/gynaecologist (obstetrician from now on). Tamara decided to wait until the 8th week of pregnancy to go to her doctor, knowing from a previous unviable pregnancy and a previous miscarriage that the obstetrician would use ultrasound to confirm the pregnancy. She said:

It was exciting. I consciously decided that I wouldn't go to the obstetrician until the 7-8th week of pregnancy because I wanted to see the heart beating. I think it's awful—at the beginning there is a gestational sac and an egg, and, after that,

it's just a molar pregnancy. I had that. And, then, there is no beating heart. It would have been a waste. (Antenatal interview, Tamara)

While Tamara counted the days until her first ultrasound and hoped for the best, Annika, who was pregnant with her second child, went immediately to her obstetrician after her home pregnancy test was positive. She was barely into her 5th week of pregnancy, having used the pregnancy test two days after she had missed her period. Annika's job prohibited her from working during pregnancy, so she felt that she had to immediately attend to getting physician-prescribed pregnancy leave. Her obstetrician conducted an ultrasound examination straightaway. Annika said of this:

So, you couldn't see anything—it was 4 plus 2 or something like that. And a week later, there was still nothing to see; and, a week after that, still nothing. And then (the doctor) wondered if it was a tubal pregnancy. Then they did a blood test looking for beta HCG, and it was clear that I was pregnant. ... After those results, I went back to the doctor, then there was an embryonic sac (seen in ultrasound) but only like a line. You couldn't really see anything. She (the obstetrician) wanted a second opinion. That afternoon I went to the hospital. But the next shock came. They told me to come on an empty stomach so that they could do a curettage right away (in case there was no visible embryo). (Antenatal interview, Annika)

Annika's story continues. At the hospital, she was examined by an obstetrician who spent some time talking to her before beginning the ultrasound examination.

The doctor was so nice. I didn't really expect that, you know. She asked me how I'm feeling. I said, not well. Then she asked me if I *feel* pregnant. 'Do you *feel* pregnant?' I told her: I feel nauseated, and I could eat non-stop, I am so hungry. But I can't eat because everything makes me queasy. She said that that's a good sign. And then she did an ultrasound and suddenly you could really see a little cluster and a heart beating. The HEART! But there wasn't anything to see that was really clear except for the embryonic sac and heart beating. A week later, I went back to my obstetrician, and everything was clearer and recognizable. (Antenatal interview, Annika)

These beginnings were the rule, not the exception. Confirmation of pregnancy followed only after visual verification, and visual verification seemed to lead to needing more of the same according to the women's stories. Women truly enjoyed these appointments, as long as they didn't result in any ambiguous results about the condition of the fetus. I did, however, meet one woman, Amelie, who was uninterested in ultrasound scans.

According to Amelie, her rejection of ultrasound scans came out of a sense of innate trust in her body that she had acquired through years of physical training. She had a

deep spiritual outlook on life, and wanted personalized care during pregnancy, which she hoped she could get from her obstetrician. After testing positive on her home pregnancy test, she went to her obstetrician's office with the news. When her obstetrician, whom she had known since she was a teenager, didn't share her celebratory mood, she became disenchanted. Her obstetrician's only comment to her was to make an appointment in four weeks for an ultrasound. Amelie left unhappy and called the birth centre shortly thereafter to make an appointment. It wasn't that she had a problem with medical doctors, she explained, but that she didn't want to feel like she was being processed through what she and other women whom I interviewed called "the medical apparatus". From Amelie's interview:

I didn't actually want it (ultrasound), but we had to because I didn't know when it (the pregnancy) even happened. We had to know exactly for the birth centre. ... I was much further along than we thought, so, in this respect, it was good. The first ultrasound—it was a necessity. And the second one was necessary to find out where the placenta was. I skipped the third one. (Antenatal interview, Amelie)

These two ultrasound appointments were a requirement for the women registered at the birth centre, according to the midwives, to rule out the risk of a woman giving birth at the birth centre to a baby before 37 + 0 weeks pregnancy, since the baby would be considered premature. It is believed that an ultrasound scan before 12 weeks of pregnancy is the best indicator for the age of the pregnancy. In addition, they told me, knowing the location of the placenta aids in excluding those women whose placenta is too close to or lying over the cervix, a situation which could lead to severe blood loss and fetal and maternal death. The third ultrasound was only required for women who seemed at risk for having a small for date baby or a baby in breech position. These were some of the risks or exclusion criteria that the midwives at the birth centre considered diagnosable through ultrasound, and, consequently, made these a requirement.

8.5 “Our Women are not into Technology”: Discovering Undocumented Ultrasound Scans

In interview after interview, while going over the mother's record books with the women, I discovered that the obstetricians used ultrasound at almost every appointment throughout the pregnancy to check the position of the presenting part of the fetus (head or breech), to measure the approximate weight of the fetus, and to listen to the heartbeats, as told to me by the women. However, the obstetricians hadn't documented these scans on the pages in the mother's record book reserved for ultrasound scans.

While looking with Marie at her mother's record book, she explained to me:

I had the standard (amount of scans). Quite often. I mean, I didn't only have those three (points to the page where the scans are documented). This time I had less than last time (first pregnancy). It wasn't as important to me this time as it was during the first pregnancy. Then, I wanted to know everything and see everything. But this time I had 1, 2, 3, 4, 5, 6, 7, 8—(she points to and counts all the antenatal appointments in her record book). ... My doctor always did an ultrasound from above, and, in addition, a vaginal scan. So that I could see. Or probably also for herself, so that she could see the heartbeats. Anyway, I didn't have the feeling that my doctor did too many scans. She always held back with ultrasound. Others do it more often. (Antenatal interview, Marie)

When I shared this discovery of undocumented scans with the midwives at the weekly team meeting, they were appalled and sceptical. The data that they sent to the Association for Quality at Out-of-Hospital Births (Q.U.A.G.) only included the ultrasound examinations that were documented in the mother's record book. Hence, their notion that the women at the birth centre were only having 2, or at the most 3, ultrasound scans during pregnancy was a misconception. They had never asked the women about routinized scans beyond the three in the antenatal guidelines documented on the pages designated for these. I told the midwives that, in my group of women, on average, they were having eight. One of the midwives thought that I had somehow met women who were not characteristic of 'their' birth centre women. From my field notes, a conversation with the midwife Rebecca:

Me: Have you ever asked the women how often the obstetrician is using ultrasound to look at the baby?

Rebecca: Well, no. I mean, I look at the pages in the mother's record book where the doctor enters data from ultrasound. I didn't even entertain the idea that they were getting more. Our women are not into medical technology. That's why they want to give birth here.

Me: Apparently that's not the case.

Rebecca: I still can't believe you. I think you're not meeting our typical women here. I know of one woman for sure who isn't even going to the obstetrician for antenatal appointments. She's only coming here.

Me: Are you talking about Amelie? She's the one woman in my group who is the exception.

Rebecca: No. It's someone else. I'll find others for you. You'll see. (Field notebook 4, p. 16)

The midwives searched for women who had had less than 3 ultrasound scans, but only found two, Amelie, whom I had already met, and another woman, who declined a meeting with me since she was already one week postdate and feeling stressed out.

I, myself, needed a perspectival adjustment period to accept and open up to hearing women's notions of the utility and perceived benefit of multiple ultrasound scans. Luisa, pregnant with her first baby, explained her position on ultrasound scans in a similar fashion to the others whom I spoke with. Although she considered herself to be into natural remedies when ill and declining medical interventions unless absolutely necessary, she could easily justify having had 8 scans:

I have to be honest with you—I found it so nice (to have scans). I'm, you know, to see the baby—it was really wonderful. I'm not, sad to say, *that* alternative. It's nice, it's simply totally wonderful to see it. (Antenatal interview, Luisa)

Amelie, the one woman I spoke with who had had only 2 scans, was not the only research participant who described herself as having an innate trust in her body, but she was the only woman I could find who had all of her antenatal examinations at the birth centre and would have gladly done without any ultrasound. For the other women, seeing the baby on the screen was magical, exciting, reassuring, and, somehow, not considered contrary to any other personal notions of naturalness or a desire for a low intervention, low technology approach to birth. Seeing the baby on the screen was something to look forward to, for themselves and for their partner.

8.6 “It’s Better if you Look at the Baby, Safer”: The Perceived Capabilities and Wonders of Ultrasound

The women considered ultrasound to be a panacea. They said that it was:

- a remedy for anxiety about the baby;
- a way for the father to build a relationship to his child;
- a way to detect Down syndrome or any fetal anomalies in general;
- a method to pronounce the baby healthy and to predict the weight (which was an indicator for gestational diabetes or the type of delivery the woman could expect, safe or risky);
- a way to predict the risk of premature labour;
- a way to pronounce that the baby was ready to be born;

- a way to decide if a baby could be carried postdate or needed to be induced in order to prevent intrauterine death by measuring the amount of amniotic fluid still left in the womb;
- and a way to calculate the age and condition of the placenta (first degree, second degree, third degree), this being an indicator for the need for more ultrasound scans or a possible indication for induction of labour.

Vanessa had this to say about her experience with ultrasound:

Vanessa: In my first pregnancy, I had a lot more ultrasound than during this pregnancy because I had malaria. He (the obstetrician) took extreme care and searched for deformities. What's going on? Is there anything? He looked a lot. It's better if you look at the baby, safer, right? Everything's okay. With the second, I had less. I didn't have the big screening because I was young. With this pregnancy, I wanted the detailed ultrasound anomaly scan. I had it right at the beginning, then again, then another, then one at the hospital, and then another (with the obstetrician)—to know that everything is okay, great.

Me: Did it make you happy?

Vanessa: That everything was okay?

Me: No, that it was done so often.

Vanessa: Well, the one at the hospital, I was happy that it was done. I had the assurance that it was in the proper position. And, more or less, that it is totally ready. It was week 36 and weighed a bit over 3000 grams. Now it can come. It is absolutely not in any danger. (Antenatal interview, Vanessa)

At the antenatal exams, I often noted that the midwives were annoyed when the women mentioned that they were going back to the doctor at the end of the pregnancy for what the midwife considered an unnecessary scan, but I only had one experience where the midwife vocally expressed displeasure. From my field notes during Tamara's antenatal exam:

Tamara told Mathilde, the midwife conducting the appointment, that she had been having ultrasound scans every week for the last three weeks. The obstetrician thought that her amniotic fluid was reduced. Mathilde told her that she didn't need to go to the obstetrician anymore, but Tamara was having none of this. Mathilde left the room, and, when she came back in, she asked Tamara if she was really going to go back for another scan. Tamara said yes, for a scan, but not for an antenatal exam. Mathilde shook her head sort of sideways. ... She asked if she would come back to the birth centre for the rest of her antenatal exams, reminding her that it is also important to build up a relationship to the midwives and to the

birth centre itself. ... She said that she would do both. Mathilde told her that this was an absolute overuse of medical care. (Field notes, record 19)

Tamara told me when Mathilde was outside the room that she sincerely trusted her obstetrician and thoroughly enjoyed her appointments with him. She felt that she was getting the care she needed and wanted at both places, the obstetrician's office and the birth centre, and felt that it was just the right amount of care.

Lastly, ultrasound scans engendered wonder and excitement, feelings that women described having while seeing the baby projected on the screen. Laura, pregnant with her second child, said:

I had ultrasound often. He (the obstetrician) did an ultrasound every time I was there, even 3D, without charging me extra for it. ... It was a wonder to see the heart, the legs. That one can already really see everything, and see how it develops. This scientific aspect, I find it simply exciting also. This is why I also wanted to go to the doctor. But I know the difference. I think both are good, this scientific side, that I could choose this. That I can combine both (obstetrician and midwifery antenatal care). I think it's super. (Antenatal interview, Laura)

Laura described both of her pregnancies as uncomfortable due to the extreme physical limitations that they imposed upon her, at times, wishing they could finally just be over. While she was quick to counter that being pregnant was not an affliction, she did say that she had a running joke with her husband that the second pregnancy should actually be his responsibility and not hers. Monique, pregnant with her third child, when asked about her scans said:

The doctor is someone who can see with magic if everything is okay. (Antenatal interview, Monique)

As long as the obstetrician didn't find any anomalies or inconsistencies, the women happily complied with the obstetrician's use of ultrasound, at least at the beginning of pregnancy. However, several women had anxiety associated with the ultrasound scans that bound them into a cycle of scans, while others lost interest in scans when they experienced quickening, the sensation of fetal movements.

8.7 “I’ve been a Doctor for 25 Years and Have Never Seen Anything Like That’: ‘Looking At’ and ‘Looking For’

Looking at the baby with ultrasound was thought of by the women as risk reduction—something that you do as a part of pregnancy for the well-being of the baby. However, the women differentiated between ‘looking at’ the baby and ‘looking for’ something, an anomaly or anything about the baby that could signify an abnormality. While the women enjoyed seeing the baby on the screen, many rejected the more detailed anomaly scan at 20 weeks because they were going to keep the baby even if it were to be in some way physically disabled. In spite of this, many continued to enjoy the less detailed scans at the antenatal appointments to check for the fetal presenting part and to watch the heart beating.

Ultrasound scans were, however, not always reassuring. Notably, when something unexpected was discovered during a scan, the women were adversely effected emotionally. Lilly, pregnant with her first child, described her inability to bond with her baby during pregnancy, and the anxiety that she had to deal with following findings in the ultrasound scan at 18 weeks of pregnancy. She described her experience with her obstetrician:

It was unbelievable. The doctor was a *bit* inept. He said that he had been a doctor for 25 years and had never seen anything like what he was seeing (on the screen). It was --(*Lilly made a gasping noise*); I felt like I was going to die because I thought that the baby was going to be stillborn. It was a terrible feeling. (Antenatal interview, Lilly)

Lilly was told that her baby had choroid plexus cysts, small fluid filled structures in the brain of the fetus sometimes seen during mid-pregnancy scans. They generally disappear later in pregnancy. Lilly understood the findings from the ultrasound as being exceptionally grave, not helped by her recurrent google searches after the scans.

The ultrasound scans were not nice because we were tense. Cysts in the brain. It was in the 18th week. They said that they were relatively large. When they are that large, the doctor told us that there is the possibility, there is a suspicion, that the baby has trisomy 21. Or 18? So I was told to get checked (by a specialist) in a prenatal centre. ... So I had the detailed differential screening there followed by control scans. In the 27th week, there was absolutely nothing more to be seen of the cysts. False alarm! (Antenatal interview, Lilly)

Lilly chalked up her experience to being caused, in part, by her insurance status. Lilly believed that having private insurance had put her at risk for being subjected to excessive and unnecessary medical assessments. Since I had already heard several stories like Lilly's from women who had statutory health insurance, I didn't assume that her care should be attributed to her insurance status. Kordula, for example, was not privately insured, but asked by her obstetrician to come in for weekly scans during the weeks before her due date.

Kordula had given birth to her first child at the birth centre. At the end of that pregnancy, she had been diagnosed through ultrasound scans as having a reduced amount of amniotic fluid. In her second pregnancy, she chose to go back to the same obstetrician, having been satisfied with the high standard of care she felt she had received in her first pregnancy. However, her obstetrician didn't want to share antenatal care with the midwives at the birth centre, especially at the end of the pregnancy, so Kordula had had only three antenatal appointments at the birth centre and 10 with her obstetrician. Kordula explained to me:

Unfortunately, I couldn't alternate (between the birth centre and the obstetrician) like I wanted because the gynaecologist unexpectedly didn't want that, or rather, she wanted me to have the birth centre appointments in addition to hers, which would have been too much for the health insurance company. I can't go every week to both (sighs loudly) – alternating would have been the right model for me. ... We talked a lot (she and the midwives) that that was kind of daft, daft of the gynaecologist. But the gynaecologist is nice and, I really don't like doctors very much—like I don't like hospitals. But I think she's totally okay. I am thoroughly, uhm, it's okay for me to go there. She doesn't stress me out, well, as long as she doesn't measure anything too often. ... I like ultrasound scans. Of course I think they're exciting. (Antenatal interview, Kordula)

Under the guise of risk management, ultrasound scans were, all in all, like a covert encounter that happened to women during pregnancy, whether they wanted it or not. It was desired and desirable, but the women wanted it on their terms, which wasn't always the case. In effect, it wasn't generally spoken about in welcoming terms at birth centre appointments. While the midwives at the birth centre were wholly unaware of the number of ultrasound scans that the women were receiving, this was, in large part, because the midwives weren't asking, the women weren't telling, and the obstetricians weren't documenting.

8.8 Summary of Chapter

In this chapter I have provided information about how I made contact with the pregnant women at the birth centre, as well as explaining the registration process at the birth centre. I have portrayed the women's descriptions of ultrasound scans with their obstetricians, and have shown the importance that ultrasound scans had for the women during pregnancy, especially early pregnancy. Seeing the beating heart was reassuring for the women, especially since they felt that visual proof of their pregnancy was crucial for their well-being.

Looking at the baby at the scans was, for the most part, a pleasurable and desired experience. While the women in theory had the choice to have all of their antenatal care with the midwives at the birth centre, most of the women continued to go to their obstetrician until the birth of their baby. The women felt that the continued use of ultrasound until the birth of their baby was necessary. This was often the suggestion of their obstetrician.

In the next chapter, I will give further examples of the use of technology and the construction of risk at antenatal appointments with the obstetrician as told to me by the women. Their comments about these appointments further underscore the impact that the risk discourse had on their feelings of security. I will describe how the midwives worked with the women during pregnancy to help the women to learn to sense their baby in their body. Furthermore, I will also portray how the women described their sensations of fetal movements, especially the first felt movements, also called quickening, and the effect this had on them.

CHAPTER 9. FINDINGS - FROM VISION TO TACTILITY: DEALING WITH RISK AND CREATING SAFETY AT THE BIRTH CENTRE

9.0 Introduction to Chapter

In the last chapter, I described the women's need for reassurance during pregnancy, their desire for ultrasound scans, and the contested nature of these in the rooms of the birth centre.

In the first section of this chapter, I will take a closer look at the women's antenatal care and their exposure to the risk discourse at appointments with their obstetricians. I have based this on interview data. To understand more thoroughly the choices that the women made when choosing care providers, I have included data from my observations at their appointments at the birth centre. The two themes that emerged from the data were: "*You get put on a trajectory*": Risk as a Taken-for-Granted State; and Navigating Antenatal Care: Finding the Appropriate Antenatal Care Provider.

In the second section, I will describe how the midwives utilization of risk and safety in dialogue with the women was personalized and context specific. The midwives reconnected the women to their physical sensations of pregnancy, while at the same time strengthening their connection to their baby in the womb. The baby that the women had thus far experienced visually on the screen was thus put back into their body. The prominent themes underlying the reframing of risk and the enhancement of a personalized sense of safety were: "*I think he knows you*": Sensing the Immanent Child; "*It becomes more real*": Building on Women's Experience of Fetal Movements; and "*The shortest distance*": The Mother-Baby Dyad.

9.1 Introduction to Section

In this section, I will present the perceptions of the women concerning their antenatal care. The women expressed that their obstetricians often provoked fear and uncertainty at their antenatal care appointments. This occurred when the obstetricians offered supplementary examinations that were not included in the maternity policy guidelines. According to the women, the obstetricians explained that these examinations as useful

in identifying and calculating risks. Ruling out risks meant overcoming uncertainty, pitting risk and uncertainty against certainty and safety. In spite of these difficulties, the majority of the women continued their antenatal care with the obstetrician although they could have had their antenatal care exclusively with the midwives at the birth centre. The two themes that I will explore in this section are: “*You get put on a trajectory*”: Risk as a Taken-for-Granted State; and Navigating Antenatal Care: Finding the Appropriate Antenatal Care Provider.

9.1.1 “*You Get Put on a Trajectory*”: Risk as a Taken-for-Granted State

In addition to the focus on visible proof of a vital, intrauterine embryo with a beating heart, antenatal care at the beginning of pregnancy was also a time when women were instructed to alter their customary behaviour. The health promotion information they received at their first antenatal care appointments were clothed in warnings. The obstetricians gave them information about forbidden foods and behaviours, and they offered scans and blood tests not covered by the statutory health insurance companies.

The midwives at the birth centre believed that this approach in early pregnancy put an excessive focus on risk and had a distressing effect on women. Barbara, one of the founding midwives of the birth centre, said:

You can tell women so many things. You can make them so crazy during the pregnancy. Three sentences from an obstetrician are enough to take away a woman’s reassurance for the duration of the entire pregnancy. (Midwife interview, Barbara)

Similarly, several multigravid research participants expressed that the tenor of antenatal care had become more restrictive. Henny said:

When you go to the obstetrician now and he determines that you are pregnant, then you get a leaflet with all of the things that you’re no longer allowed to do because you could endanger your child, and then you get so, uhm, you get put on a trajectory. ... It’s so full of risks. I’m not allowed to eat what I want anymore, not allowed to have sex how I want, can’t move around anymore how I want to. ... Virtually every decision is taken away from the woman, and yet she is still the carrier of risk for everything. (Antenatal interview, Henny)

Henny was a healthcare professional, as well as one of the other pregnant participants, Nadia. Nadia, pregnant with her first child, expected a collegial, mutually respectful

relationship with her obstetrician at her antenatal appointments on the grounds of being a valued fellow professional. However, when she compared her encounters to that of the other women in her birth preparation class, she realized that she was subjected to the same risk discourse at her antenatal care appointments as the others, and that her reaction to it was similar. Her professional status didn't prevent her obstetrician from informing her about everything that could be a threat to her unborn baby. She said:

I think that it is a huge issue that the doctors in the hospital and at antenatal care appointments say, well, I told you everything. They inform you about every risk imaginable, but what I as a patient do with that information, that it is only making me feel insecure and is unsettling, that doesn't interest the doctor at all. ... When you have a positive pregnancy test, then the obstetrician immediately gives you a brochure with (information about) measuring the neck fold because it could be that the baby is sick. What's the point of that? (Antenatal interview, Nadia)

"What's the point of that" was a question echoed in many of the interviews with the women and the midwives. The question was always rhetorical; the women never offered an opinion other than the notion that it was important to their obstetrician that they do everything possible to screen the baby and insure that it was normal.

Women reported being confronted with risk probabilities and risk scenarios from the moment their pregnancy test was positive (see chapter 8.) By the time they had started the registration process at the birth centre between the 13-25th week of pregnancy, they were already immersed in antenatal care with their obstetrician. All of the women had had their first appointments with the obstetrician before the 8th week of pregnancy. Hence, the obstetrician was the initial caretaker for all of the women at the beginning of pregnancy with the exception of Amelie (see chapter 8).

An aspect of being put on the risk trajectory meant being offered examinations to screen for anomalies beyond those recommended in the maternity policy guidelines (*i.a.* scans, blood tests, amniocentesis), many of which had to be paid for out-of-pocket. The maternity policy guidelines are published by the Federal Joint Committee and have the goal of recognizing risks in pregnancy and minimizing premature births (See chapter 3.7). The examinations written in the maternity policy guidelines are all covered by the statutory health insurance companies and, as such, are considered sufficient for detecting risks that would require further surveillance or treatment.

The women's reactions to being offered extra examinations were mixed. Some of the women felt that their age might predispose their baby to genetic disorders or congenital

abnormalities. Therefore, the women over 35, with the exception of Monique (See chapter 9.1.2), welcomed the notion of minimizing their uncertainty, and accepted examinations beyond those in the maternity policy guidelines. Simone, one of the eight pregnant participants who was over 35 years of age, told me in her interview that she chose to have a blood test that could give her information about chromosomal disorders. She said:

I did the blood test, the new one. The blood was sent to America. I didn't have to do it, but I did it because of my age. I made this decision with my husband. If you can find this out, and it is completely harmless for the baby, then why not? You can decide what to do with the information when you get it. I thought, let's do that. Let's see what the results are. It turned out to be normal, everything was okay, and this reassured me. It made sense to me to do this in early pregnancy. But other tests, those that didn't make sense to me—I rejected those. I didn't want to have tests done just to look for something that might not even be there. (Antenatal interview, Simone)

For Simone, her obstetrician was her specialist contact person for matters pertaining to risk in pregnancy. This was the case for the majority of the women, even for those who complained about the obstetricians' preoccupation with risk and examinations.

After several months in the field, the initial group of women I had interviewed had all given birth, and I was pleased to see several of them in the waiting room with their babies and partners. Magda and Kaethe were both there to meet and chat with the other women from their antenatal birth preparation class. They asked how my research was going, and if I could share any of my initial findings with them.

I told them that I had discovered that the women had received scans and examinations beyond those recommended in the maternity policy guidelines. I described this as a medicalized pregnancy that relied heavily on technology and the practice of visual reassurance. From my field notes:

Magda said that she had had obstetric-led antenatal care. She wouldn't have had it any other way. How else can you know how the baby is doing? A woman needs to have all of those check-ups and ultrasounds. Kaethe said that she felt that her obstetric-led pregnancy had had a negative effect on her and led, in part, to her having a C-section. She didn't believe that she was able to separate the care she had in pregnancy and the negative feelings she had about how her birth turned out. She said that she had intellectualized the whole process and was not really familiar with her body and her body's ability to give birth. ...

Magda said that she got the ultrasounds because the birth centre wanted them, but also because it would have been impossible to reject them—and why would she want to reject them? Why not get scans? It is good to see the baby, and it helped her to see that there was really a baby inside, that the doctor could see that everything was there, that everything was okay. That gave her a good and confident feeling. (Field notes, record 16)

Kaethe, from the above field note entry, was pregnant with her first child and under 35. She was offered supplementary antenatal examinations, but rejected those that could potentially give her information concerning the probability of fetal anomalies. Kaethe had registered at the birth centre in her 8th week of pregnancy, however her preliminary antenatal appointments took place with her obstetrician. Her reasoning was that it was important to have an ultrasound scan to make sure that the embryo had implanted in the womb. She had a low risk pregnancy, and complained about the economic exploitation of pregnant women, nevertheless she continued care with her obstetrician. Of the 14 antenatal care appointments she had had, 6 were with her obstetrician and 8 with the birth centre midwives. At her interview, she told me:

I told my obstetrician that I didn't want to have the detailed scan. ... At present, there is an unbelievable market—the pregnant woman is like a marketplace, and you can earn so much money on her if you conduct a lot of examinations. And what I think is so terrible is that they work with fear; they make the women afraid. They are always working with fear—when they say that you have to do all of these things, this and that. I've been put in that situation numerous times by my obstetrician. He offers a test and says: hmm? (Her eyebrows go up.) Should I? I have no idea. ... What I believe is, and what my partner also believes, is that you can never have 100% certainty. But that's what they attempt to sell you with all of the examinations. (Antenatal interview, Kaethe)

Simone and Magda both felt comfortable with examinations that they assumed would give them clear-cut answers concerning the normality of their babies. Kaethe, on the other hand, felt that the discovery of a fetal anomaly would have consequences that she and her husband weren't prepared to take. Almost half of the women considered their antenatal care appointments with their obstetrician as significant for detecting possible risks that could endanger their pregnancy. Interestingly, Kaethe was one of only two women who described the additional examinations as an added economic resource for the obstetricians.

Many of the women attempted to circumvent the obstetric risk discourse by switching doctors. One of these was Frida, pregnant with her first child. She sought out a new

obstetrician, but felt uneasy with both obstetricians whom she saw during pregnancy. She said:

I switched to a different obstetrician after my initial appointments, but now I don't want to go to the second one, either. I need warmth from my caretaker. ... I had a Pap smear at the beginning of pregnancy that was positive for the HP virus. After switching, the second doctor did another smear, and that was okay. But she called me to tell me that she wanted to do another one six weeks before my due date. And why? They wouldn't treat me for anything anyway. It's not an acute case of cancer or anything like that. (Antenatal interview, Frida)

Dora, pregnant with her first child, also switched to another obstetrician during her pregnancy. She explained:

She (the obstetrician) conducted examinations without telling me beforehand what she was doing. ... Then I took my partner with to the scan in the 21st week as a witness because I had been complaining so much at home about all the things that had gone wrong with her. She was nice enough, but she didn't understand that I found it inappropriate that she was conducting examinations without informing me first. So I switched to a different obstetrician, but she also wasn't okay. By then, I had also had antenatal appointments at the birth centre. She saw in my mother's record book that one of the lines was filled out by someone else. She told me that that was unacceptable, that a midwife isn't allowed to draw blood. Those kinds of comments. (Antenatal interview, Dora)

Frauke, pregnant with her first child and in her 20s, moved in her fifth month of pregnancy, so also had antenatal appointments with two different obstetricians. She explained to me that her first obstetrician tried to pressure her into accepting prenatal diagnostic examinations. Frauke's obstetrician was transparent about her reason for wanting to conduct additional examinations. Frauke told me:

She (the obstetrician) explained all of the prenatal diagnostic examinations to me. I told her that I didn't want to have any. And she said, well, okay, but I have to tell you about them. I could tell that she—then she started to talk about herself all of a sudden—that she absolutely did all of them when she was pregnant with her son because she couldn't imagine bringing a disabled child into the world. ... In spite of her doing that I thought that she was okay. The obstetrician I'm seeing now is really difficult. (Antenatal interview, Frauke)

These points of view sum up the participants' experiences with being put on a risk trajectory. While some women accepted this as suitable antenatal care, others tried to circumvent the risk discourse either by switching doctors or continuing antenatal care solely with the midwives at the birth centre. For the most part, the women welcomed

ultrasound scans in order to see the baby, but many of them rejected detailed scans and other methods of prenatal diagnostics, most of which had to be paid for out-of-pocket.

9.1.2 Navigating Antenatal Care: Finding the Appropriate Antenatal Care Provider

Although I wanted to understand better why so many of the women continued care with their obstetricians when they had the option of having this care with the midwives at the birth centre, I was cautious during our interviews. I felt that overtly questioning their choices might make them feel insecure, and I wanted to avoid giving them the impression that I might be judging their choices. I decided that I could understand more by simply asking them to describe their care in both locations.

When describing their care with their obstetricians, the women reported that their obstetricians didn't spend much time with them at their appointments. The women often felt that these appointments were brief and superficial. Yvonne said:

At the obstetrician's office, I have the feeling that I am one of many. (Antenatal interview, Yvonne)

Magda commented on the brevity of her appointments with her obstetrician:

With the doctor, I never have a conversation that lasts longer than 5 or 10 minutes because I notice quickly, okay, you can tell that this person, well, he doesn't have any time for me. (Antenatal interview, Magda)

The women easily explained away the detached approach of the obstetricians: this was described as normal, customary physician behaviour. Frida expressed sentiments shared by almost all of the research participants. She said:

This distance that they (the obstetricians) need, I think it's logical. (Antenatal interview, Frida)

In their descriptions of antenatal care, the women juxtaposed the detachment and terseness of their obstetricians with the warmth of the midwives at the birth centre. During observations, I experienced the midwives' working style as friendly and welcoming. The

otherwise mundane questions: “How are you” and “How is your baby” were more than fleeting formalities. The midwives sought with these questions to hear first-hand from the women what their physical sensations of pregnancy were, as well as their sensations of their baby. None of the midwives believed that giving birth at the birth centre was inherently dangerous for women with a low-risk pregnancy. However, their concept of safety went beyond ticking off boxes on a checklist to ensure that women met the criteria for giving birth at the birth centre. The midwives were establishing the women’s physical and emotional self-awareness, as well as their cognizance of their unborn baby. While the women connected visually with their baby on the screen at the obstetrician’s office, they were supported by the midwives at the birth centre to connect tactilely with the baby inside their womb. Furthermore, learning to palpate their uterus with the midwives also gave them the opportunity to be more in their body. They were at once learning to touch their baby with their own hands from the outside to identify the feet, back, rump, and head of the baby, as well as learning to sense what their baby’s movements meant for them physically and emotionally.

Since I didn’t feel that it was ethical to press the women to explain why they didn’t choose the antenatal care that they described using positive emotions, such as warmth, over the detached care with the obstetrician, I asked some of the midwives why they thought that the women went to an obstetrician when they could have most or all of their antenatal care at the birth centre. Rebecca, one of the midwives who had been at the birth centre for well over a decade, thought that pregnant women, in general, were so troubled by uncertainty that they had a need for excessive care during pregnancy. She told me at her interview:

There are women who can’t seem to extricate themselves from their obstetricians. There could be a pragmatic reason, or maybe not even—but the women need—or, rather, maybe it’s that the obstetricians can’t manage to let go of the women. This is a huge development, that the women are enslaved to, that they are not able to tell (their obstetricians) that they don’t want to come; or: (said in a different voice) *“No, I can’t tell him that I’m cancelling the appointment, even though I actually have an appointment with the midwives—then I’ll just have double appointments.”*

That, I believe, is the issue, that they don’t have the guts. They don’t have an issue with cancelling an appointment with the midwife, but they can’t cancel with the doctor. Extraordinary. I think it’s maybe that women really need this, that maybe, maybe there was something, an experience from a long time ago, something they experienced as a child, closeness to parents, and now they have to get help from a (scan) photo in order to be happy. Or the thought of the confined space (of the uterus) is too much. (Midwife interview, Rebecca)

Rebecca's conception of the women's enslavement to the appointments with their obstetricians seemed to me, as with the covert, undocumented scans, to be a veiled sign of the lack of cooperation between the midwives and the obstetricians, as well as the lack of respect for their respective antenatal care. The midwives' tactic was to let women decide for themselves where to receive antenatal care; however, they complained about women's continuation in antenatal care with their obstetrician. The midwives expected the women to resist these appointments.

One reason that many of the women gave in their interviews for booking appointments with both the midwives and the doctors in the same week in pregnancy was that they were told by their obstetricians that a cooperative model of antenatal care with the birth centre midwives was undesirable. This cooperative model of care would have meant that the women would have booked appointments alternately with the obstetrician and birth centre midwives as pregnancy progressed. Jessika, pregnant with her second child, had given birth to her first child at the birth centre. She said this about her obstetrician:

My doctor is extremely possessive, and she is, uhm, not opposed to the birth centre, but she very much wants to have control over antenatal care. She doesn't let the women out of her clutches easily... But I found it really good because I had premature contractions in my first pregnancy. I had to see this ultrasound now and again and see, okay, it's (the cervix) all still closed. Anyway, I found this important medically. (Antenatal interview, Jessika)

Jessika believed she was choosing the safest care for her pregnancy. In her first pregnancy she was at risk for premature birth due to premature contractions. She felt that she was also at risk in her second pregnancy, although she wasn't exhibiting the same symptoms. Until she reached the 36th week of pregnancy, her obstetrician turned out to be the caretaker who could best reassure her.

For the women who continued to exclusively go to their obstetricians for antenatal care or decided to have joint care at the birth centre, the risk trajectory initiated at the beginning of pregnancy with the first leaflets endured. Monique is a prime example of the impact of this insidious risk discourse.

Monique, who had a post graduate education, said that, in general, during her pregnancies, she felt more grounded than usual because her body had a task to fulfil. In this pregnancy, her fourth, she became concerned that her child might have Down syndrome. Before this pregnancy, she had suffered a miscarriage. Monique decided

against additional screenings recommended by her doctor that might have given her more information about her child, in part, because she couldn't afford them, but also because she and her partner had decided that they would keep the baby regardless.

Directly after birth, Monique was beside herself, unable to accept that her baby was healthy. She recalled throughout pregnancy a risk prediction that her doctor had told her. I had been at her birth and in the room postpartum, and witnessed that, even with her baby in her arms, she could not let go of the belief that her child was somehow impaired or had Down's syndrome. After I left the room, I wrote down our conversation in my field notes:

They (Monique and her partner) both asked me if the baby was healthy. They are afraid that the baby has Down syndrome. I asked them to explain to me why they thought this. Monique's partner said that the doctor had made them afraid. He told them that there was a 1% risk that the baby had it. I asked if he had actually said 1%, and what this 1% risk means. He shrugged his shoulders and said that he had no idea at all. I looked over at Monique. She also shrugged her shoulders.

...

Their second midwife at the birth centre, Annegret, had already done the initial baby examination and told them that the baby didn't have any traits of a Down syndrome baby. Monique asked me to look at the baby. I told her that I was not there in a medical capacity, but that we could look together. I asked her to describe her baby to me, from head to toe. She did this, unable to find a feature suggestive of an impairment or of Down syndrome, but, even after this, Monique said to me: I am so old. Older women like me have a higher risk of having a Down syndrome baby. That is what we were told. ...

She said that she couldn't accept and love her baby until she knew for sure that she didn't have Down syndrome. Not that she wouldn't love her with Down syndrome, but that it would be different. I asked her who could reassure her, and she said she didn't know. I told her that she could go to the paediatrician on Friday and get the baby checked. She said: Ach no, why that? The paediatrician is far away, and, anyway, we don't really have one. I told her that they are the experts for children, so, maybe he can give her reassurance and maybe this will sink in? She said: No, I keep thinking about the risk during pregnancy, and I'm still afraid. (Field notes, record 18)

Monique had no concrete proof during pregnancy that her baby had Down syndrome, only a risk assertion that influenced her emotionally and seemed to override her actual experience, visual and otherwise, of her baby directly after the birth. This led me to believe that even the suggestion of a possible diagnosis can, for some women, cause them to project and carry this fear into the future. This was the case even in the face of tangible evidence that these fears were unfounded. Monique's experience was the most extreme of all of the women whom I met, but certainly not unique in its essence.

9.2 Introduction to Section

In the last section, I explored the women's experience of the risk discourse in antenatal care and their choice for care provider. The feelings of fear and uncertainty that had permeated early pregnancy were attended to at the birth centre, having a positive effect on all of the women, according to their descriptions of appointments at their interviews. The midwives spent time getting to know the women, thus establishing reassuring connections to them, as well as strengthening the connection between the mother and her unborn baby through utilizing the women's increasing awareness of fetal movements. It seemed that the most trusted sense in obstetric care was the visual—the visual proof of the beating heart on the screen. The frequent use of ultrasound scans by the obstetricians connected the woman to her baby by removing it from her body and projecting it on a screen, while the appointments with the midwives put the baby back into the body of the woman.

9.2.1 *"I Think He Knows You"*: Sensing the Immanent Child

One of the ways that the midwives connected with the women was to engage tactilely with the baby in the womb. Affirming women's accounts and descriptions of their sensations of the baby while creating their own relationship with the baby gave the midwives a layer of information beyond the medical file. The interactions with the midwives at the birth centre were also an aspect of birth preparation, since the birth centre was considered by the midwives and the women to be more than just a space to turn up at to give birth. Hence, from the point of view of the midwives, one of the many ways for women to get prepared for birth was to become intimately aware of their body, not from an outsider's perspective or medical standpoint, but from within. Listening to the body, reflecting on physical sensations, and knowing the habits, position, and movement patterns of the baby put the woman back in her body, while at the same time putting the baby back inside the woman.

Although the midwives talked about the women as being overly worried, concrete reasons for this were rarely a topic of discussion in the kitchen or at team meetings. When I asked the midwife Paula if she knew what kind of proof the women needed in pregnancy to know that everything was okay, she said:

The typical woman who is walking around today? Most of them would like to have a picture, black on white, even better if it is signed, that everything is 100% all

right. But there is always uncertainty, even if there is a photo, that there could be something, that something isn't perfect. They can't accept this. They really need the feeling that: He told me that everything was all right. I find it difficult because, in part, one has to reflect and ask, what am I feeling? Is everything okay? Because the body can tell you better if everything is okay, more so, than any machine can. (Midwife interview, Paula)

The midwives were faced daily with women seeking reassurance after they had been subsumed by the taken-for-granted risky nature of pregnancy, and, even more profoundly, by the way in which their bodies were constructed as risk incarnate. To counter this, the midwives sought to re-orientate women back into a relationship with their unborn baby. At one of my visits to the birth centre, I had a quick exchange with Miriam in the kitchen:

I asked when women usually register. She said that they register at 8-12 weeks, which isn't bad—it's actually good. The relationship to the body and the baby can be developed and get strengthened at the birth centre. (Field notes, record 8)

The midwives began each appointment by asking the women how they were feeling. At many of the appointments that I attended, the women discussed their most recent appointment with their obstetrician and any diagnosis that they had received as a result of a scan, a blood test, or a vaginal smear. In my observations, the diagnosis and/or the woman's account of the obstetrician's statements concerning an issue detected by an examination were never explicitly discredited by the midwives in their interactions with the women. However, these findings were often discussed until the midwife appeared to be satisfied that she had reframed the issue for the woman. The midwife's aim was to facilitate the woman to discover her own resources for building self-assurance.

Any insecurities or negative emotions that remained after verbal discussion of issues that concerned the women were addressed in the next phase of the visit, during which the midwife palpated the woman's abdomen to assess the position, size, and movements of the baby. But the midwives didn't stop the palpation after these diagnostics. The midwives continued with palpation, asking the woman to join them. I observed how the midwives directed the attention of the woman to the moving, kicking, vital baby inside. While the palpation of the abdomen, also called Leopold manoeuvres, is usually seen as physical diagnostic procedures, the midwives in my study spent a considerable amount of time with their hands on the abdomen of each woman, simply sensing movements together with her.

For example, when Berit visited the birth centre for a post due date appointment, the midwife Mathilde incorporated a lengthy hands on session. Berit had come to an appointment at the birth centre after having had a non-pregnancy related emergency the week before. Mathilde spent the first half of the appointment discussing Berit's most recent medical diagnosis from her visit to the hospital the previous weekend. Although the diagnosis was not a threat to her pregnancy, nevertheless, the birth centre team had to call several specialists to find out if Berit would still be able to birth at the birth centre. Mathilde was visibly pleased to be able to tell Berit that her condition posed no risk to the approaching birth. After this was discussed, Mathilde continued with the rest of the appointment. This is an excerpt from my field notes:

Mathilde asks Berit to move over to the bed, where pillows are propped up against the wall, allowing Berit to lie down in a semi-reclined position. Mathilde has amazing hands, long fingers, somewhat pale. She rests them on Berit's belly, waiting, chatting all the while in a friendly manner. After a few minutes, Mathilde and Berit look at each other, eyes suddenly wide open. "Hello! There you are!" Mathilde says. She and Berit share a laugh together. "I think he knows you," Berit says. "It always takes longer for him to respond when the other midwives do this." Mathilde now begins to palpate Berit's abdomen and baby in a firm but gentle manner, pushing her hands into the softness while searching for resistance, making the parts of the baby visible even to me sitting across the room. Berit is smiling, not grimacing; this is pleasant for her. Mathilde is telling her where the rump of the baby is, where the back is; now she is feeling a foot, and guides Berit's hands to hers, letting her feel the different parts. Then, Mathilde moves her hand down and rests it just above Berit's pubic bone. She asks her to breathe in deeply, and, when Berit exhales, she reaches with her fingers above the pubic bone around the head. Mathilde tries to give the head a soft jiggle and asks, "Is it easier to get up the stairs without getting winded now that your baby has dropped?" Berit nods yes. (Field notes, record 4)

Mathilde's colleagues undertook this procedure similarly. Indeed, this episode is reminiscent of Rachel's appointment with Renate in chapter 8.2. I discovered later in observations and conversations with the midwives that their goal went far beyond the diagnostic component of checking the fundus of the uterus (to establish the week of pregnancy), and the position and presentation of the baby. Their key objective was to create and facilitate a moving dialogue between the responsive baby and the woman. Their secondary objective was to create a relationship between themselves (the midwives) and the baby, using the women as facilitators. The pregnant women were encouraged to lead the conversation, whereby they described their realizations and experiences with their baby in their day to day life. Berit, from the field notes above, told me this in her interview:

I didn't ask for extra scans, but my doctor did them anyway, free of charge. I had the three major ones, but he also did one at each appointment. He said: When a woman comes here, she should see and hear her baby, so that she knows that the baby is doing well. When he asked me if I wanted these scans, I told him that I didn't need them. At the birth centre, when the midwives ask me: Do you want to hear the heartbeats? I tell them that I don't need to hear them. I can feel how it's moving and how it's doing. I don't actually need to hear the sounds. (Antenatal interview, Berit)

The midwife Antonia described in her interview how she connects women with their physical sensations, especially those women who have trouble sensing their baby:

Nowadays, there are women who are not really in their body. They are, they don't have a good connection to their child. They can make up for this after the birth. I don't put pressure on them. If she says—"hey, I don't know what you want"—when I ask them how their baby is doing, then I let them be. I put my hand on their belly and feel how the baby is moving and get an idea of the movement pattern. And then I mirror this to them. "Look here, it's kicking here." I talk to the baby. And I say, "Hello, there you are!" I use myself as the medium for making contact, but I don't put pressure on them. (Midwife interview, Antonia)

A woman's ability to sense her baby included being able to talk about movement patterns, movement rhythms associated with day and night time, and movement as a response to emotions that the women felt. The midwife Beatrice explained this to me in detail:

Beatrice: Women who doubt themselves (during pregnancy) often manifest a self-fulfilling prophesy. They say after the birth: see, it didn't work.

Me: What can you do as a midwife during pregnancy or at birth to help a woman in that situation?

Beatrice: During pregnancy, with all the women, I work with palpation of the baby. I really tell them: give me your hands. Have you used your hands to touch your baby? Do you know the position he's in? ... What is he doing right now? And is there anything he does at specific times; times when he's kicking and when he's not? My thinking is that they'll describe to me the experiences they've had with their baby, and I can at least tell if there is a connection between them. Or she'll say: No, I've never tried to touch him, and, no, I don't know what position he's in, or anything about his movements. And you can take her hands and show her: This is how it works. Trust yourself and reach into your belly. And I explain the Leopold manoeuvres. What always works really well when they have been pregnant for a while is to help them feel the head, and then they exclaim: "Ah, check it out! I can feel and move the head!" ... This is so important. This is what the women don't experience anymore when they go to the obstetrician. And also, that no one shows them that they can touch, they can reach deep into their abdomen, and it doesn't hurt them or their baby. Then they can sense the baby in a new way, and it changes their perception. (Midwife interview, Beatrice)

At all of the appointments I attended at the birth centre, the midwives worked this way. They aspired to support the women's sensed and embodied experience of the baby. In addition, the midwives often spoke of their efforts to facilitate the women in becoming more conscious of the movements of their baby and the feelings that these elicited. This was a deliberate process intended to help the women achieve an internal, pictorial, moving sense of their baby.

This was also at the heart of what the midwives definition of connection was. The midwives were not talking about the women loving their babies or even loving being pregnant, nor about an inner dialogue the women might have with their baby. Connection for the midwives was of a physical nature and meant: being present in one's body; spending time touching and palpating one's baby from the outside; knowing where the different body parts of the baby were; and knowing what the movement patterns and daily movement rhythms of the baby were.

9.3 Introduction to Section

In this section, I will describe how the midwives reconnected the women to their physical sensations of pregnancy, thus putting them back in their body, while at the same time strengthening their connection to their baby in the womb. The baby, which had been abstract at the beginning of pregnancy and made visible by ultrasound scans before it could be physically felt by the woman, was put back into their body. The baby thus became tangibly real, giving the women a way to connect independently with their baby. This provided most of the women with a resource to reassure themselves and develop self-confidence. The two prominent themes in this section are: "*It becomes more real*": Building on Women's Experience of Fetal Movements; and "*The shortest distance*": The Mother-Baby Dyad.

9.3.1 "*It Becomes More Real*": Building on Women's Experience of Fetal Movements

Fetal movements were described by almost all of the women as transformational. The women's experiences of fetal movements, especially the very first, felt movements, also called quickening, were accompanied by a profound change in attitude towards the tentativeness of the pregnancy. Yvonne was hospitalized for hyperemesis gravidarum (severe nausea and vomiting) at the beginning of pregnancy. She felt unsettled and was

unsure if she really wanted to be pregnant, while at the same time fearful of miscarrying. By the 13th week of pregnancy, she had already had 5 scans.

I was terribly afraid—is something bad happening to the baby? I can't feel him; I have no control. Beginning from the moment when I could feel him—this happened really early on—in the 15th week, everything suddenly changed drastically. I could sense him; I loosened up and relaxed. (Antenatal interview, Yvonne)

An added consequence of this for Yvonne was that she felt that she no longer needed ultrasound scans to reassure her about the vitality of her baby. She only had two further scans from that point on until the end of pregnancy. These she did because she felt that they benefitted the bonding between her partner and the baby.

Natalie was also reassured after sensing the first fetal movements. Like Yvonne, she had frequent trips to her obstetrician for scans at the beginning of pregnancy. She said:

(It was) absolutely amazing. I was waiting the whole time for them and kept thinking: is that my baby moving? Yes? No? Around the 16th or 17th week I felt them ever so softly, like a fluttering. And I thought that that was for sure my baby moving.

Me: What was different for you after this?

Natalie: Everything was totally different after that, of course, because when you can feel the baby then you know that everything is good. (Antenatal interview, Natalie)

Marie's experience was quite similar. She explained:

(After feeling the baby move) I had, of course, more peace of mind that it is there. (Before this), it had been kind of like: is it really there? It's doing fine. You have more control, and you don't have to go to the doctor all the time. And, of course, because of the movements it got more real. You aren't afraid anymore. It's not so abstract anymore. And the bigger and stronger it gets, the more you imagine that it also has its own character. Like, with my first, he always pushed himself away down here, and then I always told him that everything is okay, he can calm down. She (points to belly) is doing a whole lot of gymnastics, but she is simply doing well and is content. (Antenatal interview, Marie)

For Dora, pregnancy wasn't separated into three trimesters. She felt that quickening indicated the second part of her pregnancy. She experienced quickening around week

17 after having had a relatively difficult time adjusting to the physical changes in what she called the first part of pregnancy. From her interview:

And, uhm, in the second part of pregnancy, it was sometimes intrusive to always feel the baby but I got used to it. You don't feel as bad as at the beginning of pregnancy, and it isn't as difficult to move around like at the end of pregnancy, but it is also more present because everyone knows. (Antenatal interview, Dora)

Saskia, also pregnant with her first child, had been on the waiting list to register at the birth centre. She didn't have her first appointment after 12-16 weeks, like most of the other women, but much later in pregnancy. She was able to describe her first experience with the midwife vividly. After one of her antenatal appointments at the birth centre, she told me:

I thought I could connect with the baby when I saw him with ultrasound, but that was so abstract, the baby, you know, and it's position inside me. When the midwife here at the birth centre touched my belly for the first time, felt the baby and showed me just how he was lying inside my uterus and how he could move, I suddenly realized something. I could comprehend more; the back is here, the legs here. That gave me the feeling of being closer; it brought my baby closer to me in my imagination. (Field notes, record 16)

Palpating the baby with the women provided an opportunity for the midwives to reinforce the significance of the women's physical sensations of pregnancy and of the baby, thus enhancing the connection between the mother and baby. This interiorized the somatic awareness of the woman and engendered a sense of embodiment, the focus of the next subsection.

9.3.2 “*The Shortest Distance*”: Reifying the Mother-Baby Dyad

Supporting a strong physically-sensed connection between mother and baby was a goal in and of itself for the birth centre midwives. According to the midwives, the significance of this connection was that the women would more readily be able to detect problems, should they arise. In addition, a physically grounded mother—baby relationship was thought to be beneficial to the women so that they could improve their ability to make self-directed decisions about care. The inverse of this belief was that not having a good connection to the baby meant that the women remained embedded in the risk discourse, disconnected from their own body and from their baby as a physical entity. The midwives believed that this led to women accepting interventions that were unnecessary, as the

example below shows. Here is the reaction of one of the midwives after hearing that Kordula (See chapter 8.7) had decided to get induced.

Kordula had been told that her level of amniotic fluid was at the lower end of normal. As a consequence, her obstetrician had given her a referral to the hospital to schedule an induction. At the hospital, Kordula had been told that induction was safer than waiting for contractions to begin on their own. At the birth centre, Kordula had asked the midwives if they could attempt to induce her with castor oil, the only induction method utilized at the birth centre. The midwives agreed to try this, but the attempt was unsuccessful. Kordula decided to comply with the recommendations of her obstetrician and the hospital obstetric staff and accept induction. From my field notes while sitting in the kitchen:

Rebecca asked about Kordula. Miriam told her that she went to the hospital. Rebecca's comment was: Mother and child couldn't work well together. She had so many chances—but, then again, it is not our goal that women give birth here, rather that they have a good and safe birth wherever they are, here or at the hospital. (Field notes, record 7)

The midwives believed that poor connection and communication between mother and baby operated at times as a causal factor, as in the above story. At other times, a poor connection was additionally thought of as an underlying, otherwise imperceptible and objectively unmeasurable sign that could give rise to obstacles during labour, since the woman was less reliable without a strong connection to her physical sensations of herself and her baby. The midwives seemed to believe that this was because lack of connection between mother and baby added an element of uncertainty: the women were unable to relay necessary information about the well-being of the baby to the midwives, leaving the midwives only with technological means to assess well-being. This reduced assessment of the well-being of the fetus to the fetal heartbeats. The midwives believed that the fetal heart rate was an insufficient replacement for a more complete assessment of the well-being of the baby, such as would be available to them if the women had a good connection to their baby. With a good connection, the women could report on their sensations and perceptions.

Ultimately, a significant aspect of the midwives' perception of safe care at the birth centre was the belief that the woman herself was a kind of early detection system. Understanding, supporting, and facilitating the mother-baby connection made it more likely that, with the help of the women, the midwives could detect a problem before it could be measured. In this sense, identifying a lack of connection was not regarded as

a moral judgement. The woman was not a bad mother if she was unable to connect to her child—she was simply thought of as not present in her body and thus less capable of making an assessment of her well-being and that of her baby based on physical and emotional sensations. I asked Frida, pregnant with her first child, what it meant to her to have a connection to her baby. She told me:

I am downright the person responsible (for my pregnancy). I think responsibility is a somewhat rigid word to describe it. However, because the baby is in me, I have to dialogue with myself. And, for sure, people can do that (dialogue) from the outside, but as a consequence that the baby is in me, and the shortest distance from her is to me, means that I can hear her best. (Antenatal interview, Frida)

The time that the midwives spent feeling the movements of the babies together with the women was reassuring and confidence-building, for both the midwives and the women. For the midwives, the woman's physical sensations of the baby from within were decidedly significant. This was in addition to the importance of recognising the physiological reality of the woman and baby as a linked and unified system, both acting upon each other. The midwives considered the baby to be a receptive, responsive entity, with the woman as the bridge between the midwife and the baby. The midwife Mathilde spoke about this in her interview:

They are a team (woman and baby). I encourage the woman to make contact. I do the same thing. I put my hands on (her abdomen) and make contact with the baby. It's obvious when the women don't have a very good connection with the baby. ... If something isn't working (at birth), if she doesn't have a good dynamic or the contractions are too weak or the baby isn't rotating, then I would always do what I need to do in terms of midwifery practices, but I would also tell her to talk to her baby, to connect with it physically. (Midwife interview, Mathilde)

The midwife Annegret considered the baby the central *acteur* at birth. The communication between the woman and the baby was for her at once physiological, but must also be supported consciously. She said in her interview:

For me, this is birth: the baby does everything; the mother supports him/her and the midwife supports the mother. The baby is the active part. ... The baby initiates the rhythm (of the birth) and the mother supports this. But it is not only the baby. The mother has to participate. They do this together. (Midwife interview, Annegret)

The midwife Tanja echoed her colleagues. When I asked her to talk about the mother-baby relationship at her interview, she explained to me:

Mother and baby do the birth together. It's different than saying that the mother's body works like a machine or that birth is only about birth mechanics. It is an individual process, like every person. And every child brings his/her own personality to the process. The connection doesn't begin the moment that the baby comes into this world, but before. I try to encourage a good connection between the mother and her baby, so that they can communicate well with each other. Especially during the pregnancy, not just at the moment that the woman is holding her baby in her arms. And the women discover that a good connection can develop. There are women who are surprised by their pregnancy, but they can still establish a good connection during pregnancy. (Midwife interview, Tanja)

The pregnant woman's physical connection i.e. her somatic awareness of her baby was paramount to the midwives for a safe pregnancy, labour, and birth. It added an extra dimension to the dialogue between the midwives and the women. In addition, in the time that I spent with the women, I observed that this contributed to the self-trust and confidence that developed along with the connection.

9.4 Summary of Chapter

In this chapter and the previous chapter, I have shown how risk permeates antenatal care, in general, and how it impresses upon women their own risky nature in pregnancy. Assurance in early pregnancy was almost always sought in the visual experience of the beating heart of the embryo on the screen. However, 'looking at' and 'looking for' often created conflicts. This occurred when the otherwise pleasant and exciting experience of looking at the beating heart or other body parts of the baby became a diagnostic situation. The purpose of the scan for the obstetrician was to look for anomalies; the women could be in denial about the actual reason for the scan until the obstetrician discovered an irregularity. The result of this was a cycle of insecurity, with a recurring need for reassurance. The women often attained a sense of relief at the scan, however the relief was fleeting, for the women were not learning to rely on their own physical sensations and feelings. Their reliance was on a procedure that not only took the baby out of their body, but also required a professional to interpret the image of the baby on the screen. As such, they developed knowledge about the ultrasound scan version of their baby, but little or no understanding of their own somatic sensations as pregnant women.

In addition, I showed how, at the birth centre, the midwives worked to reconnect the women to their physicality, encouraging them to learn to express their sensations of their baby. In this way, they could better answer the questions: “How are you?” and “How is your baby?” Tactile perception of the baby, a skill that the midwives taught the women, raised the awareness of most of the women, helping to build self-confidence and trust in themselves and their baby. In addition, through the hands-on work of the midwives, they were able to develop close relationships with the women and their baby. This was thought to be a significant factor in creating and maintaining safety at birth. To conclude, rather than risk and safety being strictly static and oppositional, they were fluid and malleable. Above all, they were dependent on the framework in which they arose. It was in this framework that the midwives explained and operationalized risk and safety.

Chapters 8 and 9 described how midwives and women together perceived and constructed risk and safety. In the next chapter, I will widen my focus from exchanges between research participants and my observations of these to describe the quality management system in use at the birth centre from the perspective of the midwives who developed and coordinated the system. Birth centres in Germany must have a quality management system that is audited every three years in order to qualify for reimbursement of their operating costs from the statutory health insurance funds.

CHAPTER 10. FINDINGS – ‘BEING GIVEN ENOUGH SAFETY TO FEEL SUPPORTED’: QUALITY MANAGEMENT AT THE BIRTH CENTRE

10.0 Introduction to Chapter

This chapter is a break in the narrative style of the presentation of my findings in chapters 8 and 9. In this chapter I will explain the quality management system that was utilized by the birth centre where I conducted research. The quality management system acted as a solid, yet organic framework for every aspect of the operation of the birth centre. The importance of this chapter is to show that the midwives offered care within a regulated context. The standards and guidelines, reassessed cyclically through quality management procedures, allowed the midwives to work reflexively, an aspect of reflexive modernity and the risk society. (See chapter 4.2.2). In this way, standards and guidelines were not thought of by the midwives as inhibitory, but as a way to forge a safe pathway for the care of the women registered at the birth centre. The midwives believed that this freed them up to be able to work creatively and discover innovative and fresh ways to enhance safety and promote good outcomes.

I collected data for this chapter during observations of internal and external quality management audits at the birth centre, as well as in focused interviews with the quality management representatives there, Annegret and Sally, both midwives. Supporting data comes from a section of the Social Code Book §134a; from the supplementary contract that the birth centres in Germany have with the Central Association of Statutory Health Insurance Funds (See appendix 8); and from an article published in 2013 in a peer reviewed journal in Germany on midwife-led birth centres (Bauer et al., 2013).

This chapter is in part about my experiences observing how the quality management system was implemented. However, I wouldn't have grasped what quality management means to the representatives, Annegret and Sally, without having conducted interviews with them to better understand the system. In addition to this, because the birth centre team was getting prepared for their external audit during my time in the field, I was able to get a sweeping and profound look into how quality management was implemented at the birth centre. If I hadn't been collecting data during an audit period, it might have been that the discussions concerning structure, process and outcome would not have been as consistency discussed with the terminology of quality management.

In the wider scope of my research at the birth centre, using an inductive approach to data collection and analysis meant that I did not use the categories of quality management as predetermined categories during data collection. However, I began to apply the terminology of quality management—structure, process, outcome—when observing and analysing interactions at the birth centre.

10.1 *'Women are not Objects'*: Giving meaning to and Humanizing Quality Management at Birth Centres in Germany

According to Annegret, one of my quality management interview partners, the quality management system in place at the birth centre where I collected data was initiated in the 1990s. At that time, the birth centre midwives throughout Germany foresaw the impending expansion of quality management throughout the health sector. With the intention to maintain control over their working processes and goals, Annegret and another colleague from the birth centre met 8-10 times per year with midwives from other German birth centres and representatives from the statutory health insurance companies. Their aim was to create a comprehensive quality management system tailored to birth centre care. The motivation to design their own system was not only to ensure that midwives would oversee and steer the design process, but also to obligate the statutory health insurance companies to reimburse the birth centres for operating costs. Up until that time, the statutory health insurance companies had only randomly reimbursed the birth centres and birth centre clients for the operating costs associated with births.

Quality management, according to Annegret, made sense for large birth centres, but less so for smaller birth centres, those with only 2-4 midwives. For large birth centres, it was thought that the development of a quality management system would enable the midwives to keep track of the appointments that the women registered there had had with other colleagues. The work would have a certain homogeneity to it, and each team member could be assured that the work that needed to get done was being accomplished. In addition, it would provide a structure and plan for integrating new midwives into the team.

It took many years to put together a system. While the midwife-representatives of the various birth centres met together to discuss the different parts of the system, each birth centre wrote their own quality management handbook custom-made to fit their Leitmotif and the size of their birth centre. Annegret and Sally, my other quality management

interview partner, both explained to me in their separate interviews that the birth centres adapted the quality management system from the auto industry for work with human beings. Since the outcomes for the auto industry were based on objects, not humans, the transference of concepts appropriate for describing birth centre care meant having to overhaul the quality management vocabulary. From Annegret's interview:

Quality management isn't limited to one particular area of industry or the economy. It comes from the auto industry, and there were acceptance issues (from the midwives) in the beginning because the language was far too technical—objects. But women are not objects! There were expressions like: object of observation. We changed this to: birth process, woman, child. An object became a client or a service process. (There were also terms like:) verifiable outcome quality-- the end of a process. For us that included episiotomies or an intact perineum, etc. Everything had to be rewritten because the language wasn't ours. We adapted the dreadful, technical language from the auto industry into a language that was more appropriate, a language that was applicable to the type of care we were giving. (QM interview, Annegret)

In 2007, midwives became responsible for their own administration. As part of this process, they had to negotiate their fees directly with the statutory health insurance companies (see chapter 2). The midwifery associations (German Midwifery Association and the Association of Independent Midwives in Germany) sent representatives to these negotiations. The midwives who were members in one of the two associations automatically entered into the contract. Almost a year after this, in 2008, a contract was closed between the midwifery associations, the Network of Birth Centres (in Germany), and the Central Association of Statutory Health Insurance Companies stipulating the conditions for reimbursement for operating costs at birth centres (Bauer et al., 2013). This contract was last updated in 2011. Both contracts, the contract from 2007 and from 2008, stipulated the requirements for opening and maintaining a birth centre; cataloguing the reimbursement plan for midwifery care in all areas of service delivery, including cataloguing the reimbursement plan for births at birth centres. The contracts also include a generalized description of what is considered midwifery care. From Bauer and Kötter (2013):

(The scope of practice of midwives includes): Care during pregnancy; birth preparation; care during labour and birth; monitoring of the postpartum period and the development of the infant including breastfeeding support. The supplementary contract is focused on outpatient births at midwife-led institutions. Part 1 describes in detail the quality agreements. Development and maintenance of the list of participating institutions is determined by the Central Association of Statutory Health Insurance Funds. ... The conditions that have to be fulfilled to enter into the contract are, for example, that the birth centre be led by a midwife and that the institution have sufficient operational and organisational liability

insurance. Above and beyond this, each institution must take part in internal quality management and external quality control (ibid, p. 15).

According to Bauer and Kötter (2013), in 2011, 135 of 139 midwife-led institutions had begun the process of establishing a quality management system.

10.2 ‘The Women Should be able to Say: “I” Birthed my Baby’: Quality Management from Theory to Praxis

Adherence to quality management is thought to mitigate the risks of giving birth in a birth centre (Bauer et al., 2013). (See appendix 8, §9) The quality management system is composed of structural quality, process quality, and outcome quality, all of which are defined in the attachments to the supplementary contract agreed upon in 2008.

In the following subsections, I will explain structural quality, process quality, and outcome quality as they relate to care at the birth centre.

10.2.1 Structural Quality

Structural quality assures that the personnel, physical space, and material goods necessary for running the birth centre are described in detail, thus providing transparency for the service users, midwives, and, insurance companies (Bauer et al., 2013). In addition, the structures in place should be suitable for achieving the goals outlined in process quality and outcome quality, according to both Annegret and Sally. For example, structural quality guarantees that there are enough midwives working at the birth centre to care for the clients registered there, which includes offering one-to-one care at birth and a second midwife at each birth. Meeting the requirements of structural quality for physical space and material resources means that there are enough rooms suitable for births, and that the birth centre midwives maintain hygiene according to legal specifications. Likewise, structural quality includes having a system in place for inventorying and buying material goods, including knowing how much of each material good needs to be on hand at all times.

Structural quality not only makes provisions for ensuring that there are enough midwives to cover shifts, but also includes a plan detailing how to cover shifts when midwives are ill, on vacation, pregnant, or unable to continue working due to exhaustion. Adherence

to the plan for structural quality ensures that needs are met continually, especially during periods of change. Lastly, according to Bauer and Kötter (2013), structural quality also outlines the pathways that connect the birth centre to health practitioners and services outside of the birth centre, including obstetricians, paediatricians, paramedics, transfer hospitals, laboratories, and other members of the healthcare system.

The distance from the birth centre to each transfer hospital is notably of concern to the Central Association of Statutory Health Insurance Companies, as I learned at the external audit conducted by certified quality management auditors. From my field notes:

Ida (one of the external auditors): You must provide a list for us and the Central Association of Statutory Health Insurance Funds of all of your cooperation partners, not with last name, since this would be an infringement of data protection, but they must be listed with their profession, nevertheless. The names of the hospitals should be listed, including the distance and the travel time. The woman (who examines the audit papers) checks for herself how far away each hospital really is, and she actually investigates how quickly the woman, family and child can get there in case of an emergency. This part of quality management actually came from the Network of Birth Centres—they wanted to have this specified. There isn't a limit on how far away a birth centre can be from a hospital, but we want to know how long it takes to get there. (Field notebook 2, pgs. 16-18)

The subject of travel time and distance is a specific point mentioned in the quality management contract. From Bauer and Kötter (2013):

The following is specified in §4 Section 1 of the quality management contract: The possible transfer hospitals along with the distance (number of kilometres and expected travel time) must be clarified for the insured (woman) and documented in the registration contract and/or on the informed consent document (p. 16).

Structural quality provides a secure personnel scheme and suitable working conditions for the midwives, as well as transparency for the women registered at the birth centre. It also ensures that the birth centre is connected to practitioners and hospitals, should a woman need care that cannot be provided by the midwives at the birth centre.

10.2.2 Process Quality

Process quality was, for Annegret and Sally, not just an equally important aspect of quality management, but in essence, the most important part. Process quality, for

example, outlines each appointment at the birth centre, including who is responsible, what these responsibilities entail, and where they are documented. In addition, it outlines the working procedures during births. Annegret explained to me that process quality outlines:

...how we work, but doesn't tell us what to say to people and what to do in non-emergency situations. It tells us to document, but not when and what to document. (QM interview, Annegret)

Process quality assures that the birth centre has standardized procedures, and gives the women registered at the birth centre the assurance that there are established pathways for achieving the goal of a healthy birth (healthy mother and healthy baby). At a team meeting where the midwives were planning and practicing for their external audit, they discussed the importance of processes and maintaining process quality. The midwives said:

The processes are determined. Every woman gets the same care in the same order. Nothing is forgotten. (Field notebook 2, pg. 22)

Standards, however, were not considered static. From Annegret's interview:

(The midwife) must have good reasons to depart from the standards. She has to document what she did differently. For example: For this and that reason, the (woman) wishes or gives her consent that, because of the dynamic of her birth, the following measures have been taken or have not been taken. It has to be documented, not just carried out. ... The goal is that (the woman says): I birthed my baby. Not—my baby was delivered to me. She has to be given so much safety that she feels supported and given so much space, that she can find the things she needs herself. That is important to us. That is process quality. This is why we have to have one-to-one care, so that we can know and perceive what she needs when she needs it. (QM interview, Annegret)

For Sally, process quality was like a living organism. She stressed the importance of reflecting on the processes at the birth centre. From her interview:

First, you describe how you work. In quality management, you record/capture 'what is' and compare this to the ideal. And then you reflect: With the way I'm doing things, am I anywhere close to where I should be? And then you also have to look at whether you have to change something. First that, then you reflect on it together with the team. How are things in reality? That is the processing procedure. That is the most exciting part—the processing procedure with the

team. It can be that everyone has a different perception of an issue. You write it down. Discussions ensue. Ideas are exchanged, and the processing chain continues because it becomes clear to us that we're talking about three different things. Or, worst case, ten people are sitting there, and they all have a different take on the issue. You talk about the different possibilities and come to an agreement. (QM interview, Sally)

After reflection and discussion, the new process is written into the quality management handbook and becomes a part of the 'way things are done'—or a new description of practical work. For both Annegret and Sally, process quality included searching for the most recent studies on treatments and work processes, taking part in external training, and then bringing this information back to the team for internal training. The aim for the midwives at the birth centre was to discuss each individual working process associated with process quality within a two year period, before starting the procedure over at the beginning, making changes in work processes when necessary.

10.2.3 Outcome Quality

Both Annegret and Sally stressed that, while outcome quality was a significant aspect of quality management, positive outcomes could only be met when process quality was tailored to the birth centres outcome goals. These outcome goals were a product of the midwives' and women's aspirations and had to be discussed and updated on a regular basis. They also included the outcome, as I wrote above, of a healthy baby born to a healthy woman.

In order to find out what women wanted, they were asked directly at their antenatal appointments, as well as receiving a questionnaire at home after their birth. The answers to the questionnaires were analysed on a regular basis, and the information gathered from these relayed to the midwives at team meetings. In addition, if the women criticised or complained about their care to their midwife at postpartum appointments, the midwife brought this up at team meetings. I experienced these discussions at team meetings. At one of the team meetings that I attended, Beatrice said that one of her postpartum clients (mentions name) and her husband were upset with the care that they received at the birth centre before they were transferred. From my field notes:

The birth centre wasn't really the right place for them. This is what the woman told Beatrice. Her husband said that he was ignored; the midwives didn't pay any attention to him, he was anxious, and he saw that the midwives were nervous. He wanted better explanations about what was going on. He noticed at the

hospital that professionals were at work, and that they were on the ball, getting the necessary work done.

The team asked the midwives who were present at the birth why they thought that the husband felt that the care at the birth centre, at least he implied this, was unprofessional. The transfer midwife said that the woman's husband had only been to one appointment—the risk discussion at the birth centre—but otherwise didn't know any of the midwives, nor was he familiar with the space. The team then discussed how the midwives could better integrate the working processes at the birth centre into a dialogue of safety so that the goals of feeling safe could also be reached, in spite of transfer.

Karla added that the two midwives should take responsibility for their part in what happened. Even just saying one simple sentence to the husband might have helped him understand better what was going on. The midwives knew that it was not a life and death situation, but maybe he didn't know that. (Field notebook 4, pgs. 1-3)

Both Annegret and Sally believed that the notion of talking about outcomes in terms of processes was also a way to discover what needed to be improved in quality management on the whole. Sally discussed the importance of innovation and methods to discover new ways to reach better outcomes. According to her, if you only look for solutions to problems within your current set of resources, you will probably not be able to change your outcomes. From her interview:

We use a method for outcome analysis called Ishikawa. It's a fishbone diagram. The important thing is that, no matter what system you use, you have to be able to understand causes. Quality management gives us an exciting way to look at causality in terms of structure and process. But, if you only use this process with your own team, then you may not be able to think outside the box. The outcomes that you have happen over and over because you continue to think with the same old patterns. Because of this, we try to use methods, like Ishikawa, to open up our patterns of thinking. (QM interview, Sally)

Sally also added that adherence to a quality management system that includes regular reflection at team meetings allows the midwives to make the connection between structure, process, and outcome, instead of merely receiving changes from management. The changes that are decided upon thus emerge from actual circumstances, and are more easily implemented. Talking about outcomes at team meetings, like with the above example, also helps midwives reflect on their own conduct, which supports professional development.

10.3 Summary of Chapter

In this chapter I have described the development of the quality management system at the birth centre where I conducted research. For the midwives I interviewed, safety was considered unattainable without systematised work processes that were open enough to allow midwives and women the autonomy to make individualised decisions should a situation call for a novel approach. Through the combination of structural quality, process quality, and outcome quality, the midwives believe they are able to create and sustain an environment in which they and the birth centre families feel safe, are safe, and are working safely, while at the same time possessing the quality of adaptability.

In the next chapter I will take a closer look at how the risk discourse was transformed into a discourse of safety by describing to the parents-to-be the scope of practice of the midwives at the birth centre at the 'second appointment,' the so-called 'risk' appointment.

CHAPTER 11. FINDINGS - TRANSFORMING RISK: USING SCOPE OF PRACTICE TO DEFINE SAFETY

11.0 Introduction Chapter 11

In this chapter, I will give examples of the 'risk discussion' appointment (*Risikobesprechung*) from observations and interviews. It is obligatory at the birth centre to inform the women and their partner or birth companion about the actions that are taken by the midwives, should a problem arise during labour or postpartum. For almost all of the women, this so-called risk discussion, the second obligatory appointment at the birth centre, gave them reassurance and solidified their choice for the birth centre. This discussion was tailored to the needs of the women and their birth companion, with the intention to allay any fears about birth in general or the procedures at the birth centre in particular. For some, their interest in hearing about risks was minimal, for others, they needed to hear detailed descriptions of emergency procedures.

The importance of this meeting from an analytic point of view included, but also went beyond getting informed consent. The goal the midwives had at this meeting, which was quite transparent, was to explain labour, birth, and the postpartum period within the regulated scope of practice of the midwives working at the birth centre. From this perspective, issues that could arise during labour, birth, and postpartum were less about issues of pathology and liability, and more about reassuring the women that they would get the care they needed at the place they needed it with the appropriate caretaker, whether at the birth centre or at a hospital, in case of transfer.

11.1 The Risk Appointment at the Birth Centre

In this chapter, I will present two themes: '*This is what we do*': Transforming risk scenarios into safety procedures; and Developing a Personal Sense of Safety: The Tailored Risk Appointment. Understanding the 'risk discussion' appointment and how it was implemented aids in understanding how risk was transformed into a dialogue of safety about birthing at the birth centre. This was especially in regard to the significance of one-to-one care and the respect for the needs of the women and their partner. In addition, for women who had experienced a previous traumatic birth, the second appointment was an opportunity to discover if the birth centre could really offer these women a place to give birth that they considered safe.

11.1.1 *'This Is What We Do': Transforming Risk Scenarios into Safety Procedures*

On my first day of observations at the birth centre, Karla, one of the midwives, recommended that I go with the midwife Rebecca to her appointment with Iris, pregnant with her second child in week 35. This was Iris's 'risk appointment', also referred to as the 'second appointment' by the midwives. At this appointment, the midwives informed the pregnant woman and her birth companion about the risks associated with labour and the postpartum period. This was Rebecca's description of the appointment from her interview:

It is actually just a description of our work, what we can do, what our limitations are and when we might have to transfer. It's about how far our scope of practice reaches. I don't even call it a risk discussion—I just call it the second appointment. I tell them: 'We have a so-called second appointment, and it is about transfer situations'. This is what it's about—in order to prepare the parents well. (Midwife interview, Rebecca)

The depiction of this appointment as the risk appointment seemed ironic to all of the midwives, since the 'what-ifs' at birth can happen anywhere, even in a hospital—or especially in a hospital, as many of the midwives believed. The 'what-if' scenarios discussed at the risk appointment ranged from non-emergency circumstances, such as contractions stopping at some point during labour, to emergency circumstances, such as postpartum heavy bleeding. I have conducted this appointment countless times at the birth centre where I work, so I was curious to hear how Rebecca would conduct this appointment.

Rebecca, Iris, her husband, and I went into one of the appointment rooms together. I still wasn't familiar with the rooms at the birth centre, so Rebecca went into another room and grabbed a chair for me. She put the chair at one end of the table, which let me easily observe both the pair and Rebecca. After the four of us got seated at the table, Iris handed Rebecca several pages of what looked like a questionnaire. Each page had a birth centre logo at the top with questions that Iris had answered by hand. I hadn't yet had the opportunity to look at the internal documents at the birth centre, so I wasn't sure what these were. Rebecca skimmed over the answers that Iris had written down and mumbled to herself, "ah, okay, atony, meconium stained amniotic fluid" (FN 1). She then laid out two documents in front of her. One of these was the official informed consent form from the German Midwifery Association and the midwives' liability insurance carrier,

the other was a checklist. I had brought a notebook in with me to take notes, something that I would refrain from at later observational sessions.

Rebecca looked at both Iris and her husband as she told them that the 'risk talk' was less about risk, and more about defining the scope of practice of the midwives at the birth centre. Specifically, it was about the possible situations that could arise during labour that the midwives would not be able to treat. These situations, should they arise, would require transfer. I found this explanation not only clear and coherent, but also novel. From my field notes:

Rebecca: Here is the form from our liability insurer. I will use our form for our talk, since it is in logical order and uses the proper names and conditions for the reasons for transfer, without the overly emotional language of the form written by our liability insurance carrier. I'll give you this form when we're finished. You are required to read it and sign it as a condition for giving birth at the birth centre, but you must wait 24 hours after this risk discussion (*Risikobesprechung*) before you make your decision. Only then, should you sign the form. (Field notes, record 1)

Rebecca explained the operational structure of the birth centre to Iris and her husband, focusing on the advantages of one-to-one care during labour and two-to-one care (two midwives for each woman) at birth (the emergence of the baby). One of the main advantages, according to Rebecca, was that the close, intimate care created a deeper exchange between the midwives and women than was possible when a midwife was caring for more than one woman at a time or having to go in and out of the room to accomplish other tasks. She explained, for example, that the midwives were able to expeditiously detect situations that would either necessitate an intervention at the birth centre or require transfer to a hospital during labour, before they became emergencies. Transfer would be necessary only if the treatment needed by the woman or baby went beyond the scope of practice of the midwives. While listening to this and taking copious notes, I realized that, although this was a 'risk' appointment, Rebecca, while focusing on specific unplanned events that could occur during labour, did not use the word 'risk.' Again, from my field notes:

She goes through the list and doesn't mention the word RISK even once! How has she managed this? I am waiting for it, waiting to hear the word, but it never comes. She uses phrases like: This is something that happens very rarely. This is something that I have never experienced at the birth centre, but it is known to happen on very rare occasions. Rebecca allows time for questions. Iris and her husband have very few. Iris describes the situation at her first birth, which was in a hospital delivery room. She says: "Four people threw themselves on my belly and pushed down very hard (Kristeller manoeuvre); then they took my baby away."

She wants to know what happens at the birth centre after the birth if the baby has a problem.

Rebecca: If the baby is having problems adapting, then the baby stays with you, still attached to the placenta if the cord is still pulsating. We can bring all of our resuscitation gear over to where you have given birth. You can hold your baby in your arms or between your legs and talk to him. He should hear your voices. This is very important. We call a neonatologist. An ambulance is here within 10 minutes. In the meantime, we are all trained to perform newborn resuscitation. We also have to call a second team of emergency medical technicians. The room fills up quickly with strangers (*Fremde*) who have come to help. If we call a neonatologist, then they will almost always take the baby with, even if he is okay when they arrive. If they take the baby, then there is no space in the vehicle for you or for your husband. Your husband can either stay here with you, or go in a car to the hospital where the baby will be. Sometimes, you cannot be admitted to the same hospital where your baby is. It is an unhappy situation, but this is sometimes what happens. We often try to find a solution, even invent a medical indication, so that the mother can be admitted to the maternity ward in the same hospital where the baby is. (Field notes, record 1)

I discovered after the appointment that Rebecca knew all the details of Iris's first birth. At that birth, which was in a hospital, Iris's cervix dilated quickly to 10 cm. Iris felt overwhelmed and asked for an epidural. The epidural slowed down the progress of the birth so much so, that she needed to have an oxytocin drip to augment her contractions. During the expulsion phase of labour, the heartbeats of her baby were pathological, and she couldn't push because of the epidural, so the doctor pulled out the baby using vacuum extraction. Her baby needed to be resuscitated after birth, was taken to a different room for this, and transferred after that to a neonatal clinic. She didn't see him until 90 minutes after the birth and wasn't allowed to hold him the first day. Her baby remained in the hospital for a week. Iris suffered from postpartum depression after this birth. She had reflected on her birth from her perspective as a medical professional, and had come to the conclusion that the epidural was perhaps unnecessary and had probably led to the need for the oxytocin drip, which then affected the heart rate of the baby. The epidural left her unable to push, which led to the need to use physical force on her abdomen (*Kristeller manouvre*) and the vacuum to expedite the birth of her baby.

Throughout the discussion, Rebecca kept the focus on the scope of practice of the midwives within the framework of the birth centre. She made it clear that there were possibilities for interventions at the hospital that midwives were allowed to carry out under the supervision of an obstetrician that were not permitted at the birth centre. A few of these that were mentioned were administering an oxytocin drip during labour to augment contractions, caring for women with elevated blood pressure, and caring for women who needed intravenous antibiotics.

Iris believed that the circumstances at her first birth, as well as the dramatic, poor outcome and transfer of her baby to a neonatal ward, was caused by a combination of fragmented care at birth and the utilization of interventions that she didn't actually need. She didn't feel safe going back to the hospital for the upcoming birth. She had chosen the birth centre this time because the interventions that she felt had led to a poor outcome were not available there. For her, as a physician, she understood that one-to-one care meant having someone watching her and keeping track of all of the changes and developments during her labour. The most important piece of information for Iris was that the midwives would do everything possible to keep her together with her baby, even if problems would arise.

Iris was separated from her first baby after his birth and felt reassured after hearing Rebecca explain the measures that would be taken if her baby would need physician care after her upcoming birth. For Natalie, however, pregnant with her first child, hearing about the 'what-ifs' at the second appointment frightened her, especially hearing that she and her baby would be separated if the baby had to be transferred after birth. Natalie said:

I went to the second appointment with my husband and found it really unpleasant. It lasted two hours. We talked about everything that could go wrong. For me, the biggest risk is that maybe the baby won't be okay, and that it would have to get transferred to a hospital, and I wouldn't be there. That is a terrifying thought. But, with me, if there would be anything with me, that's an unpleasant notion for my husband, but it's not so dramatic. But the idea that I would come here with a full belly and leave without my baby—that is awful. (Antenatal interview, Natalie)

Natalie was the only woman I interviewed who wasn't reassured at the second appointment. Like Natalie, Magda was also worried about what would happen if her baby had problems adapting after birth and had to be transferred. She explained:

The second appointment really helped both of us. We had to come to terms with all of the risks. We heard about a lot of things that I didn't know anything about before. And I got to confront the fears I had had about what would happen if there would be anything wrong with the baby. ... And then we were told in detail what happens if there is an emergency with the baby. ... I felt that my baby was safe after that. (Antenatal interview, Magda)

Magda felt that the information that she heard at her second appointment had given her the opportunity to air her fears and talk openly about them. Hearing exactly what the procedures would be should problems arise took the abstractness out of the notion of

'what if', giving her concrete answers concerning her fears. The rest of the interviews with the women echoed what Magda had said to me. Tamara told me at her interview:

I guess you can always have concerns about almost everything you do, you know, like that something could happen. We had the second appointment, the risk appointment. We got a really good explanation about what the midwives do in particular circumstances. Most of the transfers are non-emergency transfers—only rarely is there an emergency. The distance to the hospital isn't long. ... They don't take any risks here. The continuous support from the midwives means that they have a better and more complete picture of what's going on with the woman than in the hospital. Because of this, we both feel that we're in good hands here at the birth centre. (Antenatal interview, Tamara)

For Nadia, pregnant with her first child, hearing exactly how problems are managed made all the difference for her. She made sure that all of her questions were answered at her second appointment. She told me:

I didn't make my decision about giving birth here (at the birth centre), didn't know if I had enough trust, until after the second appointment. I had left it open. ... I needed to hear the drill here. I asked at the second appointment: What do you do if a woman has excessive uterine bleeding postpartum? What exactly do you do? And then what happens?

I wanted to have the answers. I also had to hear from them: "We have partussisten (a medication used during labour to suppress uterine contractions); we can insert a venous catheter; we can give you an oxytocin injection postpartum (to stop heavy bleeding)". I had to hear about those kinds of things. It's not like they can't do anything here. That had been my fear. (Antenatal interview, Nadia)

One of the midwives, Beatrice, thought that it would be beneficial for women and their partner to have time to ask questions of the birth attendants in whatever setting they're planning to give birth. Her explanation shows that the parents-to-be have a chance to have agency if they have heard in advance what the specific procedures at their chosen birth site are. She said this to me:

The topics at the risk appointment are always so intense, like placental abruption (when the placenta detaches from the uterus before the baby is born) and the death of the baby and, in spite of this, it's possible to inform parents without making a horror story out of it. You know, so that the parents don't end up feeling like—Oh God, it would be best not to have a baby at all, but rather this: an informed decision for or against something so that you feel safe about whatever decision you make. ...

This isn't about us avoiding getting sued. It's about being in the know—knowing what the risks are so that the parents can decide for or against something. And to be able to talk about what happens if the birth doesn't happen according to the plans they've made. We tell them—this is what we do in this or that situation. We tell them about the various medications we have and about our emergency equipment. (Midwife interview, Beatrice)

Beatrice also spoke about the legal protection that midwives at the birth centre have through getting informed consent from the women registered to give birth at the birth centre. The woman's partner/husband or birth companion is also required to sign the form, a feature of the contract that the midwives found beneficial.

11.1.2 Summary of Section 11.1

The midwives believed that the risk discussion was primarily for the women, since a well-informed woman could better take part in decision-making should a situation arise that might warrant transfer. In addition, the midwives built trust through transforming the risk discourse about birth at the birth centre into a discourse of action and safety based on the scope of practice of the midwives. The reassurance that the women and their partners experienced after this appointment helped to solidify their confidence in their decision to birth at the birth centre.

11.2 Personalizing Safety: The Tailored Risk Discussion

Wholly dissimilar from the 'second appointment' with Iris was the appointment with Sammy, also pregnant with her second child. She had given birth to her first child at the birth centre. Her husband didn't have time to accompany her to the appointment and had instead opted to sign a waiver. Sammy came with her daughter, who was just over two years old. She was so charming that neither I nor her mother could take our eyes off of her. From my field notes:

'Mom' sits down on the middle of the bed, setting her two year old down opposite her. Katharina (the midwife conducting the appointment) sits on the floor; I pull a birthing stool over to the edge of the bed. I focus my attention for quite a bit of the time on Sammy's adorable two year old. She is first off playing with plastic, colourful cups that fit inside each other. ... I am listening to Katharina with one ear, noticing that she isn't very focused herself. Then I begin to observe Sammy. I have to hold myself back from chuckling. She isn't listening to a word that Katharina is saying! She, like me, is following every move that her daughter is making. ...

Katharina plugs on, talking and talking, explaining all the different reasons for having to transfer or intervene in a birth at the birth centre. She also doesn't mention the word risk, as far as I can tell. I'm just not able to listen very carefully, as taken as I am with this child. When the little girl begins to get restless, her mother takes out a plastic container with a cut up blueberry muffin inside and hands it to her daughter. ... Katharina begins to talk more quickly. ... This appointment is required by the insurer of all midwives offering birth in birth centres. Sammy could care less. She gave birth to her daughter here and will give birth to her second child here as well. Risk or transfer is probably the farthest thing from her mind.

The tone of this 'second appointment' is comical: the instance of a healthy pregnant woman together with the child she had given birth to two years prior in exactly that room being told about all the 'what-if' scenarios that might possibly happen. Or not happen. I wonder why when I've bought a car, my car insurance carrier doesn't require the car dealership to explain to me all of the terrible accidents that could happen while I'm driving. (Field notes, record 2)

Katharina told me after the appointment that she didn't think it was worth the effort to coerce or pressure Sammy into listening to her. She did, however, believe that it was a wasted hour, and wished that women who had already been informed during a previous pregnancy could also opt out of the 'risk appointment' by signing a waiver. As the midwife Elizabeth told me one afternoon while we were chatting in the kitchen, every woman needs to have a 'second appointment' so that those who have not yet grasped up until that point what it means to give birth without interventions will understand. In addition, they need to know what the midwife can do, and what she cannot do. The 'second appointment' was there to talk about potential problems and their solutions, and then to reflect on the appropriateness of the birth centre from an individual point of view. Elizabeth told me:

You can't just tell someone they're not at risk. They have to come to the conclusion themselves that they are safe. If they can't manage that, then they need to birth somewhere else. (Field notes, record 22)

Elizabeth explained to me at her interview that the birth centre is operated according to quality management principles. Maintaining a thorough file on each woman was one aspect of quality management. This included taking an extensive medical history at the 'first appointment.' At each subsequent antenatal appointment, personal information was added that the woman and her partner had shared with the midwives. By the time the women had had their 'second appointment,' the midwives had become familiar with the women's feelings and fears during pregnancy and those concerning the upcoming birth.

The focused risk discussion was also a compulsory feature of quality management. However, Elizabeth wasn't entirely positive about the implications that this obligatory appointment suggested. She told me at her interview:

The way the birth centre is structured, it wouldn't be possible for women to simply come here to give birth without having gone through our registration process, including the 'second appointment.' This is a safety concept. It's compulsory that: We have a thorough medical history in the woman's file; we have to conduct a risk discussion; the forms have to be signed at least 24 hours before the birth. These are the procedures required by the statutory health insurance companies and the Ministry of Health. They've conceived this in such a way that the folks here are aware that they are purposefully steering themselves towards adversity. (Sighs loudly) (Midwife interview, Elizabeth)

In this sense, the way that midwives used scope of practice to address the fears of the parents-to-be was a way to resist and transform the risk discourse. Explaining in detail the scope of practice of the midwives also made clear that the midwives can take action. For Sammy, her way to deal with this required appointment was to turn off and let it simply happen without paying too much attention. Jeannette, pregnant with her first child, also gave me the impression that she wasn't interested in hearing all of the details. She explained to me:

What did I think about it (the 'second appointment')? I'm not really sure. I mean, I heard about problems that can arise, but I didn't really embrace them, and I didn't commit them to memory because it's not that important to me. We both have the attitude that whatever is going to happen will happen no matter where you are, and then you deal with the situation in that moment. It's good to know that there are non-emergency transfers and emergency transfers. We didn't know about that. That was new. (Antenatal interview, Jeannette)

Frida summed up her 'second appointment' with a brief explanation and a shrug of her shoulders. She told me:

It was okay for me. It's one of those things that has to be checked off the list and then signed. It didn't make me afraid or anything. You hear all of the risks. That's it. (Antenatal interview, Frida)

11.3 Summary of Chapter

I concluded from this data that the risk appointment was first and foremost about offering women a different way to look at the difficulties that can arise during labour and

explaining solutions for each problem. I learned from observing risk discussions that there was no standard approach to this appointment. However, what all the appointments had in common was the re-framing of risk scenarios into safety scenarios. This was done by explaining labour difficulties in the context of the midwives' scope of practice. Explaining what midwives do gave the women and their partners the possibility to alter their perspective on possible future risk scenarios at birth, focusing instead on solutions.

The midwives tailored this informed consent discussion concerning the risks of giving birth in a birth centre to the women and their partners. This was made possible, in part, by the forms that the women returned to the midwife at this 'second appointment.' These forms included the question: What fears do you have around giving birth? As a result of this, the midwives could give extra attention to the specific concerns that the women and their birth companion had about birth in general, as well as the birth centre procedures more specifically.

The problems that can arise during labour, birth, and the postpartum period were transformed through explanation from the abstract to the concrete. As such, the risk appointment gave form to fears. Explaining events in terms of the woman's and baby's bodies served to embody these events. What had been thought of as unforeseen events were thus described as something that could be seen, felt, detected, and managed. In this sense, the risk discussion accomplished the establishment of the connection between the actions that the midwives take and the woman's and baby's embodiment of birth.

The midwives complained about the irony of having to offer a risk discussion at the birth centre in light of the fact that the hospital did not, but they felt that this was a key discussion for many of the couples to make an informed decision. The midwives were adept at using humour to retain a sense of ease while navigating through 'what-if' scenarios, helping their clients better understand the framework of the birth centre for labour and birth.

CHAPTER 12. FINDINGS - SAFETY AT BIRTH: PHYSIOLOGY, COGNIZANCE, CONNECTION

12.0 Introduction to Chapter

In chapter 11, I showed how the midwives transformed the risk discourse into a dialogue of safety by explaining their scope of practice at the birth centre. In this chapter, the final chapter of my findings, I will describe the midwives' insights into creating safety at birth. To a large extent, these insights led them to their decision to work at the birth centre. Hence, I've chosen stories that the midwives told me about their path to understanding the significance of physiological birth and their desire to work in an environment that provides the framework to make this possible. I have supplemented the midwives' stories with several of the women's postpartum stories of their birth, as well as data from my observations.

This chapter includes the three main themes underlying midwives' perceptions of safe care at birth that emerged from observations and interviews. They were:

1. Honouring and protecting embodied physiology;
2. Embodied cognizance: Physical sensations, feelings, actions; and
3. Enhancing safety through connection.

12.1 Honouring and Protecting Embodied Physiology

The midwives who were working at the birth centre when I began conducting research there told me that they had not been taught during their midwifery training that processes could have a definitive and determining effect on outcomes. For this reason, many of them needed time to discover that the outcomes of physiological births and births with interventions were often quite different, for the women, the baby, and for themselves. In their training, the interventions, such as vacuum extractions, epidurals, continuous fetal heart monitoring, and oxytocin drips to augment contractions, were so interwoven into the care of labouring women that they seemed to be a part of the labour process itself. Their awareness of the differences between the two began for some during their practical training when they began attending births and reflecting on the various labours they attended, and, for others, only after they had commenced work in a hospital maternity

unit after receiving their state certification. The connections that the midwives most often made between births with and without interventions were the often negative effects that the interventions had on the fetus, as well as the differences that they noticed between infant and maternal well-being directly postpartum. In their experience, the women and babies both adapted better after births without interventions. Interfering in a birth by artificially rupturing the membranes, administering an epidural only to prevent the woman from making loud sounds during contractions, or accelerating a birth through augmentation with an oxytocin drip or unnecessary vacuum extraction were seen as harmful both to the mother and the baby. Claire's story follows and is an example of what she considered unnecessary interference in the otherwise physiological progression of birth.

12.1.1 Claire's Story: Right and Wrong seen through the Lens of Physiology

The midwife Claire's approach to safety and her motivation for choosing to work in birth centres arose out of a recurring situation that she experienced during her practical midwifery training. Because of this frequent event that she called the '2pm vacuum', she didn't work in a hospital after her midwifery certification examinations, choosing instead to work at a birth centre. At that time, there was no formal training program for midwives to complete before they began working in birth centres. This is still the case today. The birth centre where Claire first worked after completing her state certification required midwives with no birth centre experience to observe births as the third midwife for at least three months. Claire observed births for three months and, afterwards, worked as the second midwife until she and the team believed that she was ready to work as the first midwife, the midwife primarily responsible for the labouring woman. This process lasted nine months. Claire told me that, in her formal training leading to state certification:

You don't learn to oversee a birth; you don't learn care; and you rarely if ever learn about physiology – just to simply sit and watch as the birth unfolds on its own, and simply to be there, to give support when necessary, to be attentive, and to learn to react adequately. And, above all, to get the FEELING— what is birth anyway? What is a natural birth process? I first had to take this all in. ...

At one of the hospital maternity units that I trained at there was always a 2pm vacuum extraction. There were daily ward rounds in the delivery room at 2 pm, and if the women were fully dilated, the head doctor would pull them (the babies) out. ... I actually wanted to throw myself in front of the women to protect them, but that wasn't possible. And I thought, no, I can't participate in this. I can't do this. I can't work every day contrary to my understanding of birth. I couldn't cope with this. Surely there are good reasons to do a vacuum extraction; I don't doubt this; but not because the head doctor happens to be doing rounds and has time

at that moment. ... This was absolutely abuse. It was never discussed with the parents, but rather: "I'm going to do this now." (Midwife interview, Claire)

Students of midwifery in Germany undertake their practical training very nearly exclusively in hospital delivery rooms, with only a period of 6-8 weeks in which they observe independent midwives. It is optional to do these observations at a birth centre or with a home birth midwife. This means that many of the midwives choosing to work at birth centres have not yet seen any births at birth centres or at home. At the birth centre where I conducted this research, the period of informal continuing education included a 3-month period of observing other midwives, as Claire had experienced. This consisted solely of being present at births as a third midwife, and simply 'watching birth unfold', as Claire described it.

The midwives, in answering my request at interviews to tell stories about births that they believed were either good or bad, told stories rife with comparisons between hospital and birth centre births. The stories that the midwives told about bad, or unsettling, births often involved descriptions of interventions that were utilized for the sole purpose of speeding up labour. Ella, who had worked for several years full-time in a hospital delivery room after her training, made the decision to work at the birth centre in order to be a part of a team that enabled women to birth physiologically.

12.1.2 Ella's Story: The Safety of Sensation and Embodiment

Ella, one of the younger midwives at the birth centre, told me why she preferred to work at the birth centre as opposed to working in a hospital maternity unit:

While working at the hospital, I often experienced that women had incomplete uterine ruptures—this is just one step shy of a complete uterine rupture—when the women had a very effective epidural that left them completely without physical sensation, and then also had an oxytocin drip raised as high as it could go. They had no idea, no physical sensation of what was going on with their body and, because of this, couldn't express anything body-related anymore. ... And I think that a lot of complications are fear-related; that interventions are used that make the person using them feel safe, but lead to complications with the woman and baby—I think this happens less often at births outside the hospital. ... I experienced so much violence at birth in the hospital—I found this horrific. That would be a reason for me never to work there again. In my opinion, it's outrageous that what happens there is, in part, a legal form of violence. ... I find it rather ironic because the midwives who work in birth centres or at home births always have to prove that it isn't dangerous, but I find it totally outrageous that no one is discussing what happens at hospital births. (Midwife interview, Ella)

Ella's concerns were based mostly on what she considered to be the loss of safety when interventions were used during labour without a medical indication, specifically epidurals and oxytocin drips. From her point of view, when women were no longer in their body, they were unable to feel their baby and had no sensations of their labour. This disturbed labour rhythms and put undue stress and pressure on the fetus, which in turn led to poor outcomes for both, thus compromising safety. For Ella, the above interventions disembodied the women, silencing the baby in her body and thus silencing her.

One of the women registered to give birth at the birth centre, Nadia, had begun her career as a physician with the belief that women who gave birth anywhere but in a hospital were irresponsible, risking their life and the life of their unborn child. However, after several years of clinical experience, a different belief began to emerge and take hold, changing the way she worked, and influencing her decision to give birth at the birth centre. She told me in her interview:

In the 3 years that I was an assistant physician, I saw that the births (without interventions), generally speaking, always worked out well. The less we intervened, the better the results. And that's my purely subjective experience, I mean, I never carried out any statistics, but I quite suddenly became aware, hmm, the more we intervene etc., with pain medication—here with an epidural, and there with an oxytocin drip—and with artificial rupture of the membranes, and making decisions for organizational reasons—like when things have to go more quickly—I noticed that we actually produced the pathology that we then had to rectify later or that we had to react to later. (Antenatal interview, Nadia)

Nadia felt safe at the birth centre for many reasons. Besides the evidence showing that births in birth centres are safe, she said that a safety factor was 'being known' by the midwives because:

If a person really witnesses births, then they are amazed when they discover how much happens beyond the measuring devices. ... When a woman is labouring, it's possible to notice that something isn't going well before the measuring devices can measure this. That's the huge advantage that the midwives at the birth centre have and want to have. (Antenatal interview, Nadia)

The midwife Paula's notion of safe birth involved giving women the time they needed to birth in the way that was best for themselves and their baby. Paula explained:

In the hospital I learned that it was unsafe if the woman didn't push as soon as the cervix was fully dilated. I wanted them to sleep instead. But this was

considered really dangerous for the baby. I said: Say what? I only see time as a risk factor in the moment where mom and baby aren't doing well. Then time certainly plays a role. As long as mom and baby are doing well, then they can have all the time in the world. If anything is out of the ordinary, then you have to have a good sense of time, be clear on what is the best thing to do in the moment. If you would ask me how long a birth lasts, then I have an immediate answer: As long as mother and baby need. And that is the safest amount of time. If you try to shorten or lengthen labour, then you are interfering in a circular flow that, even today, we don't fully understand in its entirety. Interventions have a revengeful nature. (Midwife interview, Paula)

For Rebecca, the act of intervening in a normal labour was at the same time an act which created abnormality in its wake. She worked at the birth centre with the following in mind:

When I have to intervene, then I have to ask myself the question: what is the woman's body trying to tell me? What is her body showing me if, for example, it's not making contractions anymore? When I intervene, then I am actually moving away from a normal birth into a not so normal birth. (Midwife interview, Rebecca)

I questioned Karla about how she came to believe that intervening at birth wasn't safe. I asked her if she had gained knowledge about physiological or natural births from books. She told me:

I didn't have to read about what safe birth is; I could sense it. I knew this because I knew that, in the moment that I was doing something to the woman, I was completely changing her contractions. Because I knew that, in that moment, I was influencing the natural course of her birth which had otherwise been okay. I tampered with her without having a reason to do so, and it became clear to me that the contractions would change, that it would change the position of the head (of the baby), just because I thought that I had to do something. And this was also clear to me, and you could see this happening, that everything changed in that moment. And it was also clear to me that the women, even if they wanted to stand up and move around, that I would make them lie on their side the whole time. That's how it was. And that this also changed the woman's perception of and acceptance of pain, compared to when I simply cared for her without intervening. (Midwife interview, Karla)

For the women registered at the birth centre, their acceptance of the lack of interventions such as epidurals and oxytocin drips began at the informational, open-door evening. I attended several of these. At this informational session, they heard that the birth centre could offer *i.a.* warm water, massage, and one-to-one care as a form of pain management, however the women would also have to prepare themselves for experiencing the discomfort of labour.

12.1.3 Summary of Section

In this section, I have introduced the theme: Honouring and Protecting Embodied Physiology. Many of the midwives joined the birth centre team after becoming disillusioned with the structure of care in hospital maternity units that forced them to offer what they considered unsafe, sub-optimal, and, abusive care. While working in hospitals, they often had to care for many labouring women concurrently, however they also had shifts where they experienced physiological births. This gave them the opportunity to experience births both with and without interventions. They found the outcomes of the births without interventions better, for the women and the babies.

According to the midwives, the use of interventions out of context expressed a disregard, if not disdain, for the significance of the physiology of birth and the importance of physiology for all aspects of safety, including physical and emotional safety of the labouring woman and the unborn baby. Consequently, the decision to work at the birth centre was coupled with the desire to give women the care that the midwives felt they needed to birth physiologically.

12.2 Embodied Cognizance: Physical Sensations, Feelings, Actions

In chapters 8 and 9, I explained the significance that the midwives placed on listening to women at their antenatal appointments and helping them put their baby back in their body. At births at the birth centre, 'listening' was more than just of the auditory sort. It encompassed an inner listening to one's own body, both midwife and woman, and a consequent exchange of this information, both verbally and non-verbally. Attentiveness, openness, and trust between the women and the midwives, as well as between colleagues, were resources that were necessary to facilitate connection and communication, all of which were reinforced by regular team meetings and antenatal care. Furthermore, it was also decidedly important to the midwives that their colleagues, whether in a hospital maternity unit or at the birth centre, listened to them when they had misgivings about a labouring woman and dialogued with them about potential solutions and consequences.

12.2.1 Antonia's Report: Unmeasurable Somatic Realms of Sensing

At the team meetings I attended, I heard about several events where women or midwives simply had a feeling that a woman should be transferred. The following story is from a team meeting I attended. From my field notes:

Antonia was the first midwife on duty when Estelle, pregnant with her first child, arrived with ruptured membranes. She began to labour a few hours later. Estelle told Antonia often that she could feel that something was wrong. According to Antonia, when Estelle's cervix was dilated 6-7 cm, she said again that something was wrong with her baby. She told Antonia about the birth of her friend's baby, who had developed amniotic infection syndrome during labour.

Antonia says (to us at the meeting) that she had a feeling that the woman wasn't saying this because her friend's story had frightened her. On the contrary, the woman was quite clear, and, as Antonia put it: "Moving in and out of the labour bubble—sometimes she was so clear and present. She wasn't afraid—she knew something that I couldn't sense."

Antonia says that the only suspicious sign that she could find was that, during one of the vaginal examinations, she could feel that the sagittal suture was not in an oblique diameter at the pelvic brim, but rather directly antero-posterior or straight. Although Antonia found it a bit early in labour to transfer only for this reason, she believed Estelle, but documented the problem with the position of the head as the reason for transfer. Annegret, present at the team meeting, says that the reason for transfer was because the woman wanted to transfer. She believes that it is better to be honest in these cases; to say at transfer at the hospital that the woman thinks that something is wrong and wanted to be transferred.

Estelle had a vacuum assisted delivery 7 hours after she was transferred. Her baby was born with amniotic infection syndrome and had to be transferred to the neonatal intensive care ward. The midwives are discussing whether Estelle's birth was a self-fulfilling prophecy or if she really knew that something was wrong. None of the midwives can come up with a way that a woman could bring amniotic infection syndrome upon herself. They believe she knew that her baby was not okay.

I ask if the transfers are really sometimes just because the midwife or woman has a feeling that the birth centre isn't the right place for the birth anymore. They all nod their heads yes. Claire adds: "No one in the team ever has to justify a transfer. If any of us thinks that the birth centre is no longer the safest place for the birth, then we transfer. End of story." (Field notebook 1, pgs. 127-8)

The midwives took what the women told them seriously. They believed that a woman who had a good connection to her baby was able to pick up on subtle sensations that were unmeasurable. The conversations about births and transfers at the team meetings bore this out. The midwives spoke openly about the positive and negative feelings that they had during births. They never directly called this intuition, since the feelings they

were talking about were often physical sensations, while intuition is more akin to a belief that is disembodied. The midwives had built a team where each member was listened to equally, regardless of the number of years they had been practicing midwifery. The team supported a culture of listening—to the women and to the other team members.

12.2.2 Beatrice's Story: Dealing with Sparks before they Rage

For the midwife Beatrice, her reason for switching from working at a hospital to working at the birth centre had to do with a negative team experience. For her, working at the hospital meant that she was a part of a larger team made up of various specialists who were together responsible for each labouring woman. However, according to Beatrice, this didn't translate into more safety for the women. Beatrice's experience of a labouring woman who, while getting epidural anaesthesia had an eclamptic seizure and flatlined (her heart stopped beating), added to her resolve that working at a birth centre was safer than working at a hospital. This is the story she told me:

The anaesthesiologist came. We had drawn blood and measured blood pressure and everything was normal. While the anaesthesiologist was inserting the catheter for the epidural, her blood pressure rose rapidly within a period of a half hour – beginning with 130 to whatever, and kept rising. This was in the middle of the night. I called the assistant obstetrician several times and said: hey, her blood pressure is suddenly going through the roof. She (the assistant obstetrician) cut me off. She said I should let the epidural first take effect, and that this was happening because of her (the labouring woman's) pain and agitation. At this point, I felt as if I was working alone because it was already apparent to me that something here was really wrong and, quite simply, the next person higher up wasn't listening. I knew that something was terribly wrong.

After that, her blood pressure was 180/110. The anaesthesiologist didn't react. And, then, I remember this clearly, I sat down next to the woman and stroked her leg, asked her if she could feel this. She said: "Yes, I can feel that, and I also have a terrible pain up here (upper abdomen). I'm in a lot of pain here." And then she started to seize. Her husband ran out into the hallway and started screaming: "My wife is dying! Help!" The woman's sister ran out of the room and fainted in the hallway. The anaesthesiologist panicked and couldn't move. He stood there frozen. And I thought to myself: "Heh! Okay, you have to manage this alone."... I told the anaesthesiologist that I couldn't feel a pulse. He just stood there frozen in panic and looked at me, wasn't capable of doing anything.

I needed a lot of therapy to work through this experience. It was a dreadful experience, but, in some way, it was good for my own sense of safety to know, that, even though I didn't yet have a lot of work experience, I managed this situation well, was able to give directions to all the others, and was able to look after three people and be with the woman. I thought to myself—okay, the clinic is not a safe place for me or for some of the women. I create safety out of my own

efforts, from within, and I know, when there's a 'fire', I won't panic, rather, I can quite clearly do what needs to be done. (Midwife interview, Beatrice)

Beatrice told me that most of the midwives at the birth centre had had experiences like this, experiences where they simply knew that something was wrong. Because of this, they have agreed to listen to women's and midwives' concerns, these 'sparks' of insight, even if they cannot find evidence to substantiate these. Beatrice gleaned from this experience that she needed to work in a team with reliable, well-trained colleagues who listened to her when she noticed that something wasn't right. In this case, the high blood pressure was an obvious sign of pathology, albeit not for the obstetrician with whom she was working.

12.2.3 Kordula's Birth Story: Too Busy to Care

Kordula told me about her birth at her postpartum interview (See chapter 9.3.2). She had given birth to her first child at the birth centre after spontaneous onset of labour, although her obstetrician had recommended induction at the hospital on her due date because her amniotic fluid volume was measured at the lower end of normal. With her second child, she had the same diagnosis, but decided this time to follow the advice of her obstetrician for induction of labour at the hospital. She felt that, equipped with her first birth experience, she could have a positive birth anywhere. At her postpartum interview, she talked about her frustration at not having been told that it would take several days to get labour going with misoprostol, the medication used for induction. She thought that she would take a few tablets and then give birth.

She had routine CTGs every few hours, some lasting for hours at a time because her baby, according to Kordula, didn't like the CTG. He became very agitated and didn't stop moving. This meant that the CTG didn't look optimal to the midwives, which was a reason, according to the midwives, to leave the CTG on. Kordula said:

The machinery at the hospital was dreadful. I found it so senseless. It was really ludicrous. Then (after two days at the hospital) I had a nervous breakdown. I was crying, shaking. I was at the end of my rope. I called my partner and told him to come. I felt so alone and was supposed to get another CTG. I had the feeling in the meantime that I wasn't able to give birth to my child. ...

When I finally got contractions, I was sent (from my hospital room) to the delivery room. It was ten after two. There was a pseudo-wellness-picture in the room, a lotus flower bathed in neon light. So "beautiful." (Laughs) But the terrible thing was that I was alone and the fetal heart monitor was on again. I had told them

when I got there: These are birth contractions; I'm going to give birth soon. I had told all of the eight midwives who had cared for me in the previous days that I gave birth really fast to my first child. And I could feel that this was really birth. I had told them: I can't lie on the bed like this. I have to be in a different position than being forced to lie like this. I rang the buzzer (to call the midwife) to tell her this again.

She said: "No, I have to keep the fetal heart monitor on you until it's been on long enough"—and then she was gone again. Then things (contractions) kept going, and I was really about to give birth. My partner came at 2:30, then the midwife came. For real this time. I finally got the water that I had asked for. She did a vaginal exam and told me that my baby is almost here. Super, I've been trying to tell you that for 20 minutes. Then we did the birth together for the 10 minutes that it took. Another midwife came in. I wasn't allowed to change positions; the fetal heart monitor stayed on. I gave birth on my side. It was absolutely horrid. Really. I probably would have had to assert myself differently, better, but I didn't have any kind of relationship with this person. It was dreadful. If we had even had a half hour together before this, and we could have had a discussion with each other, then, maybe, but when I'm about to give birth—that's impossible. (Postpartum interview, Kordula)

Although Kordula didn't know for sure how many other labouring women were in the maternity unit with her at the same time, she felt that this should not be an excuse for disregarding her needs and ignoring the sensations she reported. The midwives at the birth centre who had worked in hospital maternity units were familiar with stories like Kordula's, but from their perspective. One of the midwives, Karla, told me about similar experiences from her point of view as a hospital midwife.

While Karla was telling me during her interview about her experiences caring for women during labour and birth and sharing her thoughts on what makes birth safe, she began to cry as she recalled stories from her training and the following years when she worked in a hospital delivery room. Karla's voice faltered as she told me about having to work night shifts with just one other midwife. They often cared for 4-5 labouring women simultaneously, and were also responsible for cleaning up after each birth and preparing the room for the next woman. This left them limited opportunities to be in the room with any one woman for any length of time.

Karla said that women often gave birth without a midwife in the room. She had neither time to listen to women's needs nor to fulfil them. Consequently, she decided to quit her job at the hospital after, out of desperation, she slapped a woman on her thigh because she had crossed her legs and held them together tightly during the last phase of birth. Karla was caring for other women in various stages of labour at the same time and needed to get back to them. She can still remember the loud smacking sound from the

moment her gloved hand met the woman's leg. This was coupled with the nervousness she felt that the woman she was not with at that moment could be in danger.

Elizabeth, another midwife at the birth centre, hadn't had any negative or traumatic experiences per se while working in a hospital maternity unit, but found the entire system untenable. She felt physically uncomfortable caring for more than one woman at a time, and, in addition, not knowing anything personal about the women at all. She told me this at her interview:

For me, when a birth is going well, then I, myself, have a positive physical experience. But it is more than that. When I have the feeling that the woman trusts herself, not just me, but also herself, and I can create an environment around her to support this, then she will also be able to find the strength and resources in herself that she needs to get through the birth. (Midwife interview, Elizabeth)

Hence, listening to women was also an act of supporting the woman's trust in herself. The stories of the four midwives in this subsection, along with Kordula's disappointing experience at her birth show the importance of listening to women's sensations during labour, which is only realisable with one-to-one care.

12.2.4 Summary of Section

In this section, I have given examples from the midwives showing the importance they placed on listening to the labouring women, as well as listening to each other. Offering one-to-one care was at the core of this. At their interviews, they went into detail about the necessity of being mindful of the labouring woman's feelings and physical sensations, including her sensations of her baby. All of the midwives explained that being present with only one labouring woman at a time gave them the opportunity to better sense and understand the urgency of irregularities when they arose.

12.3 Enhancing Safety Through Connection

12.3.1 Berit's Birth: The Ideal Birth Centre Birth

After observing my first birth at the birth centre, Berit's birth of her second child, I understood what an ideal birth at the birth centre was from the perspective of the midwives. Berit's midwives, Mathilde and Annegret, both said that her birth was perfect.

Berit was calm, inhaling fully during each contraction, and uninhibited in her vocal toning while exhaling, uttering a deep, long aaaah. The fetal heartbeats, measured with a handheld Doppler, were normal. Mathilde didn't perceive the need to conduct any vaginal exams, since Berit's verbal and non-verbal communication told Mathilde every step of the way where Berit was at in her labouring process. Berit's birth dynamic—the obvious direction of her labour towards birth—took place at a tempo that Berit could keep up with. Her breathing was deep and controlled, and she moved freely throughout the room. Based on the normal fetal heart rate, her baby was not experiencing distress.

During her labour, I was sitting on the floor, moving to different places in the room depending on where the other birth attendants were. When Berit was beginning to have a sensation to push, I moved a bit closer to the mat where she was kneeling. I have been the attending midwife at over 1200 births, so I didn't focus my attention solely on watching what was going on at Berit's perineum. Instead, I had the liberty to take in the entire scene at the birth, something that I don't usually have occasion to do when I am the responsible midwife.

Berit gave birth in the early morning hours just before dawn, about 6 hours after she arrived at the birth centre. Lit candles bathed the room in a soft light; a small lamp illuminated the cabinet where the emergency equipment was kept. From my field notes:

Mathilde and Annegret kneel down before Berit. Their heads are bowed, but they are looking up at her. Tears well up in my eyes. I am taken with the aesthetics of this scene, of Berit and her midwives. It is reminiscent of a master painting. I am thinking of Rembrandt now, who was able to paint light in the darkness. Both Annegret and Mathilde also have light radiating from their eyes, a reflection of the candlelight maybe—with expressions of total respect and reverence. They are looking up at Berit, who is looking within herself. She is not absent, but intent, focused, breathing loudly during contractions. (Field notes, record 5)

I have experienced a close connection countless times to labouring women and also observed this connection between a midwife-colleague and a labouring woman. However, during Berit's birth, I experienced something new. I had the opportunity to see how the midwives could anticipate what would happen next. It seemed that Mathilde and Annegret had embodied Berit's dynamic and were in sync with her.

I met with Berit at her home 8 weeks after her birth to conduct a postpartum interview. She told me about a particularly moving moment for her at the birth centre:

One of the best moments for me was when I was lying on the bed and thought, I have to cry but I didn't really want to at that moment—when Mathilde told me that I wasn't going to go home. She had laid her hand on my belly during two contractions—I'm tearing up now just thinking about it—and she said to me: Berit, you're not going back home again today—and I thought: finally my birth is starting. Finally, you get to do this, oh my God. And I was completely, I was totally—I can really now, and for real now, and finally (she cries). That was one of the—I was so—I can see this situation now before my eyes, where I thought—FINALLY. That was such a powerful moment. (Postpartum interview, Berit)

In Berit's case, the first midwife, Mathilde, hadn't conducted any vaginal exams, not even at admittance. Mathilde was able to feel in those two contractions the direction of Berit's birth: the unfolding of her birth dynamic. Mathilde entered into a relationship with Berit from the moment that she arrived at the birth centre in labour. Their interactions were infused with trust and respect. While it goes without saying that Berit was in labour, not the midwife, the intimate and empathetic interactions between her and Mathilde were striking. Because Mathilde remained present throughout her labour, with the exception of the few moments when she left the room to make a phone call to her second midwife, Annegret, she became a significant part of the birth.

Mathilde defined the situation through her presence and became a part of the labouring process. I didn't perceive her as a guide from the outside, nor was she acting as a catalyst in that moment. She was feeling the birth dynamic that Berit was manifesting. She interpreted Berit's externally palpable physical manifestations of labour as signs of the birth to come, while utilizing Berit's tonal expressions and gestures as guideposts that told her where Berit was at physically and emotionally in her labour process as a whole.

Berit told me that she hadn't been aware during labour of where she was at in the labour process, i.e. how far dilated her cervix was or how long labour would take. However, she knew that she was going to give birth quite soon when the second midwife came into the room. From her postpartum interview:

It was clear to me at the birth, even without having had a vaginal exam, where I was at when Annegret (the second midwife) came into the room. Mathilde (the first midwife) had said that she wanted to go out to get her, but she came in on her own, because, she said: "I can hear you. I can hear that you are close to giving birth." (Postpartum interview, Berit)

While it could be that midwives in any setting would be able to differentiate and interpret the sounds that a woman is making during labour and know when to come in the room,

Berit's experience of this was one of wonder. Annegret had been waiting outside the door for just these sounds to know when to enter the room.

12.3.2 Creating Dynamic Safety: Becoming a Part of the Dynamic Process of Birth

The midwives all discussed in their interviews what they did or purposefully did not do to create safety during labour and birth. This went above and beyond creating a safe environment and fulfilling quality management guidelines such as listening to the fetal heart rate with the hand-held doppler, filling out the partogram (to graph the progress of the woman's labour), and knowing emergency procedures. Their descriptions showed that they involved themselves in the woman's birth dynamic by becoming a co-creator inside the birthing room. This included establishing a connection between themselves and the labouring woman and her unborn baby; establishing relationships and communicating with the woman's birth companion; and communicating with the other midwives present at the birth centre, as well as the second midwife and myself as a researcher-midwife. Being a co-creator also meant that the midwife listened to the woman's verbal account of her sensations, while at the same time sensing for herself where the woman was at emotionally and physically in the labouring process.

In the stories that Annegret told me about births, she described herself as an active participant, without her necessarily having to do anything to the women. She arranged furniture in the hospital delivery rooms where she worked so that the labouring women would feel safe, or she attempted to keep particular people out of the room if their presence disquieted the women. From Annegret's interview:

There's a birth that is still very clear in my memory. I hadn't been a midwife for very long, about nine months. There was a young woman, maybe she was 18. Her partner was also young, and the mother of the woman was always with them. She came to the hospital over and over with contractions, but, as soon as she arrived, the contractions went away and they went home again. That happened over a period of a few days. Everything was fine with the baby. We didn't have to do anything, but it was stressful for the woman. At some point, her mother took me aside and told me that her daughter had been gang raped when she was 15 ..., and that's why it's so difficult for her. She thought it would help if I knew this. Somehow, we began to trust each other after this. And I noticed that this totally helped me. I was able to engage with her better. There was closeness; I knew something about her, but it didn't have to be thematised. It was simply in the room and could be – it was like a ghost that had been floating, hanging around in the room. I could understand her fear better. ... And she birthed well. (Midwife interview, Annegret)

Such actions by the midwives show the significance of making a concerted effort to connect with a woman. Moreover, this could also be considered an intervention, albeit a physically non-invasive intervention. The act of connecting and establishing a relationship has an effect on the women's emotions, according to the midwives, and, consequently, an effect on the course of labour. With Annegret's example, the hospital in and of itself, replete with equipment, didn't provide the woman with the safety she needed. Annegret involved herself personally with the woman, her partner, and her mother and comprehended what she needed to do to create a safe environment for the woman to give birth. Annegret had experienced the stop and start of the woman's birth dynamic, uncertain about the reason, until she was able to connect with her on an intimate, empathic level through the help of her mother.

The midwife Ella was resolute in her notion that the physical appearance of a room was less important than the connection between herself and the woman. She believed that, when she can make this connection, she has the confidence to simply let labour progress. She told me:

The atmosphere (in the room) influences the psyche. It doesn't matter if the walls are painted yellow or green. It's important that the woman can relax. That is always a fundamental requirement. The midwife or whoever is caring for her has to be open and willing to connect to her. The atmosphere in a room is not only about the objects in the room or how the woman feels in the room, but is about whether or not she feels that she is being cared for by someone who is empathic and can understand her. ...

I have moments where I know because of my connection to a woman that I don't have to do anything; I don't have to intervene because I can see that everything is okay, completely normal. Or I can simply say to her: try changing your position. You don't always have to do something invasive to the women. (Midwife interview, Ella)

Tanya, at her interview, explained to me that connection is at the core of safety. She brought up the unpredictability of labour and the importance of making connections. Tanya had told me that, years before, she had been the second midwife at a birth where everything was normal—the heartbeats of the baby were normal, the woman was healthy—yet the baby had to be resuscitated after birth. Here is an excerpt from our conversation:

Tanya: Essentially, I have to work in such a way that I won't blame myself for anything later. That I won't think that I didn't do something that would have made

sense to do. I am always working with safety in mind, which means that my work is customized for the woman I'm working with. ...

Me: Are you connected with the baby, with the woman or with the birth process?

Tanya: As a midwife, I work with the whole, unique birth process of each woman. And this birth process doesn't exclude anyone: mother, child, and ultimately me as the midwife. This is the process in its entirety. It's an individual process with each person. And each child brings its own personality into the process. And that doesn't begin the moment that the baby is living in this world but rather before. (Midwife interview, Tanya)

Since, at the birth centre the space essentially belongs to the midwives, the midwives not only define how the space is used at the birth centre, but also interpret and define labour through their presence. As Tanya explained, the midwife is working with the whole process. In addition, intrinsic to the creation of safety was the midwives' capability to be empathic, connected participants in the labour of each woman. The midwives perceived themselves as active participants in the labour, even if they were not performing hands-on interventions.

12.3.3 A Two-way Connection: Women and Midwives

At their postpartum interviews, the women could easily recall what their midwives were doing during labour and commented on the effect this had on them. I was at the birth centre when Annika called the midwife on call, Daniela, to tell her that she had contractions and wanted to come to the birth centre. After the call, Daniela pulled out Annika's file to get familiar with her, since she hadn't met her yet. One of the things that Annika had told me at her antenatal interview was that, with her first child, she hadn't felt respected. She explained that the midwives and doctors at the hospital hadn't listened to her when she told them what she was sensing. Since I had asked permission from all of the women to share their interviews with the midwives, I told Daniela and Silke, the third midwife (in training), what I had learned from Annika.

Because Annika had invited me to her birth, I stayed at the birth centre and was there when she arrived with her husband. For Annika, during her labour, she welcomed the involvement of Daniela, her midwife. This was one of the things that made her feel safe. From my field notes:

Annika was traumatized at her first birth. The main reason for the trauma, according to her, was not the pain itself, but rather not being listened to and taken

seriously. Daniela kept this in mind when she was with her. Almost every time that Annika told her what she was sensing, Daniela repeated back to her what she had said almost verbatim, especially when Annika expressed sensations of pain. Daniela also lightly touched the part of Annika's body where she had these sensations, asked if she had understood correctly, and waited for Annika's response. (Field notes, record 17)

Annika told me at her postpartum interview that she felt well cared for during labour. Most importantly, she felt safe because Daniela had taken her seriously. She told me in detail the guidance that she had received from Daniela. From her interview:

It was my thing to sort of lean forward during contractions. They also lasted longer in that position. Then I told Daniela that I couldn't breathe deeply anymore. She said that I could try going into the birthing tub, and that it would get better. That was so amazing in the tub. My husband and I both thought that it was so beautiful with the candlelight. It was really wonderful. ... Daniela always told me that I could do this or that. They were offers. I could try what she said, but I didn't have to. That was exactly what I needed. (Postpartum interview, Annika)

Jessika, who had given birth to her first child at the birth centre, told me about her midwife's involvement during her second birth. She explained to me that she wasn't in a fog during labour, like she was with her first child, where she had had a deep, spiritual experience. During this labour, her head was clear, and she could remember everything. She could clearly recall what her midwife, Annegret, was doing during her labour. From her interview:

First she put the fetal heart monitor on. I couldn't lie down anymore. I sat for that. She didn't check me otherwise, I mean, she didn't even do one vaginal exam. It (the birth) went so quickly. She didn't need to check. She told me to relax, so we lit candles and put on music. At my first birth, we didn't even have time for that. Then she left us alone and went to make tea. While she was gone, my membranes ruptured. She could hear me and came right away. ...

Anyway, your topic is safety, and I can tell you that I felt safe. I mean, I think that risks have to be taken care of. If the baby isn't safe, then that's a fact—that's a kind of safety that is based on a fact. I'm not so sure that the women in the hospital are really safe. They might be safe from a medical point of view, but they don't feel safe. I know that that happens a lot, and that it has an influence on the birth. That the birth turns in a skewed direction and doesn't progress. I'm certain about that. If a woman doesn't feel safe, then she can't let go and then the baby can't come out. I felt safe and could let go. (Postpartum interview, Jessika)

At Yvonne's birth, her midwife, Antonia, sat down on the floor across the room during her labour and remained silent. Yvonne had told Antonia that she didn't want to be touched

during labour, which Antonia respected. Yvonne told me that Antonia didn't conduct any vaginal exams during labour to check on her cervical dilation. Yvonne explained the situation to me at her postpartum interview:

I asked Antonia if she had to keep listening to the heartbeats; if she always had to touch me. She said no, that I could listen to the heartbeats myself. She showed me how to do this, and then I did this on my own. She was in the same room. She simply sat there, and I did everything myself. Like I said, she really gave me a lot of space because she noticed that this was what I needed. And I told her what I wanted when I needed help. ... Before I went into labour, I had told Antonia what I wanted and didn't want during labour. I knew because of our connection that I didn't have to make long drawn out explanations about why I wanted things the way I wanted them. (Postpartum interview, Yvonne)

When I asked Dora at her postpartum interview what helped her feel safe during labour, she told me:

I found it reassuring to have Rebecca (her midwife) at my side. Rebecca told me at some point: you're pushing already, aren't you? And I told her: I feel such an intense pressure that I have to push along with that feeling. Rebecca told me that that's okay. At some point I told her that it hurt and she told me so empathically: "Yes. I know," and I knew she understood. I really felt in that moment that there was someone there who understood me. (Postpartum interview, Dora)

Dora had to be transferred to a maternity unit postpartum in order to be sutured, since she had a complicated tear that the midwives couldn't repair. Rebecca stayed at her side at the hospital for the whole procedure. Dora said that she felt good having Rebecca there; her presence was reassuring.

Nadine, who also had to be transferred postpartum due to placenta retention, told me this about her care during labour at the birth centre:

I think what totally makes a difference here is that they observe the women. They looked at me and thought about who I am and how I'm managing. They got to know me at the antenatal appointments and knew what kind of person I am. They knew everything about me. ... And when I was at the birth centre in labour, she (my midwife) was there. She observed me and helped me when I needed it. It was perfect; just the way I wanted it to be. (Postpartum interview, Nadine)

The last labouring woman whom I observed was Louisa. Louisa's labour at the birth centre helped me to understand more clearly the negative effect that a lack of connection

between the midwife and the woman can have on the woman herself and on her birth dynamic. While Annika, Jessika and the others all felt safe at the birth centre, Louisa, who was transferred during labour, told me during her postpartum interview that she didn't have a good connection with either of the midwives who cared for her at the birth centre. She arrived at the birth centre during the night, and was handed over to the next midwife at 10am. From her interview:

I liked the first midwife a lot. I had a good connection with her at the beginning, but then it got strange. And I didn't understand why she handed me over when she was still at the birth centre for appointments. She should have cancelled the appointments and stayed with me. .. And I didn't have a connection with the next midwife at all. She was in the room with me and was quiet; she was next to me and was always there, but I didn't have the feeling that she was helping me. I didn't feel safe. ...

At the birth centre (before being transferred) I had said that I didn't have any energy left. I was empty. But that couldn't have been the case because, at the hospital (after the transfer), I was overflowing with energy. Everything was on track. I was in a good mood. It was all about the atmosphere. Before I was transferred, while I was still at the birth centre, I felt that something wasn't right there.

... The midwife at the hospital—she was perfect. She was open and warm-hearted. Safety for me at the hospital was the midwife. She radiated safety. She was amazingly open. (Postpartum interview, Louisa)

Louisa's experience presented me with a negative case that confirmed what I had learned from my observations and analysis of interview data up until that point. The midwives worked hard at making connections to the women, but this wasn't always possible. With Louisa, the "chemistry wasn't there." She explained to me in her interview that her birth dynamic slowed down and she didn't feel safe anymore. She told me that, in retrospect, she had expected to have the connection with the birth centre midwives that she had with her midwife at the hospital. All in all, connection enhanced the women's sense of safety, regardless of birthplace.

12.3.4 Summary of Section

The midwives at the birth centre had the goal of establishing a good connection with each of the women during labour, since this was at the core of their perception of creating safety at birth. One-to-one care was the key for them to do this, since they believed that presence was necessary to build a strong connection. The women also expressed at their postpartum interviews that their connection to their midwife made them feel safe,

or, in Louisa's experience at the birth centre, the lack of connection had left her feeling unsafe. She found connection to her midwife at the hospital and understood how invigorated and safe this connection made her feel.

12.4 Summary of Chapter

In this chapter I have described the midwives concepts of safety, which were in large part also their reasons for choosing to work at the birth centre. These three themes were: Honouring and protecting embodied physiology; Embodied cognizance: Physical sensations, feelings, actions; and Enhancing safety through connection.

According to the midwives, physiological birth did not always happen on its own. They often had to actively create the circumstances so that the women could feel safe and the birth dynamic could evolve. In order to do this, they felt that they needed to have prior information from the women concerning their wishes and fears, which they got specifically at the 'risk appointment', as well as at antenatal appointments. In case they hadn't met the women before they came to the birth centre in labour, they used the file with the women's medical history, background, and personal wishes to shape their care. The work during pregnancy to engage women with their physical sensations and put the baby back in their body came to fruition at birth, since this helped the women to better engage with their sensations during labour and communicate these to the midwives. This was especially significant for the midwives, since it was their belief that the women were better able to sense and signal problems which weren't yet objectively measurable with technological devices. Finally, both the midwives and the women perceived that the connection between them was a significant safety factor.

CHAPTER 13. DISCUSSION

The aim of this study was to explore the perceptions and creation of risk and safety at births at a birth centre in Germany from the point of view of the midwives who work there and the women registered to give birth there. This initial aim remained constant throughout data collection, analysis, and the final write-up.

I will begin this chapter with a summary of the original knowledge that this study contributes to the existing literature:

- The most significant original knowledge to emerge from this study was the way in which midwives reconnected women to their own sense of the physical reality of their fetus through mindful palpation of the abdomen. This served to engage each woman in feeling and sensing their baby. The midwives undertook this process, not just as a clinical test, but also, and much more importantly, as a way to strengthen the woman's physical and emotional connection to her baby. This was especially important in a context where women typically experienced very high levels of ultrasound examination during pregnancy (see below), during which the fetus had been figuratively and regularly removed from the woman's body and represented as an image on a screen. The midwives' mindful palpations served to put the baby back into the woman's body. This encouraged the positive, mindful focus of the women towards their baby, as well as towards themselves. The midwives believed that safe birth depended upon the women having a good sense of their baby, since this enhanced the women's ability to communicate their physical sensations, especially in regard to their baby.
- An additional original finding of this study was that the number of ultrasound scans that my research participants experienced was prohibitive, especially given the fact that the women were all classified as having low-risk pregnancies. The majority of these scans were not documented. The overuse of ultrasound contributed to the women's engagement with the risk discourse, thus increasing their anxiety and their inability to feel better without more scans.
- While the women in this study understood birth as natural, a process that can safely take place in a low-tech environment (such that the birth centre is), pregnancy was neither described as natural nor as a life event that should progress without technological surveillance. In other studies to date, women

planning a birth at home or at a birth centre have been described as technology averse in both phases, pregnancy and birth. For my research participants, pregnancy was understood as a risk to the baby, while birthing was not.

In the first section of this chapter, I will give background information about antenatal ultrasound. I hadn't anticipated the extent to which the women registered to give birth at the birth centre had engaged with their scans, hence the addition of background information in this chapter. Next, I will discuss various concepts of embodiment, followed by the significance of 'putting the baby back in the body' for the construction of safety at the birth centre. Following this, I will discuss my findings in light of the ethnographies that have previously been conducted around the theme of risk. I will then address the limitations to my study, ending the chapter with implications for practice.

13.1 Keeping Secrets: Birth Centre Women's Utilization of Antenatal Ultrasound

Early on during data collection, I discovered that the women registered to give birth at the birth centre had a profound need for ultrasound scans. I had not anticipated this, since, according to the perinatal data collected by Q.U.A.G. (Association for the Quality of Out-of-Hospital Birth: See chapter 3.9) in 2015, of the 11,039 women who began their births at home or at a birth centre (aggregated data for both birth places), 77% had apparently had 4 or fewer scans (Loytved, 2016). In addition to this, the midwives at the birth centre had told me that the women were not getting more than the three recommended scans. Curious about the discrepancy between the women I had interviewed and the national statistics, I checked the perinatal data collection forms filled out by the midwives at the birth centre. The number of scans that they entered on the forms reflected the number of scans that had been documented by the obstetricians in the women's mother's record book. However, the women had told me during their interviews the true number of scans that had been conducted, most of which had not been documented (See chapter 8.5). Therefore, it is possible that women planning to give birth at home and at birth centres are receiving a far higher number of scans than are reflected in the national statistics.

The scans contributed significantly to the women's notions of risk, and, in addition, to issues of risk and safety as per discussions with the midwives at antenatal appointments. While the majority of pregnant women in my study believed that the use of ultrasound contributed to risk reduction, the midwives at the birth centre were quite critical about

scans when talking amongst themselves. However, in dialogue with the women at antenatal appointments, they held back their commentary, even when they were certain that the scans were an inadequate approach to risk reduction and the creation of safety. Whereas the midwives worked with the women at antenatal appointments to feel comfortable with their pregnant body and to re-connect them with their physical sensations of pregnancy, parallel to this, the women were satisfying their desire to reify the pregnancy through watching the beating heart of the baby on the screen. I am not claiming that the scans were the cause of the women's physical alienation, but, as I will demonstrate in this chapter, the scans reinforced the disembodiment of their pregnancy.

This section of the discussion therefore provides some background information concerning the use of ultrasound scans in antenatal care in Germany as a basis for exploring this topic in the context of risk.

13.1.1 Antenatal Ultrasound Scans in Germany

In Germany, the majority of women go to an obstetrician for their antenatal care (Bauer, 2011). This customary practice began in the 1960s when the Statutory Health Insurance Funds began covering the costs of antenatal care with an obstetrician to the exclusion of midwives. Today, antenatal care with midwives is possible, however women rarely make use of their services (Schäfers & Kolip, 2016). Further, one of the routines that supports this structure of care is that all pregnant women are expected to go to an obstetrician at the beginning of pregnancy for an ultrasound scan to verify that there is a viable embryo implanted in their uterus.

Since 1979, ultrasound screening has been an obligatory part of antenatal care in Germany (Erikson, 2007, p. 188). The SHI funds cover the cost of three ultrasound screening appointments (See chapter 3.6, point (5)), as well as further scans, should these be medically indicated. Parental requests for scans outside of those recommended in the maternity policy guidelines are considered an "individual healthcare service" (*IGeL: individuelle Gesundheitsleistung*), the cost of which must be borne by the client (Frauenärzte im Netz, n/a). Susan Erikson discovered in her study of antenatal ultrasound in two large German hospitals that, while parents-to-be enjoyed seeing the image of their baby on the screen, the German obstetricians she interviewed "complained that the pleasure of looking confounded the medical use of ultrasound as a diagnostic tool: Obstetricians use ultrasound to ferret out risky maternal and fetal conditions; parents use ultrasound to see their future children" (2007, p. 22).

My study participants thoroughly enjoyed looking at the baby on the screen. They sought reassurance from the visual of the beating heart, ironically using that moment as an opportunity to connect (See chapter 8). In the literature, waving at the fetus on the screen is interpreted as an act of maternal bonding, while paradoxically in the same moment the scan removes the baby from the woman's body (Rothman, 1987). Mitchell and Georges write that "once having mediated and helped effect the conceptual separation of the pregnant woman and fetus, ultrasound later comes to be regarded as integral to the process of re-membering the two, that is, technologically "bonding" mother to fetus" (1997, p. 382).

13.1.2 Routine Ultrasound Scans and Risk: Giving Form to Imagined Catastrophes

An original finding of this study and one of the most surprising findings for me, as well as for the midwives at the birth centre where I conducted research, was that my pregnant research participants had had an average of 8 scans during pregnancy (See Table 6). Since the women registered to give birth at the birth centre were considered to have low-risk pregnancies, the additional scans seemed inconsistent, both in light of the notion of low-risk, as well as in light of a planned birth at the birth centre. It would seem that a reliance on, or even, compliance with the routine use of technological surveillance during pregnancy would preclude the wish to birth in an environment without ultrasound scans and other technological devices found in a hospital maternity unit.

Women planning to give birth at birth centres or at home are often thought to be technology averse, aligning themselves with ideals associated with natural birth or a so-called non-medicalized birth (Davis-Floyd, 2018; Thompson, 2005; Westfall, 2016; Wood, Mignone et al., 2016). Additionally, in many studies, notions of naturalness concerning the pregnancy and/or the naturally unfolding process of birth, are set in opposition to technology (Aune, Torvik et al., 2015; Brubaker & Dillaway, 2009; Chadwick & Foster, 2014; Crossley, 2007; Davis-Floyd, 2018; Westfall, 2016). Thus, in general, women who choose to birth at home or in a birth centre are usually typified as having the desire to accomplish labour and birth in a low-tech environment without physically invasive interventions, including i.e. continuous fetal heart monitoring, epidural pain relief, vacuum extraction, and caesarean section.

Despite my research participants' belief that birth was a natural, physiological process, they did not conceptualise pregnancy in the same way. While some women attempted to define their pregnancy as a normal life event for themselves, it was seen as neither ordinary nor natural for their in-utero child. The fetus could not be left alone, unseen and

unsupervised, to simply develop and grow. Consistent with the risk discourse, both they and their child required routine monitoring and surveillance. Lupton writes that:

The proliferation of medical research and related expert advice to pregnant women has resulted in a transformation of concepts of pregnancy: it is now no longer seen as a 'natural' state but rather as the province of experts and medical monitoring (2012, p. 331).

The risky nature of pregnancy was one of the justifications that women gave me for continuing antenatal care with their obstetrician instead of switching entirely to antenatal care with the midwives at the birth centre. That their body and their behaviour were potentially dangerous to their in-utero child, was accepted as a matter of course. This notion of the deleterious effect that women can have on their in-utero child is not new to contemporary society. Lupton found evidence of this in the prenatal movement in the USA in the latter part of the 19th century (2013). In my study, the women concluded that the only way to know what effect they were having on their developing child in early pregnancy was to have the obstetrician look inside their uterus. The pregnancy, as such, was less an experience for the woman, and more a project to assure a healthy child.

In addition, undergoing regular ultrasound scans caused a ripple effect, which more often than not necessitated further scans (See chapter 8). Unsubstantiated and ambiguous results of ultrasound scans not only initiated negative cascades of emotions in my study participants, they also influenced their actions. In that the fetus was undergoing a constant developmental process, it was never considered finished or ready. In this sense, all ultrasound scan results could be framed as ambiguous, since the pronouncement of 'everything is good for now' never lasted past 'now'.

For women, the scanned fetus was akin to a fortune teller, since it embodied possible futures for the family-to-be. These scan-produced babies thus colonized the future of the women (Giddens, 1991), for they treated the documented, as well as the undocumented results of scans as real, and acted on these. They also subsequently made choices to avoid any predicted dangers, deciding to choose the future which seemed less risky for their fetus, for example by choosing induction. W.I. Thomas wrote in his seminal work "The Child in America": "If men define situations as real, they are real in their consequences" (1928, p. 1549). In their interactions with the women, the midwives at the birth centre were also obliged to treat the results of the scans as real, even those that they took issue with due to their equivocality and/or lack of evidence base.

This created a tacit struggle between the midwives and the women, since the midwives were unable to discredit or invalidate the scans. The midwives encouraged the women to book their antenatal care appointments at the birth centre in lieu of appointments with their obstetrician, but, according to the women's mother's record books, more than half of the research participants had more appointments with their obstetrician than with the midwives. Haraway writes that "artefacts and facts are parts of the powerful art of rhetoric" (1988, p. 577). The ultrasound scans created a world of risk unto itself, unprovable yet bound up with the future fear of self-regret if something would be overlooked due to a missed scan opportunity.

The fetus was the focal point of antenatal care and discourse for the women, so the ultrasound scans were for them a Hobson's Choice (Sporn, 2002). Without the ultrasound, they could not be given reassurance of fetal well-being, since the ultrasound was the obstetrician's device of choice to communicate fetal status (See chapter 8.6). The women didn't rely on their own physical sensations to substantiate health and well-being, especially in early pregnancy, since they said that there was no way for them to sense their child (See chapter 9.1.1). Their definition of health was not based on their own physical sense of well-being, but on that of the fetus. Therefore, the acceptance of the use of ultrasound technology at antenatal care appointments was a non-choice.

According to McLuhan, the effects of technology are not found in the content it produces, but rather the changes in the relationships that occur through its use (2013). The midwives were unable or unwilling to reveal to the women their opinions about the sometimes spurious scan results and the futility of routine scans. In not resisting, they contributed to the notion that they were not the best suited caretaker to monitor the fetus, at least not for the first half of pregnancy. Hence, with few exceptions, the women were reluctant to terminate their care with their obstetrician until later in the pregnancy, if at all.

13.1.3 The Real Fetus?: From 'in Woman' to 'on Screen'

I will briefly discuss additional changes that occurred with my study participants through the use of ultrasound as a medium of communication. The ultrasound technology was described by the women as unveiling life, revealing a hidden world that was otherwise dark and private. The women gave the operator of the technology the power to see inside them and into the scan-generated world of their child. Through this, their insides were 'outered,' thus altering their perception of their body and interrupting and altering the

somatically sensed sequence of pregnancy, as well. Barbara Duden described this process in “Disembodying Women” (1993). Pregnancy before the introduction of ultrasound was a private and subjective experience marked by the slow and gradual bodily changes experienced in early pregnancy. This was followed by quickening, the first fetal movements, which were sensed only by the woman. As the weeks progressed, the pregnancy then became visible to the public through the expanding girth of the woman’s abdomen. In Lupton’s book “The Social Worlds of the Unborn” she writes:

Indeed it has been argued that in many cases, particularly when the ultrasound is taken in the first trimester or the beginning of the second, women may experience a ‘technological quickening’ (observing the movements of the fetus in ultrasound images) before they have felt the embodied sensations of fetal movements within them (Mitchell and Georges 1997, Nash 2007 in Lupton, 2013, p. 62).

For my study participants, pregnancy confirmation in the time of ultrasound was instant. Thus, the pregnant women exchanged the right to privacy and physical autonomy for the illusion of security and an untimely visual experience of their otherwise veiled child—a sort of technological birth. The drawbacks of this were many. The women’s reliance on objective confirmation of their pregnancy became an imperative for ‘being pregnant’. However, the not-yet-sensed child disappeared from view after the scan was over. This caused anxiety, drawing the women back to the obstetrician for one more look, for they had not yet discovered their child with their own senses, nor had they trusted their physical senses to make the pregnancy real. They were lacking a so-called feedback loop between their physical sensations of bodily changes in early pregnancy and the fact of being pregnant. In a pregnancy that a woman would experience in physiological sequence, her bodily changes would be her first indication of pregnancy, while fetal movements would be her first certain, physically sensed assurance of her in-utero child. In this scenario, she alone would discover her child. With ultrasound, it was the scanner who discovered and revealed life. Duden writes that, since the inception of ultrasound “...the woman herself learns to experience the fetus revealed to her through chemical reactions and on electronic screens as her child. She is taught how to bond with her child through such means” (1992, p. 343). Herein lies the potential for women to become alienated from their pregnant body.

13.1.4 The Loss of Touch in Exchange for the Power to See

Before ultrasound technology was widely accessible for use in antenatal care, obstetricians palpated the abdomen of pregnant women in order to gather information about the position of the fetus in the womb. While ultrasound technology was still in the developmental phase, obstetricians used the scanner together with the information gathered from palpation (Tansey & Christie, 2000). At a conference hosted by the Wellcome Trust on the history of ultrasound technology to look at the unborn, one of the participants said:

James Willocks: As obstetricians we use our hands and Tom (Brown) has made reference to that already. Abdominal palpation is an important part of almost every examination at the antenatal clinic. The eye of faith can certainly be misleading sometimes, and you mustn't allow it to influence you too much, but the long training that we had in abdominal palpation did certainly help when it came to using manual scanning techniques. ...(this) partly explains why diagnosis by ultrasound has flourished in the hands of obstetricians and gynaecologists (2000, p. 39).

I explicitly asked most of the women at their antenatal interviews if their obstetrician palpated their abdomen. For the women who had a scan at each appointment with the obstetrician, their answer was no. In the case of these obstetricians, scans had completely replaced palpation, further reifying the scanned image as the fetus itself. The ultrasound images were magical, said one of my participants, and scientific, said another. Overall, according to my study participants, looking had replaced palpating, and with it, the intimate relationship that can develop through human touch. In doing this, the potential for the pregnancy to enchant was taken from the women and replaced by the magic of the machine, leaving in its wake a disembodied woman and a disembodied fetus.

In his seminal work "Science as Vocation", Max Weber warns of the double burden of science (2002b). While science has the goal of progress, progress in and of itself is devoid of meaning in the lives of individuals and scientists, for it can never arrive at a satiated end point. Through continual progress, the world in which human beings live can be explained, calculated, and seemingly dominated to such an extent that the world no longer enchants. According to Weber, the person who is a part of the "organic cycle of life" can be satisfied each evening through the accomplishment of daily tasks. "However, the man of culture (*Kultur Mensch*), situated in civilization's perpetual accumulation of thoughts, knowledge, and problems—he is inclined to become weary of

life—not satiated from life”¹⁶ (2002b, p. 489). According to Weber, by way of the spirit of capitalism, “the outward goods of this world gained increasing and finally inescapable power over men...”, such that the cloak of materialism became “a shell as hard as steel (*stahlhartes Gehäuse*)” (2002a, p. 121).

The metaphor of a “shell as hard as steel” is fitting for the fetus, who becomes encased on the screen, measured and pronounced suitable for life. When skin-to-skin contact between the woman and her caretaker is replaced with an ultrasound probe, space for the woman’s subjectivity and individual meaning-making diminishes. The obstetrician’s reliance on the woman’s perceptions of her in-utero child can be kept to a minimum or completely disregarded, enhancing his/her status as fetal expert (Oakley, 1984/1986).

13.1.5 Summary of Section

In this section I have shown the various effects that ultrasound scans have on women and the changes this has brought about in women’s relationships to their antenatal caretakers. Erikson believes that the disproportionate use of ultrasound in Germany rests on it being a “habitualized act,” writing further that, while “viewing the fetus has become normative, it is not in and of itself a “single horizon,” to quote Foucault, at which anatomical science, obstetrical medicine, and ocular technology was destined to arrive” (2007, p. 187).

Besides ultrasound as a Hobson’s Choice for women, another explanation for the pervasiveness and compliance with excessive ultrasound scans can be explained by Gramsci’s definition of hegemony. For Gramsci, consent always operates together with force. Open displays of force are unnecessary, since power rests in institutionalized values and morals, which are taken for granted (Lears, 1985). In the case of my study participants, seeing an image of the beating heart of their child was enough to override any dormant or otherwise practiced principles connected to notions of a natural or physiological pregnancy. Gramsci wrote the following in regard to his theory of cultural hegemony:

2) The “spontaneous” consent given by the great masses of the population to the general direction imposed on social life by the dominant fundamental group; this consent is “historically” caused by the prestige (and consequent confidence)

¹⁶ This is my translation of the original German text.

which the dominant group enjoys because of its position and function in the world of production (1991, p. 145).

According to my study participants, the rationality of looking with exactitude at the body of the fetus was considered “good sense”, an operative influence in cultural hegemony (Gramsci, 1991, p. 660). Lupton has written that, because the fetus is considered “precious cargo” (2012, p. 329), women willingly adhere to risk avoidance and “may actively demand greater access to medical surveillance such as numerous ultrasounds...” (Lupton, 1999/2013, p. 122). The fetus, vulnerable and at-risk, must be protected by all means. This includes women’s modification of their behaviour to create the best maternal environment for the developing child, as well as adherence to antenatal procedural guidelines (Simonds, Rothman et al., 2007). To sum up, safe antenatal care for my research participants was defined in large part by the use of routine ultrasound, especially at the beginning of pregnancy.

In the next section, I will discuss the development of the medicalized body and how, with the social construction of the ‘patient’, the person as patient came to be seen as embodying a medicalized body. Following that, I will describe the practice of the midwives at the birth centre to put the baby back into the body of the woman through abdominal palpation and simple questions that created a discourse of sensing.

13.2 Embodiment: A Relational Phenomenon

In this section, I will present various concepts of embodiment. Embodiment is, on the one hand, the self in the body and the individual’s lived experience in a specific context in relationship to others. On the other hand, notions of embodiment can also be understood as ways in which the body is objectified, as in the medicalized body. The medicalized body is, from this perspective, the location for disease and risk. When a diagnosis of the body is made, objectively measurable symptoms often not sensed by the individual take precedence over the lived experience of the individual, thus quelling his/her voice. Lastly, embodiment of the fetus is simply the awareness and acceptance of its location in the body of the woman, and consequently making this the foundation of antenatal care. In pregnancy and at birth, the caretakers’ and woman’s underlying beliefs concerning embodiment guide interactions and care.

13.2.1 Embodiment and the Construction of the Medicalized Body

Generally speaking, “embodiment (is) the sense of being localized within one’s physical body, (and) is a fundamental aspect of the self” (Arzy, Thut et al., 2006). However, some notions of embodiment are not concerned with the self within the body, but rather with the body as an object. An example of this is when the body is understood as “a site of cultural consumption,’ a surface to be etched, inscribed or written on” (Pile and Thrift, 1995, p. 7 in Longhurst, 1997, p. 488). Draper writes that:

Our notion of human existence requires us to have a human body but that body is both an object body, a thing, and also a lived body, an experience. How we live in the world is manifest through our bodies: there is therefore a reciprocal relationship between the body ‘social’ and the body ‘biological’ (2003, p. 747).

According to Longhurst, constructionist feminists are opposed to discourse portraying the body in biological or essentialist terms, since this sets boundaries around what women can or should do, and functions as a taken-for-granted limiting force (Longhurst, 1997). Essentialist feminists, on the other hand, take the “‘real body’ as the starting point. ... They do not wish to erase it in the way that they claim constructionist feminists do...” (ibid, p. 489). Yet another attempt to explain embodiment is that it is the meeting place of culture and self (Csordas, 1994/2003). Moreover, when embodiment is defined through the gaze of an ‘other,’ then abstract concepts such as risk and health can also be seen as embodied (Lupton, 1999).

Some theories of embodiment seek to dissolve the Cartesian duality of body and mind, which posits these as separate entities. Historically, the characteristics of the mind—rationality, orderliness, and intelligence—have been contrasted with the those of the body—chaos, emotionality, and irrationality—whereby “the body and its experiences are always subordinate to the objective reason of the mind” (Davis & Walker, 2010, p. 458). However, for Merleau-Ponty, there is no mind without a body, for there is no world without a body. He writes that:

...there is not a single impulse in a living body which is entirely fortuitous in relation to psychic intentions, not a single mental act which has not found at least its germ or its general outline in physiological tendencies. ... The psycho-physical event can no longer be conceived after the model of Cartesian physiology and as the juxtaposition of a process in itself and a *cogitatio*. The union of soul and body is not an amalgamation between two mutually external terms, subject and object... It is enacted at every instant in the movement of existence (1958, pp. 101-102).

In line with this, embodiment always implies the presence of the body in a context or location, and includes relationships to others in that location, as well as the habits, habitus, or disposition of the individual (Csordas, 1990). Haraway defines context not as “surrounding information, but as co-structure or co-text” (1991, p. 214). Environment as co-structure makes place more than just a container for interactions; environment shapes perceptions of the self and others, as well. Hence, the situated embodiment of my research participants, midwives and women alike, exposed boundaries, margins, integration, and being-in or being part of, with scant possibility for self-containment. The birth centre itself was located within the larger environment of the insurance and healthcare systems, with all of the limitations that this brought, so that embodiment of health at the birth centre, as opposed to risk, required a commitment to the vision of a re-structured whole. The fetus had to somehow be re-located into the body of the woman so that she could go beyond her marginal status in the less than 2% who birth in birth centres and at home in Germany. Her marginal status left her otherwise as the embodiment of risk and the subject of numerous scans (as most pregnant women in Germany are). This had the twofold effect of reifying risk as well as reifying the woman’s body as the location of risk.

The body is the vehicle of being in the world, and having a body is, for a living creature, to be involved in a definite environment, to identify oneself with certain projects and be continually committed to them (Merleau-Ponty, 1958, p. 94).

The approach that an individual takes to solve problems or simply to live in the world is thus also an expression of the body, for “our body itself defines the very space we live in” (Cosans, 2001, p. 48).

Manners of embodiment that lead to de-personalization, such as the embodiment of the medicalized body, have become embedded in taken-for-granted interactions and ways of seeing and doing. Berg & Harterink write:

‘Embodiment,’ here, denotes a process rather than an a priori condition; it points at the achieved characteristic of ‘having a body.’ ‘To embody’ is a verb that denotes the active incarnation of an entity with a specific body; it is intended to draw attention to the activities of the ensemble of entities—the investigative technologies, the record, the patient, the nurses--- which together perform this specific ‘embodiment’. (2004, p. 14).

This notion denies the self as the starting point for embodiment, for it does not emerge out of the lived experience of individuals, but rather out of the objectification of the body within the field of medicine. Through the practice of cataloguing objective, measurable and quantifiable evidence in regards to the physical body, a medical body emerged out of the dialogue of embodiment that was detached from the lived body (Berg et al., 2004; Duden, 1993; Westfall, 2016). Armstrong describes this as the replacement of the two-dimensional model of illness with the three-dimensional model (1995). In the two-dimensional model, the symptoms that the individual experienced were the illness. In the three-dimensional model, the physician took into account the physical symptoms that were expressed, but added to these the signs that were discovered through physical examination. These symptoms and signs became what were used to construct a 'clinical picture' and hence infer a disease (Armstrong, 1995, p. 396). Subsequently, as medicalization proceeded, quantifiable, objectively gathered evidence of illness and pathology manifested by the body was organized and classified into diseases. A consequence of this was de-personalization; the individual was robbed of his/her voice of authority in the experience of disease (Berg et al., 2004). With time, according to the authors active in this area, what came to be known as a disease was that which could be substantiated by a medical professional who searched for data in order to make a diagnosis. Cosans writes:

In principle, all the facts about the body could be encompassed in an account of all its objectively observable properties. Bodily activities in this view are mechanistic processes with no more purposiveness than a ball knocked across a billiard table. From the perspective of medicine, the body is a passive machine and the physician a technician whose role is to use his knowledge to make repairs and perhaps even improve the body's operation (2001, p. 47).

According to Berg & Harterink, bureaucratization of medical documentation, together with regulations governing documentation, culminated in the creation of the patient in the early 20th century (2004). A by-product of this process was that a person came to "have a body" and "embody a disease" (ibid, p. 14).

The manifestation of measurable symptoms and the subsequent documentation and categorization of these was, and still is, key to making a diagnosis in western, allopathic biomedicine, as well as key to making a patient. This is the medical system in which my research was located. This is not to say that illness did not exist before this development;

however, the western, allopathic, medicalized descriptions of illnesses did not. These, however, eventually became the common sense things that my research participants knew and sanctioned, prompting them to act in a taken-for-granted 'way we do things,' both in the role of medical caretaker, whether obstetrician or midwife, and patient.

13.2.2 Pregnancy and Birth as Embodied Risk or Embodied Normality

Notions of embodiment also permeate pregnancy and birth discourse. Since it is thought that something unexpected and critical could happen at any moment during pregnancy and at birth, women are treated in western, allopathic obstetric medicine as if they are the embodiment of risk (Davis-Floyd, 1992; Dubriwny & Ramadurai, 2013; Lupton, 1999)¹⁷. Thus, viewed from a biomedical perspective, pregnant and labouring women are compelled in the name of safety to give up their authority, privileging the obstetric¹⁸ understanding of the objectified body and pregnancy (Oakley, 1980). Westfall writes that, "Martin (2001) and Young (1990) both portray medicine as an interruption in the self's narrative of the body, alienating women from their experiences of pregnancy and birth" (2016, p. 264). This results in the omission of women's sensed experiences in care and treatment (Rothman, 1982/1984).

Women thus comply with procedures that are embedded in culturally approved technocratic constructs as a moral imperative (Davis-Floyd, 2018; Jordan & Davis-Floyd, 1993; Westfall, 2016). Douglas writes that "the social body constrains the way the physical body is perceived"(Douglas, 1966/2007). Women's choices for care during pregnancy and at birth are an "unfolding within the taken-for-granted ideological frame of the medicalized childbirth model, whose parameters are not overtly questioned", according to Thompson (2005, p. 236).

Hence, while women are expected to do everything possible to assure a healthy pregnancy and a safe birth, the pervasiveness of the risk discourse challenges women's agency, creating barriers for informed decision-making (Dubriwny et al., 2013). In Chadwick & Foster's research on how pregnant women constructed risk at birth, the women's perceptions profoundly affected their choice of birth mode and birth place. Some of their participants believed that they embodied danger at birth, accepting as true

¹⁷ My study was situated in a large German city. The birth centre, as noted in the background chapters, is well integrated into the healthcare system. Ergo, midwives at birth centres in Germany work within/have as their foundation western, allopathic medicine.

¹⁸ This term is inclusive of obstetricians and midwives.

that 'birthing embodiment' was a threat to their baby. They consequently chose to have a caesarean section (2014, p. 77). In the same study, women who had chosen to give birth at home "resisted the definition of birthing bodies as inherently threatening and instead constructed 'birthing embodiment' as a risky situation only in medicalised hospital settings" (ibid, p. 79). According to Davis-Floyd, women who choose to avoid medicalised hospital settings in a healthcare structure where the hospital is regarded as the safest place to give birth, are seen as rejecting (the reliance on) technology and medical experts as an authority over their own authority (1992). Cheyney refers to this as "alternative ways of knowing" (2008, p. 255).

The women in my study were on both ends of the risk/safety spectrum: they perceived themselves as embodying risk during pregnancy, but at birth, risk was located in a place (a hospital) or in the performance of a caretaker (a midwife and/or an obstetrician). They did not perceive their birthing body as a risk to themselves or their baby, with the exception of Kordula and Natalie, both of whom agreed to induction of labour. This is an original finding, since other researchers have portrayed women as consistent in their perceptions of pregnancy and birth as more or less risky or more or less natural. According to Thompson, his research participants embraced the "(natural) construction of pregnancy and the experience of birth as a Romantic utopia and its underlying anti-establishment model of risk" (2005, p. 246). In authoritative knowledge discourse surrounding pregnancy and childbirth, women have been described as privileging their knowing over that of medical authority, during both pregnancy and birth (Cheyney, 2008; Davis-Floyd, 1994). In Grigg, et. al.'s study of women's decision-making regarding birthplace, they described their research participants as either aligned with a technologically oriented model of care (choice for hospital birth) or a model of care that was midwife-led (choice for midwifery-led care at a primary maternity unit) (2014).

At the heart of public health campaigns in general and antenatal care specifically are efforts to diagnosis illness, prevent premature birth, and prevent intrauterine death (Flenady, Wojcieszek et al., 2016; Khan & Honest, 2007; Raatikainen, Heiskanen et al., 2007). Surveillance is the active agent of public health, and, therefore, in this analysis, comes to embody the promise of a healthy, live baby. This can, however, have negative consequences for pregnant and labouring women. Scamell described in her work on risk how midwives in a hospital maternity unit hindered women's embodied experience of birth through the use of surveillance procedures to detect risk (2011b). This locates the individual in a place of not-yet-embodying-disease, whereby signs of health or the embodiment of health go unnoticed or are disregarded.

In her ethnography of an in-patient hospice, Lawton described that the walls of the hospice became “the boundaries of the patient’s body” (1998, p. 134). This is similar to the birthing situation, whereby the boundaries of the woman’s body are extended into devices that monitor the fetal heart rate and into the gloved hand that measures the dilation of the woman’s cervix. These give access to and concomitantly reinforce the construction of the medically embodied birth. McLuhan writes that “...all technologies are extensions of our physical being” (2013, p. 198). The technological extensions validate a representation of birth that is composed of objectively measured signs of birth embodiment. In this construction, birth, as can be found in medical textbooks, is described as a mechanical process involving uterine contractions, the dilation of the cervix, and the movement of the fetus through the birth canal (Bickenbach, 1962; Geist & Ahrendt, 2007; Mändle, Opitz-Kreuter et al., 2003). This mechanical process, together with the fetal heart rate, becomes the framework for deciding if the woman is embodying a normal or a pathological birth. Surveillance of these are consequently the means to substantiate the definitions of normal or pathological (Zhang, Landy et al., 2010). If the woman has anything to say, it is an adjunct to the results of surveillance, not the focus. The role that the midwife and/or obstetrician play in the disembodiment and embodiment of labouring women happens at the intersection of the body and technology:

...professionals confirm the onset of labour. ... This objectification can be fully accomplished, as for example with monitoring, when the woman’s perceptions are disregarded. ... This articulation is reflected in the fact that, in most cases, obstetrical descriptions are in a sense incorporated by the woman so that it is sometimes difficult for her to untangle, in the sensation itself, direct perceptions and those involving objectification (Akrich & Pasveer, 2004, pp. 75-76).

However, midwives were shown in one study to be able to recognize and strengthen a woman’s embodiment of a normal pregnancy (Akrich & Pasveer, 2000). Akrich and Pasveer ascertained that it was the woman who embodied the normal pregnancy, while, at the same time, it was the midwife who embodied this knowledge of normal. The two reciprocally constructed each other, thereby demonstrating an opportunity for de-medicalization. Setha Low, in her work on the embodied metaphors of nerves, writes:

The language of symptoms and diagnosis removes the sensations from the physical and biological body of the sufferer, obscuring the person/body/experience relationship. Drawing upon the recent literature on embodiment, these sensations can be reconceptualized as the physical/emotional embodiment of nerves. This reconceptualization places the sensations back in the body of the sufferer and in most cases de-medicalizes them (2003, p. 140).

The process of de-medicalization in an otherwise medicalized situation is a relational task, as in the examples from Akrich & Pasveer and Low (above). It requires the efforts of both the caretaker and the patient/client.

In my observations at the birth centre, the midwives had positioned themselves as experts of birth, but they also aided the women to find their own expertise through putting the baby back in the body during pregnancy. The midwives' awareness of this necessity was certainly achieved through the temporal and spatial proximity of antenatal care and birth, an original contribution of my study. At the birth centre, the tasks of antenatal care and care for birthing women happened in the same structure in adjoining rooms. In this sense, pregnancy was not solely seen as a trajectory for one woman that ended with her birth. Stories and discussions of pregnancy and birth informed each other. Hence the perception of the midwives that the manifestation of women's expertise at birth was accomplished in part by focusing on the woman's lived body during pregnancy. For example, the midwives conducted as few vaginal exams during labour as possible, so as to have their focus on the woman's embodiment of birth as opposed to the medically objectified birthing body, which uses cervical dilation as an indicator of labour progress (See chapter 12). The women's descriptions of their somatic sensations during labour facilitated this, together with the midwives' experience as skilled practitioners at birth. It was through the sharing of the sensations of the lived body that the woman could enter into an intersubjective space. In this intersubjective space, the negative forms of embodiment could potentially be transformed, making her 'self-in-the-body' the nucleus of the event.

13.2.3 Women's Encounters with their Lived Body: Giving the Baby a Body

When my pregnant study participants compared their antenatal care appointments with the obstetrician and the midwife, they remarked that the appointments with their obstetrician were often brief, rushed, and cold. In contrast, the appointments with the midwives at the birth centre were regarded as relaxed, warm, and personal (See chapter 9). According to the women's descriptions, the midwives provided ample time to listen to their concerns in addition to conducting the examinations according to the maternity policy guidelines. At the appointments with their obstetricians, the women said that their abdomen was rarely, if at all, palpated, while, at the birth centre, the midwives palpated the women's abdomen at each appointment (See chapter 13.1.4). Moreover, the midwives encouraged the women to palpate their abdomen with them. This facilitated the shared discovery of the baby-in-the-woman: the feet, bottom, back, and head of the

baby were all touched and held by both the midwife and the woman. Above and beyond that, there was always a response from the baby in terms of movements. These moments were an intimate exchange between the midwife, woman, and baby; the midwife displayed patience, and waited with poise and encouragement for the woman and baby to discover each other.

Fetal movements have functioned as a sign to women and their practitioners of the well-being of the fetus throughout time (Frøen, 2004). Fascination and engagement with fetal movements can be found in the Bible (Holy Bible, St. Luke 1 v 41) (Marnoch, 1992, p. 54). Yet, fetal movements were not acknowledged as a medically appropriate and valuable source of information to assess fetal health until the 1970s, with the advent of antenatal ultrasound (de Vries & Fong, 2006; Marnoch, 1992). Previous methods to assess well-being included the measurement of estetrol (E₄), produced by the fetal liver (Tulchinsky, Frigoletto et al., 1975), however these and other biochemical tests were costly, did not improve outcomes, and lacked specificity and sensitivity (Marnoch, 1992).

Hence, growth of antenatal scanning opened up a new area of interest for medical practitioners—the description and evaluation of fetal motility. The fetal movement descriptors utilized by scanners as opposed to women show vivid differences (Rådestad & Lindgren, 2012). Women's embodied descriptions of their sensations of their baby correlated to times of day, to their own daily rhythms, and often included descriptions of movements related to their own body (ribs, stomach, sides).

Antenatal interventions were initiated in the 1970s that encouraged women to count fetal movements on a daily basis (Frøen, 2004; Rådestad et al., 2012). This was introduced as a preventive measure to prevent stillbirth. As early as 1991, one study discovered that there was an added benefit to movement counting protocols: focusing on the movements of the baby throughout the day seemed to support maternal attachment to the baby (Mikhail, Freda et al., 1991). Nevertheless, programmes that encourage counting fetal kicks are embedded in the risk discourse—the women are told that they can do something to perhaps prevent the intrauterine death of their baby by counting its movements. While this is certainly a significant intervention, it raises women's awareness of risk rather than teaching engagement with the baby in the context of health.

The midwives at the birth centre focused on awareness of fetal movements together with the women to strengthen their physical and emotional connection to their baby as a matter of safety, not as a matter of risk. This is a significant original contribution of my

study to knowledge. From my observations and in conversation with the midwives, I discovered that asking the women to describe the movements and daily rhythms of their baby was intentional and attentional. This encouraged the positive, mindful focus of the women towards their baby, as well as towards themselves. In addition, the midwives reported that they were purposefully developing a good connection to the baby. This connection was not made independent of the woman, but rather relied on her as an intermediary, thus giving the pregnant woman agency.

Palpating the abdomen of the woman was also a facilitator of trusting touch, getting the women accustomed to the feeling of the hands of the midwives on their body. In social circumstances, touch has been shown to be just as important to convey information as vision and hearing; skin is considered a 'social organ' (McGlone, Wessberg et al., 2014, p. 744). Montagu calls the skin "an exposed portion of the nervous system" (1971/1986, p. 5). In sensory experiments, touch has been shown to have a positive effect on stress reduction as measured by a decrease in cortisol, blood pressure, and heart rate (Field, 2010; Gallace & Spence, 2010), as well as increasing the production of oxytocin (Field, 2010). Field writes that:

Touch, affecting both tactile and pressure receptors, stimulates the central nervous system into a state of relaxation. Anxiety and stress levels, both behavioural and biochemical, are then reduced and the general effect is a relaxed, more attentive state (2014, p. 14).

The midwives were not using touch to heal, as in therapeutic touch or healing touch, which is described as a non-invasive technique that "use(s) the hands to clear, energize, and balance the human and environmental energy fields" (Kissinger & Kaczmarek, 2006, p. 14). At the birth centre, the midwives used touch to bring the women back to their lived body and raise their somatic awareness (See chapter 9.2). This was one of the ways that midwives resisted the anxiety producing effects of the risk discourse. Their experience had taught them that birthing women did not embody risk, nor was risk inherent to birth physiology. However, the notion of risk embodiment was not a piece of clothing that could simply be taken off and exchanged for something else (See chapter 11.2).

The midwives in my study believed that risk, as well as safety, were both a complex amalgam of body, sensation, perception, lived knowledge, interactions, and environment. Embodiment and the lived body intersected at focus and intention. Instead of being preoccupied with the future, i.e. on a not-yet-embodied illness or risk, the

midwives engaged with each woman in the present moment with the belief that, if the woman was feeling good, sleeping well, moving well, and if the baby was moving well, then she was embodying health. For the midwives, the woman's sense of safe embodiment was a crucial factor for a safe birth.

13.2.4 Summary of Section

In this section I have shown that, through the process of medicalization, individuals have come to be seen as embodying diseases, or, in the case of pregnancy and birth, risk. The objectification of these diseases and location of these in the human body serves to disembody the individual, as their own sensations become secondary to medical knowledge. These notions of embodiment are different than the concept of the lived body, which is an individual, subjective experience that Duden says is a criteria for aliveness (1993). The midwives in my study perceived the women's disembodiment as a lack of awareness of their lived body. They also described this as a state of not being in their body (See chapter 9.2).

Additional original knowledge that my study adds to the discussion surrounding risk and safety is the opportunity that antenatal caretakers have to assert a positive effect on women's sensed experiences of pregnancy and birth through the simple intervention of an interactive palpation of the woman's abdomen. A woman can be encouraged to connect with her baby in the womb, telling the midwife (or obstetrician) her sensations and perceptions of her baby. In this way, the lived body of the woman can be knowable by a caretaker through receptivity, accomplished through listening and touch (palpation). When the somatic sensations of the individual are incorporated into care, the individual gains a voice and agency.

13.3 Intentional Attention: Somatic Awareness and Safety

In this section I will define somatic awareness. This was conceptualised from the study data as '*Putting the baby back in the body*'. Encouraging women to engage in dialogue regarding their physical sensations at antenatal appointments was imperative to achieving this, as well as for preparation for a safe birth at the birth centre.

13.3.1 Enhanced Communication through Sensory Awareness during Pregnancy and Birth

Engaging the women in talk about fetal movements also engaged them in talk about sensations and perceptions of their own body. Through sensations and perceptions, we become aware of our world, while at the same time shaping our world and interacting with the world (Bakal, 1999). Sensations can be elicited as a result of a person's experience with their outer environment or as a result of internal processes, and are not considered pre-conceptual (Hinton, Howes et al., 2008). Before perceptions can surface, the individual has to have sensed something; perceptions do not exist without input (Gibson, 1966). While it is possible to sense something that is outside of our momentary focus, it is also possible to heighten our awareness for particular physical sensations through active attention. Hinton, et.al. write:

All sensations come into being and are altered through processes of attention and interpretation. As a result of fluctuations in its physical properties, along with these cognitive and perceptual processes, every sensation is a shifting entity, varying moment-to-moment in its qualities and intensity. It is stabilized into percepts through strategies of attention and cognitive processes of abstraction (2008, p. 140).

The midwives' efforts to construct safety at the birth centre pivoted on increased maternal physical awareness of the fetus as a way to help women get accustomed to the normality of the physiology of pregnancy and birth. This was a form of somatic awareness. Somatic awareness is cultivated by learning to read and comprehend one's own somatic sensations in context.

One definition of somatic awareness emphasizes the mental processes by which we perceive, interpret and act on information from our bodies. Perception and interpretation are important aspects of bodily awareness but by themselves they do not necessarily lead to an integration of bodily information within consciousness (Cioffi, 1991 in Bakal, 1999, p. 4).

Many of the women in my study questioned the realness of their pregnancy in the months before quickening. They spoke of phases of fear and anxiety (See chapter 8). Although they had experienced physical changes, these were not enough to make their pregnancy real and to serve as calming and reassuring symptoms. Their inability to read their body or, in other words, acknowledge their individual embodiment of pregnancy, showed a

deficit in embodied cognition.¹⁹ Only the screen embryo/fetus could do this. I am not assuming causality in these cases, however I do believe that my findings, together with the literature on scans, make a strong case for this.

Further, Bakal writes that panic can ensue when a person 'misreads their body'. In other words, the individual's sensed physical symptoms cannot be understood within the situation they are in at the moment they are felt (1999, p. 63). In this way, cognitive misinterpretation can lead to fear, anxiety, and panic. It is my belief that the risk discourse, in that it has disembodied women and the fetus, has left women without the capability to 'live' the physiology of pregnancy with ease and composure. The disembodied pregnant woman is alienated from her physical sensations in pregnancy as indicators of health, and thus unable to tolerate the flow of change in pregnancy. Risk, as Arney writes, has been transformed from a "dichotomy to a continuum" (1982, p. 143). Women are therefore never without risk; it is only a matter of how much, which is always an abstract and undefinable amount. Antenatal ultrasound served to solidify this.

For the participants in this study, the antenatal hands-on dialogue between the woman, midwife, and baby acquired an added meaning with respect to birth, since it became the foundation for connection and communication, both of which were seen by the midwives as being paramount to safety. Communication during labour at the birth centre depended upon the integration of the somatic awareness of the woman together with the midwives' clinical and embodied understandings of birth. When women had somatic awareness of the fetus and of their own pregnant and labouring bodies, they were able to act as detectors of problems that were evolving but had not yet manifested (See chapter 9.3.2). Thus, enhanced somatic awareness made it more likely that the women would be able to communicate any unsettling sensations to the midwives, during pregnancy as well as during labour. In addition, since the midwives had lived experience of births, their own knowledge of birth embodiment gave them the ability to detect problems before they could be measured.

The midwives believed that reliance solely on technological apparatus to detect problems could not give the whole picture of the labour process and well-being of the woman and the baby (See chapter 9.3.2 and chapter 12). For example, the midwives all believed that technological means to assess the fetus did not give a complete picture of its well-being. Hence, taken by themselves, technologically produced artefacts were considered as low

¹⁹ For further information on embodied cognition, see (Häfner, 2013)

quality or incomplete information and could not be a replacement for an absent midwife. This is an original contribution to knowledge.

13.3.2 Summary of Section

The somatic experiences of birthing women in my study as reported to the midwives offered the midwives information about the present moment—as birth was unfolding—and were a significant aspect of the individualized birth process. A too forceful interruption in the woman's embodiment of birth was seen as silencing her somatic experience, hijacking her emotions, and creating chaos (See chapter 12). This was also believed to alter the woman's perception of pain, as well as her course of labour, turning the physiologically embodied labour into a medicalized, impersonal version of it. The perceived result was a reduction of felt safety for the women and the midwives. For this reason, the midwives chose to work at the birth centre—to have an environment where invasive interventions were not utilised. The midwives believed that interventions led to an often radical change in birth embodiment (See chapter 12.1.2). For example, the highly individual embodied birth physiology was no longer perceptible when the woman had an oxytocin drip and/or an epidural. The midwives all believed that this was the recipe for iatrogenic pathology—physical and emotional. When the environment supported effective embodiment of birth in a healthy woman, midwives perceived this as a safe situation which did not need to be managed as much as it needed to be witnessed by the midwife and experienced by the mother.

13.4 Existing Literature: A Comparison

In this section, I will discuss my findings in light of two previous multi-site ethnographic studies that focused on risk, policy and birth (Olson et al., 2013; Olson, 2013; Scamell, 2011a; Scamell, 2011b). The search strategy can be found in section 1.4. Both studies are listed in the following table.

Table 7. Ethnography, risk and birth

Author	Title	Focus	Summary
Scamell, Mandie, 2011	“An Investigation into how Midwives make Sense of the Concept of Risk: How do midwifery perceptions of risk impinge upon maternity care services”	Risk, policy	Through participant observation, interviews, and an analysis of policy, Scamell showed how risk enters into the midwifery discourse and the effects this has on practice.
Olson, Rachel Elizabeth, 2013	“Relocating Childbirth: The politics of birth place and aboriginal midwifery in Manitoba, Canada”	Risk, policy	Through participant observation, interviews, and an analysis of policy, Olson showed how risk has been defined by the state, thus usurping meaning-making from Aboriginal families, pregnant women and Aboriginal midwives.

One of the major differences between my study and Olson’s and Scamell’s studies was my theoretical standpoint. I chose symbolic interactionism as my theoretical standpoint because I wanted my unit of analysis to be the interactions, exchanges and collaborations between the women registered at the birth centre and the midwives. Although I observed the process regarding the implementation of quality management (because of the preparation that was done for the external audit during my time in the field), I did not analyse the care given by the midwives in terms of the policy of quality management or within the wider maternity care system.

In Olson’s use of critical medical anthropology, she sought to understand maternal evacuation policies and the way these impinge on embodiment and notions of risk and safety. Scamell focused her observations on risk in midwifery talk and practice and utilized several different theoretical approaches to analyse her data including the dominant/technical paradigm, Beck’s risk theory, Douglas’s cultural theory and governmentality.

Both Olson and Scamell analysed the interactions between midwives and women within the larger purview of guidelines and policies. With this in mind, both researchers analysed how risk affected the ability of midwives to negotiate meaning making in the performance of their work (as a kind of boundary exploration). In both studies, risk

definitions influenced and inhibited midwives, noticeably influencing the way they offered care. Risk definitions, and by virtue of these, the agency to create a space for personalised definitions of risk and safety, was for all intents and purposes appropriated by policy. In my study, I sought to locate the ways that midwives transformed the risk discourse, as opposed to seeking out ways in which it impacted on their services.

Olson discovered in her study that her research participants defined safety differently than policy makers. For her native study participants, safety meant being in their own environment, connected to their land, something that was threatened through the policy of maternal evacuation. One midwife in her study commented that “every fibre and every cell yearns for that land, and the smells, and the wind and all of that” (2013, p. 127). Risks were understood as “an indication of the loss that has occurred between individual and collective bodies of people to the land and water” (ibid). Being safe meant to stay in the community and give birth on their native land, however, for policy makers, safety meant giving birth in a fully-equipped hospital with obstetricians.

Scamell aimed to explore risk apart from the concept of safety, however risk management and surveillance technology were intertwined with the notion that these prevented harm, and therefore provided safety. Scamell wrote that “under the auspices of safety, risk management and the standardisation of care, midwifery activity in the labour room inevitably coalesces around routine surveillance practices” (2011, p. 129). At the birth centre where I conducted my study, there were few routine technological surveillance practices during labour. The presence of the midwife and the connection that the woman had to her baby created the circumstances for a safe birth.

Perhaps an important difference between my study and Olson’s and Scamell’s was that I collected data at only one site. This had the advantage for me that I became well-acquainted and quite familiar with all of the midwives at the birth centre. This didn’t hinder my curiosity, however. Some of my findings may have come to light because I was able to observe closely and repeatedly similar interactions on a continual basis. I chose to explore micro interactions in one environment without focusing on power differentials, and, with this, filled a gap in knowledge concerning risk and safety in the context of work processes in birth centre care.

13.5 Limitations, Weaknesses and Strengths of this Study

In this section, I will address the quality criteria for qualitative research in reference to my dissertation. In addition, I will state the weaknesses and strengths of my study.

13.5.1 Transferability

Lincoln and Guba state that the judgement of the transferability of a study lies with the reader of the study (1985). The researcher cannot propose that her study is in and of itself transferable without the comparison case(s). For this reason, the researcher must make detailed descriptions of the phenomena so that the reader(s) can conclude if transferability is feasible.

To review, I collected data at one midwife-led freestanding birth centre in Germany. Therefore, the findings and insights captured in this study are not immediately transferable to all birth centres in Germany, nor for birth centres in other countries. My findings chapter is for this reason replete with detailed, thick descriptions, and quotes from field notes and interviews so that readers of the study can make comparisons in their own context.

In addition, in spite of having limited data collection to just one birth centre, in many ways, birth centres in Germany are quite similar. Birth centres are all subject to the same laws, rules, and regulations, as well as regulations concerning the structure and equipment that must be on hand. In addition to requirements for basic equipment (i.e. fetal heart monitors and resuscitation equipment), birth centres do not offer interventions during labour (i.e. epidural anaesthesia, oxytocin drips to augment contractions, and caesarean section). Furthermore, obstetricians are not on staff at birth centres, only state-certified midwives. These factors assure that there will be some measure of transferability. However, while the actual structural conditions in birth centres are the same throughout the country, there is variability concerning the distance to the nearest transfer hospital. Hence, if I were to expand this research, I would compare the perceptions and construction of safety in several birth centres to include those with a longer transfer time than the birth centre where I conducted research. A comparative qualitative observational study of transfer would lend itself to a study on this topic. Otherwise, I believe that I accomplished my aims having only collected data at one birth centre.

13.5.2 Dependability

In order to evaluate the dependability of a study, the aim of the study must be clear; the reasoning for choosing the participants, as well as how they were chosen must be elucidated; the process of data collection including the time-frame must be presented; and the methods used for data analysis must be transparent (Thomas & Magilvy, 2011). In addition, the analysis of the findings must be grounded in the data. I have achieved these criteria. However, one of the criteria to assure dependability is to have another researcher analyse the data set and compare the analyses. Since this was doctoral research, I worked independently on data analysis, but I met regularly with my doctoral supervisors and shared my data, as well as my process of analysis with them.

One other way to increase dependability, according to Lincoln and Guba, is to utilize overlapping sources of data (1985), such as I did by combining participant observation with interviews of both midwives and women, antenatally and postnatally.

13.5.3 Credibility

One of the ways in which I achieved credibility was through member checking. Throughout the whole process of data collection and data analysis, I shared my findings with the midwives at the birth centre at team meetings. I also had the opportunity to discuss research findings with the women whom I had interviewed ante- and postnatally in their homes and at the birth centre. Member checking is a fundamental technique for the researcher to determine if her findings truly reflect the beliefs of the research participants (Lincoln et al., 1985). Another way in which I established credibility was through peer review (Creswell & Miller, 2000). I presented my preliminary findings at midwifery and obstetric conferences in Germany to have a platform for critique and discussion. Lastly, prolonged engagement in the field facilitates trust and open relationships with research participants, which in turn ensures that the data collected is credible (Shenton, 2004). During my nine months in the field, I was able to establish trusting, collegial relationships with everyone at the birth centre, while remaining in my role as a researcher. With trusting relationships that are sustained over a prolonged period, the researcher can be assured that the research participants are telling their truths, and not presenting a version of reality just to please the researcher.

13.5.4 Confirmability

Confirmability is established through the reflexivity of the researcher. Along with adding reflexive notes to each field note entry, I have also made my standpoint and beliefs clear throughout this dissertation. The most significant purpose of reflexivity is to make sure that the findings are grounded in the data and reflect the beliefs of the research participants (Lincoln et al., 1985).

13.5.5 Weaknesses

I had planned on observing at least 10 births from inside the birthing room. Although I received 21 invitations from women to be in attendance at their birth (See chapter 7.9), my physical distance from the birth centre prevented me from arriving at the birth centre in time for several births. In addition, during data collection, the birth centre hired three new midwives. It was thoroughly understandable that the presence of these midwives at births took precedence. Nevertheless, I was able to collect a sufficient amount of data for the main theme of this study, namely '*Putting the baby back in the body*'. That said, I do believe that there is a dearth of studies that look in depth at physiological, low intervention births in real time, and I hope to have the opportunity to continue research in this area.

Had I chosen to focus this study solely on the antenatal period, in-depth interviews with the women's obstetricians would have enhanced the thick descriptions of antenatal care. However, I left my focus on proceedings at the birth centre as was consistent with my research aim. There have been no studies undertaken in Germany to survey obstetricians' attitudes concerning antenatal care nor their attitudes towards birth centres. Knowledge of these positions could be helpful in getting a dialogue started between birth centre midwives and obstetricians offering antenatal care, since lack of respect and acknowledgement between caretakers can be stressful for the women whom they mutually care for (Hunter, Berg et al., 2008).

Lastly, as a birth centre midwife, there were advantages and disadvantages to conducting research at a birth centre. Ethnographies were traditionally undertaken in foreign lands, whereby the researcher was a naïve observer, necessitating the adaptation to a new culture (See chapter 7). As such, it was believed that the researcher would be less prone to bias as opposed to the researcher gathering data in a familiar environment (Hammersley et al., 1995; van Ginkel, 1994). I have taken this into

consideration as a possible weakness of this study and have been consistent in reflexivity in the presentation of my findings so that my standpoint is transparent. In addition, conducting research in a familiar environment can be a strength. For example, I was readily accepted and trusted. I was given access to spaces and events, such as births, which are profoundly intimate and private.

13.5.6 Strengths

I found it a great advantage to collect data on pregnancy and birth at a site where both were occurring simultaneously. Just as this aided the midwives in reflecting on their care in both phases (pregnancy and birth), I was able to readily put together a whole picture of care. In addition, I found it an advantage to be a birth centre midwife, since I was able to develop a reciprocal relationship with the midwives through the sharing of birth narratives that included my own experiences.

Another strength of this study was the readiness of the midwives, as well as the women, to participate. There were no spaces at the birth centre which were off bounds for me. In addition, I was invited and encouraged to come to the weekly team meetings. At these team meetings, I had a platform to share my findings during data collection and after I commenced data analysis.

Lastly, the birth centre was open to me at all times. I could be present in the field on days and at times that were complementary to my own work schedule. I was not required to call in advance and ask permission, which made access effortless and uncomplicated.

13.6 Implications and Recommendations for Practice

13.6.1 Reinvigorating a Lost Skill: Palpation of the Uterus at each Antenatal Care Appointment

In the German setting, it is difficult to imagine the acceptance by women and obstetricians of a restriction on the use of ultrasound during pregnancy, barring any findings proving these to be harmful. However, I would recommend that obstetricians (and midwives) use the interactive approach to the Leopold manoeuvres that I described in chapter 9 to palpate the abdomen of the woman after or in place of each ultrasound scan, as was done before the widescale use of ultrasound in antenatal care. Using

palpation of the abdomen to initiate a dialogue between the caretaker, the woman, and the baby (its participation signified by movements) would help women to engage with their body and gain confidence in self-assessment of their health, as well as putting their baby back in their body. This is a recommendation for practice for all healthcare practitioners engaged in antenatal care.

While in the final phase of writing this dissertation, I attended a pelvic floor workshop in Berlin with obstetrician/gynaecologists. I was one of three midwives present. At one of the sessions, an obstetrician in clinical practice taught us how to do a rhythmic massage for the lower abdomen. When I asked her how she integrates this massage into her practice, she explained that she does this i.a. with each pregnant woman after a scan. She said that she needs to bring the women back to their body and remind them after the scan where the baby is. I felt quite pleased to hear her explanation as further validation for the findings of this study.

13.6.2 Structuring Interdisciplinary Work between Midwives and Obstetricians

There are no structures in place in Germany to facilitate communication between obstetricians and midwives offering antenatal care. At the birth centre where I conducted my study, the midwives invited obstetricians several times a year to discuss pertinent issues, however this is not a typical course of action. Professional development geared towards both groups could be a step towards initiating an open dialogue, as opposed to the current practice of fighting battles through mutual patients.

Difficulties in collaboration between midwives and obstetricians is not unique to Germany, nor is it a modern problem (See chapter 2.2). Two of the characteristics of collaboration, according to Downe, et. al., are an “acceptance of open and honest communication” and an “acceptance of shared responsibilities” (Downe, Finlayson et al., 2010). Evidence of both of these was clearly missing in my data. Because antenatal care in Germany is predominantly overseen by obstetricians, while care at birth is the designated or reserved jurisdiction of midwives, women are subjected to highly fragmented care. Women in maternity care throughout the world could greatly benefit from a structure of care that has continuity of caretaker, or, at the very least, a diplomatic collaboration of caretakers, as its aim.

13.6.3 Ensuring Thorough Documentation of Scans

If I hadn't specifically asked the women in my study how many scans they had gotten, I never would have guessed the inflated use of ultrasound antenatally. I believe that the lack of documentation of these scans in the mother's record book shows a deficiency of medical oversight. At the very least, it provides inaccurate data for perinatal statistics of births at home and in birth centres. From an ethical point of view, it serves to further conceal from pregnant women the actual purpose of antenatal scanning, which is to separate out those fetuses who should be terminated (Rothman, 1987). In that the scans are not documented, they are not portrayed as a medical intervention, but rather taken-for-granted as another way of seeing. For these reasons, I believe that it is imperative to record each scan in the mother's record book, since this is a document that is referred to and utilised by midwives and obstetricians in the woman's birth hospital, as well.

13.6.4 Recommendations for Midwifery Education

New approaches to midwifery education include skills labs, where midwifery students use manikins to learn tasks (Cooper, Endacott et al., 2010). The purpose of simulation training is to create circumstances in the lab that are as close to real events as possible (Hope, Garside et al., 2011). Simulation training has grown in importance in response to what has come to be seen as the unethical practice of learning 'at the bedside', which is seen as risky for patients (Ziv, Small et al., 2000). One of the benefits reported with the use of simulation training was:

...the opportunity (for students) to familiarize themselves with equipment and procedures within a safe, supervised environment. The students are encouraged to 'have a go', and acquaint themselves with the feel, use, safe handling and appropriate disposal of equipment (Hope et al., 2011, p. 713).

While there is a logic to this explanation, the latent implications include the acquisition of procedural skills that are disconnected from physical bodies. Learning to use equipment cannot replace learning skilled touch, which is a significant aspect of midwifery care. With the loss of practical training, clinical situations, whether emergencies or routine care, become disembodied, learned tasks with the risk of alienating the patient's experience.

For this reason, it is crucial to include hands-on training for midwifery students, especially in the art of abdominal palpation and the art of the extended Leopold manoeuvres as were described in this study.

13.6.5 A Message for Midwifery Care in all Settings

As this study shows, deepening the somatic sensory connection between the mother and baby benefitted not only the women, but also the midwives. In this study, assisting the women to gain an embodied relationship with their baby during pregnancy helped the women gain confidence and find their voice. This improved their sense of self-determination, improved communication with the midwives, and alleviated anxiety. Midwives and obstetricians in all care settings could use abdominal palpation to better include women in their care, and to facilitate them to build confidence in their body and their baby. This has implications beyond pregnancy and birth, since it is possible that new mothers might be better able to read the signals of their baby after birth if they have learned to do this during pregnancy.

Furthermore, when women have skills to describe how they are feeling and how their baby is feeling, they have more confidence to choose the best and most appropriate care for themselves. This could aid women during pregnancy to better sense when a problem has arisen, for example when fetal movements have changed or decreased.

In settings where technology is not available, using extended palpation of the abdomen can make pregnancy and birth safer, since midwives and other healthcare practitioners can establish a connection to the fetus, as the midwives in this study were able to do. While it is not a replacement for auscultation of the fetal heart rate or other examinations for understanding the health status of women and babies, it is a type of knowledge that adds quality information as another way of knowing (Davis-Floyd, 2018).

13.7 Summary of Chapter

In this chapter, I have presented an analysis and discussion of my findings. The present service delivery of antenatal care as was experienced by my study participants was embedded in the risk discourse, reinforced by an overuse of ultrasound. One of the ways that the midwives at the birth centre resisted and transformed the risk discourse into a dialogue of safety was to facilitate women to engage with their physical sensations and to put their baby back in their body.

I have also presented the limitations, weaknesses and strengths of my study, as well as proposing recommendations for practice.

CHAPTER 14. CONCLUSION

In this concluding chapter, I will reflect on the research process, risk, quality management at the birth centre, and the ways in which my practice as a midwife has changed during my PhD studies.

14.1 Choosing Focus, Presenting Voices

In this thesis, I have taken an in-depth look at the perceptions and creation of risk and safety at a birth centre in Germany from the point of view of the midwives working there and the women registered there. Using an inductive approach to research and data analysis meant trusting that, through the research process, I would discover relevant and coherent answers, not just for me, but for my study participants, as well. I believe that I have achieved this goal.

To achieve my aim, I eventually had to limit the cultural domains that I observed. This always comes with a partial loss of attention to seemingly non-relevant cultural domains (Spradley, 1980). And yet, human interaction and meaning making is a complex process, making focus a misnomer of sorts. While I could put a boundary around my visual field, it was much more difficult to contain other sensory experiences. Distractions to 'focus' were thus also significant moments while collecting data. Choosing which data path to follow might seem obvious to those outside of the research process, as if there might have been only one clear option. However, I made conscious choices along the way that informed every segment of my observations, conversations, field-note entries, and data analysis. While writing this dissertation, I made an effort to include the voices of all of my research participants, while at the same time making my own voice known. My choice to follow the theme of 'putting the baby back in the body' also truly brought to the fore an aspect of my identity as a midwife: I kept my attention on the pregnant and birthing women.

Choosing symbolic interactionism as my theoretical standpoint required that I channel my attention to mutually constructed processes, their meanings, and the outcomes along the way, of which there were many. Donabedian writes in his seminal article "Evaluating the Quality of Medical Care":

This discussion of process and outcome may seem to imply a simple separation between means and ends. Perhaps more correctly, one may think of an unbroken chain of antecedent means followed by intermediate ends which are themselves the means to still further ends. Health itself may be a means to a further objective (1966/2005, p. 694).

I came to realize that processes and outcomes were fluid; nevertheless outcomes, no matter how good they were, needed to be composed of processes tailored to the individual that furthered the feeling of being safe, for both the midwives and the women. I can best describe it by saying that, safety, as “an interpretive act” (Smythe, 2010), is a continual process that does not engender the quality of feeling safe if it has as its foundation technologically mediated pictures and printouts. These artefacts can be judiciously and ethically utilized to supplement processes, but safety diminishes when human interaction and communication become abstracted and de-individualized. There is never a ‘final’ outcome, the outcome to end all outcomes, because there is always an ‘after’ that emerges. This also extends to birth outcomes, which are never just the minutes or hours after the birth; birth outcomes last a lifetime and in and of themselves can be events in larger life processes (Thomson & Downe, 2013).

14.2 Risk and Quality Management

I decided to do an in-depth analysis of risk theories as opposed to a literature review of other researchers’ analyses of risk in pregnancy and at birth because of the vast number of papers that turned up when searching (See chapter 3). I believe that I benefitted from this. While I did not enter the field as a naïve observer (without any knowledge of notions of risk and safety concerning birth centre birth), I was able to enter the field without categories and themes that had been found by others and may have held sway over my gaze. On the other hand, the theoretical work on risk gave me different sociological frameworks to consider while in the field. Mary Douglas’ seminal work “Purity and Danger”, with its attention to boundary making and harm was fundamental (1966/2007), as were Giddens’ notion of risk colonising the future (1991) and Hilgartner’s “Social Construction of Risk Objects” (1992).

I also strived to discover notions of safety beyond those expressed in the quality management system at the birth centre. While the quality management system serves as the framework for the delivery of safe care, I discovered that the midwives at the birth centre had enhanced process quality by engaging on a more intimate level with women’s embodied experiences of pregnancy and birth. Safety was more than just a set of

guidelines and checklists; maintaining safety required constant diligence to listening to women and remaining receptive to their experiences (Smythe, 2010). Safety at birth and respectful and humanistic care of women should never be mutually exclusive (Sandall, Devane et al., 2010).

14.3 Reflection and Practice

As a result of researching and contemplating risk and safety for the past almost 6 years, my work as a midwife has been transformed.

- 1) I had assumed that women registered to give birth at birth centres were not having more than the three recommended ultrasound scans. I began to ask women to whom I provided antenatal care how often they had scans and discovered that they also had a scan at each antenatal appointment with their obstetrician. I discussed my research findings openly with them, as well as with the couples at my birth preparation classes. The issue of risk, especially fear of possible catastrophic futures, always came up. To facilitate these conversations, I attended a training for midwives to learn solution oriented consulting. Through these dialogues, I learned in my own practice as a midwife that pregnant women are open to finding other solutions to feeling safe that don't include scans. Many women didn't know that they can turn down the scans. Unlike the midwives at the birth centre where I conducted research, I directly discuss with women the number of scans that they are receiving, as well as the, at times spurious, results of these scans.

Even now, with ultrasound technology as advanced as it is, I experienced a moment of irony after a birth. The woman, who had given birth moments before, looked down at her baby and said: "I recognize your nose—it looks just like it did on the screen." In the first half hour after birth, I kept referring to the baby as 'she.' The mom looked at me at one point questioningly and asked: "Why are you calling him a 'she,' a 'her,' when he's a 'he.'" The doctor showed me the penis several times. I know I have a boy." I told her: "Because she doesn't have a penis; she's a she. Let's take a look together." This mom was shocked, but happily surprised. Ultrasound scans have ramifications, as with the story of Monique (9.1.2), that can be deep and unsettling.

- 2) At the antenatal appointments that I conduct at the birth centre where I work, I now spend a generous amount of time palpating the women's abdomen together with them. I try to connect with each baby while doing this. Listening to the women's descriptions of their baby's movements supports this. It is always an exciting experience for me, and I am grateful that I have incorporated this into my practice.
- 3) When I conduct "risk" appointments now, I always talk about the issues in terms of safety measures. I tell the couples what we do to keep them safe. In addition to asking them about their fears, I ask them what they need to know in addition to the content of the "risk" discussion to feel safe at the birth centre.
- 4) Facilitating women during pregnancy to strengthen their connection to their baby has had a profoundly positive effect on my working relationship with them, as has working with labouring women who have a good connection to their baby. As I wrote above, I now make an effort to develop a connection to the in-utero baby. As a result of this connection, I conduct far fewer vaginal exams during the course of a birth. Being able to rely on other ways of knowing that the woman and baby are doing well make these examinations superfluous at most births.

The risk discourse is pervasive in antenatal care in medicalized settings. In light of the results of this thesis, I believe that there are ways to counteract this. 'Putting the baby back in the body' and encouraging women to be aware of their physical sensations during pregnancy and at birth can contribute greatly to helping women have agency and to feel safe.

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APPENDICES

Appendix 1. Ethics Approval



29th April 2014

Soo Downe & Nancy Stone
School of Health
University of Central Lancashire

Dear Soo & Nancy

Re: STEMH Ethics Committee Application
Unique Reference Number: STEMH 212

The STEMH ethics committee has granted approval of your proposal application 'Perceptions of risk and safety and implementation of safety at a free standing birth centre in Germany from the point of view of the midwives and service users'. Approval is granted up to the end of project date* or for 3 years from the date of this letter, whichever is the longer.

It is your responsibility to ensure that

- the project is carried out in line with the information provided in the forms you have submitted
- you regularly re-consider the ethical issues that may be raised in generating and analysing your data
- any proposed amendments/changes to the project are raised with, and approved, by Committee
- you notify roffice@uclan.ac.uk if the end date changes or the project does not start
- serious adverse events that occur from the project are reported to Committee
- a closure report is submitted to complete the ethics governance procedures (Existing paperwork can be used for this purposes e.g. funder's end of grant report; abstract for student award or NRES final report. If none of these are available use [e-Ethics Closure Report Proforma](#)).

Yours sincerely

A handwritten signature in black ink, appearing to read "K. Butt", written over a light blue horizontal line.

Kevin Butt
Deputy Vice Chair
STEMH Ethics Committee

* for research degree students this will be the final lapse date

NB - Ethical approval is contingent on any health and safety checklists having been completed, and necessary approvals as a result of gained.

Appendix 2. Informed Consent Form

Form 1: For women

I hereby agree

Last name: _____

Name: _____

Date of birth: _____

that, through the midwife

(Last name, name: _____),

I have been thoroughly informed about the study being carried out at the Birth Centre (city name remains anonymous) by Ms. Nancy Stone, also a midwife and PhD student at the University of Central Lancashire with the title: *Perceptions and Implementation of Risk and Safety at a Free-Standing Birth Centre from the perspective of midwives and service-users*. I have understood that Ms. Stone would like to be present during my labour and birth as a part of her research. With this form, I am freely consenting to her presence.

This form will be kept by my midwife and added to my file at the birth centre.

City XX, (Date): _____

Signature of the pregnant woman: _____

Form 2: For midwives at observed births

I hereby agree

Last name: _____

Name: _____

Date of birth: _____

Midwife of Ms./Mrs.: _____, that I have informed her about the research of Nancy Stone according to the information that has been provided about the study (Version March 19, 2014) and have received her voluntary permission that Nancy Stone may be present during her labour and birth.

City XX, (Date): _____

Signature of the midwife: _____

This form will be added by the midwife to the file of the woman at whose birth Ms. Stone observed, and kept for the period of time in accordance with the legal period that such files are kept.

Appendix 3. Letter to Pregnant women and their Partner

Nancy Stone, MscPH
State-certified midwife in Germany
PhD Student, University of Central Lancashire
My address
My telephone number
My email address

Study Protocol: Perception and Implementation of Risk and Safety in a Free-Standing Birth Centre

Dear Parents to be,

I am a midwife and am currently studying Midwifery Sciences at the University of Central Lancashire in Preston, England in the Department of Health. For my dissertation, I am planning to do an ethnography at the birth centre "Geburtshaus XXX," researching the perception and implementation of risk and safety in a free-standing birth centre.

I would therefore like to make observations at the birth centre, including attending antenatal consultations and being present at births. I would also like to undertake interviews ante- and postnatally with women who are planning to give birth at the birth centre. In addition, I will be asking the midwives at the birth centre to consent to being observed and interviewed.

Some brief information about myself: I have been a midwife since 2001 and have 8 years' experience working in a hospital delivery ward. In 2010 I completed my master studies in public health (MscPH) at the Berlin School of Public Health at the Charité Berlin. Since 2012, I have been working part-time at the free-standing birth centre in Berlin, Kreuzberg. I have been a PhD student since January 2013.

According to German Data Protection Guidelines and UK guidelines for research ethics, staff and women participating in my study must sign an informed consent form before our interviews. If you consent to being interviewed, I will record and then transcribe it, after which the interview will be erased from the recording device. I will not make any recordings during your labour and birth. I might use some of your quotes in my thesis,

and in any publications and presentations I give about the study, but you will be identified only with a pseudonym. There will be no way of linking your name to your quotes.

According to German Data Protection Guidelines, when a woman who has agreed to let me be present at her birth gives renewed consent at the time of her admission in labour, she must sign a consent form with her midwife as her witness. This form becomes a part of her files at the birth centre. It is also important that the person or people present at your birth have read this letter, since I will also need their consent to make observations at your birth.

You have the right at any time during the interviews or observation to withdraw your participation or request that parts of the interviews or observation notes be removed. In addition, according to German Data Protection Guidelines, when a woman who has agreed to let me be present at her birth gives renewed consent at the time of her admission in labour, she must sign a consent form with her midwife as her witness. This form becomes a part of her files at the birth centre.

Since I am also an independent midwife, I have liability insurance to offer birth assistance outside the hospital. In the case of an emergency, I will assist according to the instructions of the midwife in charge. Lastly, if at any time you or the midwife would like to withdraw their participation in the study, I will without question and without repercussion remove myself from the premises of the birth center.

Your participation is voluntarily and can be rescinded at any time during the study.

This study has been audited by the data protection office of the City of XXX. It has received approval from the STEMH (Science, Technology, Engineering, Medicine and Health) ethics committee at the University of Central Lancashire, UK

Thank you for your time!

Nancy Stone, MscPH

Midwife

PhD Student-University of Central Lancashire, UK

In the unlikely event that you have any issues or complaints about the conduct of this study that you would like to discuss with someone else, please contact:

Study supervisor: Professor Soo Downe, School of Health, University of Central Lancashire, UK, tel+44 (0)1 772 893815, email sdowne@uclan.ac.uk

Or

Dean of School of Health: Professor Nigel Harrison, School of Health, University of Central Lancashire, UK ADD PHONE and EMAIL

Appendix 4. Letter to Midwives

Nancy Stone, MscPH
State-certified midwife in Germany
PhD Student, University of Central Lancashire
My address
My telephone number
My email address

Study Protocol: Perception and Implementation of Risk and Safety in a Free-Standing Birth Centre

Dear Midwives,

I am a midwife and am currently studying Midwifery Sciences at the University of Central Lancashire in Preston, England in the Department of Health. For my dissertation, I am planning to do an ethnography at the birth centre “Geburtshaus XXX,” researching the perception and implementation of risk and safety in a free-standing birth centre.

I would therefore like to observe some of your work at the birth centre, including antenatal consultations, and births. I would also like to undertake an interview with you for about an hour, to understand your thoughts and views about safety in childbirth, and related issues. I will also be asking the women you are caring for to consent to being observed, and interviewed.

Some brief information about myself: I have been a midwife since 2001 and have 8 years’ experience working in a hospital delivery ward. In 2010 I completed my master studies in public health (MscPH) at the Berlin School of Public Health at the Charité Berlin. Since 2012, I have been working part-time at the free-standing birth centre in Berlin, Kreuzberg. I have been a PhD student since January 2013.

According to German Data Protection Guidelines, as a midwife, you are considered an expert and do not need to sign an informed consent form before our interview. However, my studies are being undertaken in the UK, where consent forms do need to be signed by staff, so I will not undertake any observation or interviews unless you are happy to sign the accompanying consent form.

If you do consent to being interviewed, I will record, and then transcribe it, after which the interview will be erased from the recording device. I might use some of your quotes in my thesis, and in any publications or presentations I give about the study, but you will be identified only with a pseudonym. There will be no way of linking your name to your quotes.

You have the right at any time during the interview or observation to withdraw your participation or request that parts of the interview or observation notes be removed.

According to German Data Protection Guidelines, when a woman who has agreed to let me be present at her birth gives renewed consent at the time of her admission in labour, she must sign a consent form with you as her witness. This form becomes a part of her files at the birth centre.

Since I am also an independent midwife, I have liability insurance to offer birth outside the hospital. In the case of an emergency, I will assist according to your instructions. Lastly, if at any time you or the birthing woman would like to withdraw their participation in the study, I will without question and without repercussion remove myself from the premises of the birth center.

Your participation is voluntarily and can be rescinded at any time during the study.

This study has been audited by the data protection office of the City-State of Hamburg. It has received approval from the STEMH (Science, Technology, Engineering, Medicine and Health) ethics committee at the University of Central Lancashire, UK

Thank you for your time!

Nancy Stone, MscPH

Midwife

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In the unlikely event that you have any issues or complaints about the conduct of this study that you would like to discuss with someone else, please contact:

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Appendix 5. Interview Schedule for the Midwives

Opening

Thank you for agreeing to this interview. I want to go over a few things before we begin. You had a chance to read the information about my study and have signed the consent form. I want to remind you that I am going to record the interview. However, you can ask me at any time to turn off the recorder, for whatever reason. If you decide after the interview that you are uncertain about parts of the interview, you can also ask me to leave out part or all of the interview.

You know from the study information that I am interested in what people think about risk and safety in pregnancy and how safety is created during labour and birth in a birth centre. I am particularly interested in how midwives perceive risk and how they perceive and create safety at births outside the hospital.

I'm going to start off by asking some questions about your start as a midwife, if you've worked in a hospital delivery ward, how you made the decision to work at the birth centre and how long you've been working here. I would then like to hear some stories about births (please don't mention names of clients or personal data), births that have taken place here and transfers.

Interview topics

- Becoming a midwife;
- Work experience before the birth centre;
- Decision to work at the birth centre;
- (Encouragement to tell birth stories, i.e. were there births at the hospital that had an effect on your decision to work at the birth centre);
- Hopes, wishes for women who start their birth at the birth centre;
- Birth stories that have been an inspiration or have had an positive effect on you.
- Birth stories about difficult births.

(In case it hasn't come up in the stories yet: what does being safe mean to you? What does it mean to you as a midwife at birth? How do you create safety at birth?)

Closure

I have enjoyed listening to your stories and hearing your ideas. Is there anything you'd like to say that wasn't covered?

I will give you a transcript of the interview to read and am planning to present my findings while I'm writing my dissertation. I'll organize a date with the birth centre, and they'll send out emails.

Appendix 6. Antenatal Interview Schedule

Opening

Thank you for agreeing to this interview. I want to go over a few things before we begin. You had a chance to read the information about my study and have signed the consent form. I want to remind you that I am going to record the interview. However, you can ask me at any time to turn off the recorder, for whatever reason. If you decide after the interview that you are uncertain about parts of the interview, you can also ask me to leave out part or all of the interview.

You know from the study information that I am interested in what people think about risk and safety in pregnancy and how safety is created during labour and birth in a birth centre. I'm interested in not only what you think about safety, but also what gives you a feeling of being safe. I hope to be able to expand what I think has become a very limited idea of what safe means, since safety is not just a public, but also a private issue.

I'm going to start off by asking some questions about this pregnancy, which child this is for you, and when you decided that you wanted to give birth at the birth centre. I would then like to hear about birth stories (her own, if she has already given birth) which have touched you in some way, and how these helped you make a decision about where to give birth. You can add anything along the way that you want me to know.

Interview topics

- This pregnancy;
- Choosing the birth centre;
- The way you feel when visiting the birth centre;
- Telling the obstetrician about the choice;
- Hopes, wishes for this birth;
- Birth stories that have influenced your choice for birth space;

(In case it hasn't come up in the stories yet: what does being safe mean to you?)

Closure

I have enjoyed listening to your stories and hearing your ideas. Is there anything you'd like to say that wasn't covered?

Since I'll be interviewing you in the four weeks after birth, I'll get to hear how it was. I'm excited for you and wish you all the best!

Appendix 7. Postnatal Interview Schedule

Opening

Thank you for agreeing to this interview. Let's see what we can fit in. If you need to interrupt for whatever reason, to breastfeed, change a diaper, or anything else, let me know. I want to remind you of a few things before we begin. We've had one interview, so you know a bit of the procedure. I want to remind you that I am going to record the interview. However, you can ask me at any time to turn off the recorder, for whatever reason. If you decide after the interview that you are uncertain about parts of the interview, you can also ask me to leave out part or all of the interview.

I feel honoured to hear your birth story. Please take your time. I'm not planning on asking any fixed questions; I'm interested in hearing how it was for you. I would love it if you would start with how you knew that the birth was beginning and when you decided to call the midwife.

Interview topics

- Beginning of labour, calling the midwife;
- Arrival at the birth centre;
- Labour and birth;
- Feeling safe, being safe;
- For a woman who was transferred: description of the transfer situation, hand-off at the hospital, rest of birth.

Closure

Thank you so much for sharing your birth story with me. Is there anything you'd like to say that wasn't covered?

(For a woman who was quite emotional or described a traumatic birth: It seems to me that there are some issues that were difficult for you. I could help you find someone to talk to about it, if you would like.)

I wish you all the best!

Appendix 8. An example of coding of interview data

The examples on the next three pages show coding of interview data. The first two pages are an example of coding from Dora's antenatal interview.

Dora's interview was key for me, since she differentiated between different parts or phases of pregnancy that were not based on three, equally long trimesters. For Dora, the second part of pregnancy began when she experienced quickening, the first sensed fetal movements. This inspired me to check back in data that I had already collected for other references to fetal movements and to add this as an interview topic in subsequent interviews. I subsequently addressed the topic in interviews in the following way:

- What was it like to feel your baby move (for the first time)?
- What was different after that?

In addition to addressing this topic specifically in interviews with the women, I also began to focus my observations specifically on the topic of fetal movements at antenatal appointments and at births.

Dora's quote is included in the theme: *"It Becomes More Real"*: Building on Women's Experience of Fetal Movements (section 9.3.1).

The German quote is as follows:

Und uhm, beim 2. Teil, manchmal ist das dann störend wenn man das Kind so spürt aber es geht halt wirklich. Man fühlt sich nicht mehr so schlecht wie am Anfang und auch nicht so unbeweglich wie danach aber es ist präsenter weil es jeder weiß.

This is my translation of the quote:

And, uhm, in the second part of pregnancy, it was sometimes intrusive to always feel the baby but I got used to it. You don't feel as bad as at the beginning of pregnancy, and it isn't as difficult to move around like at the end of pregnancy, but it is also more present because everyone knows. (Antenatal interview, Dora)

The third page of coding shows Dora's example, followed by an excerpt from Yvonne's interview, where I also discovered the code. The third example is from Marie's interview. In Marie's interview, I specifically asked her about her experience of fetal movements. Her quote from section 9.3.1 includes the in situ quote used in the theme.

(After feeling the baby move) I had, of course, more peace of mind that it is there. (Before this), it had been kind of like: is it really there? It's doing fine. You have more control, and you don't have to go to the doctor all the time. And, of course, because of the movements it got more real. You aren't afraid anymore. It's not so abstract anymore. And the bigger and stronger it gets, the more you imagine that it also has its own character. Like, with my first, he always pushed himself away down here, and then I always told him that everything is okay, he can calm down. She (points to belly) is doing a whole lot of gymnastics, but she is simply doing well and is content. (Antenatal interview, Marie)

As this was an ethnographic study and included participant observation, the codes that I discovered in the interview data guided my observations in the field.

Dora

<p>irgendwie schlecht weil der Körper schwanger ist aber die anderen das nicht wissen. Das ist relativ schwierig. Das fand ich am Anfang gar nicht schön.</p>	<p>Separates self from state of being pregnant. "The body is pregnant—you feel bad—but no one knows." (Dislike)</p>	<p>Body-self duality <u>Pregnancy</u> - substantive (Dislike) <u>Being</u> - not doing</p>
<p>Kein Mensch wusste das. Ich bin kein Mensch der sich gerne im Vordergrund stellt und sich bemitleiden lässt. Von daher das war relativ schwierig. Fand ich nicht so gut.</p>	<p>Difficult—no one knew.</p>	
<p>Und uhm, beim 2. Teil, manchmal ist das dann <u>störend</u> wenn man das Kind so spürt aber es geht halt <u>wirklich</u>. Man fühlt sich nicht mehr so schlecht wie am Anfang und auch nicht so unbeweglich wie danach aber es ist präsenter weil es jeder weiß. Jeder guckt mich anders an. Das ist schwierig weil ich denke, ich bin immer noch ich. Behandle mich nicht anders weil ich schwanger bin. Behandle mich wie „Dora“ normal. Ich bin ja immer noch gleich. Das fand ich schwierig.</p>	<p>SECOND PART OF PREGNANCY IS WHEN SHE CAN FEEL THE BABY MOVE!!</p> <p>Different pregnancy phases than the three trimesters. 3 trimesters are medical explanation. But second phase as defined by the woman is sensing the baby.</p> <p>Felt better than at the beginning. Could move better. Pregnancy (and/or baby) is more present. Other people know.</p> <p>Gaze from others: her status changed. Now she is her same self—wants to be treated the same. Uncomfortable.</p> <p>Boundary around self—Self is the same; body is not.</p>	<p>THIS</p> <p>Fetal movements create change in character (sensing) of pregnancy.</p> <p>"woman's" pregnancy definition different than medical.</p> <p>Baby's movements way to sense "disturb" → sensory body (changes).</p> <p>Defining presence: ^{of fetus} she knows - movements Other know - her change in body shape. (Sensing = Fetus/baby)</p>
<p>Naja und dann im letzten Teil ist halt wieder so ein Bisschen abhängig, aber sehen ganz deutlich dass man schwanger ist.</p>	<p>THIRD PART OF PREGNANCY:</p> <p>Pregnancy is obvious to ALL</p> <p><u>Public pregnancy.</u></p>	<p>Is different from "seeing" pregnancy.</p> <p>Knowing - seeing Feeling - Others</p> <p>Public pregnancy</p>
<p>Verwandte oder ältere haben alle ihre eigenen Erfahrung die sie einem mitteilen müssen. Mach das</p>	<p>Moral character at end of pregnancy—being told what to do by others.</p>	<p><u>Moral obligations</u> Told - scolded</p>

Different way of knowing pregnancy/body

Dora

<p>doch so. Du kannst nicht mehr Fahrrad fahren nachher. Das hört irgendwann auf. Ich meinte, fuck. Ja. Aber es ist okay. Ich habe es akzeptiert, dass ich schwanger bin. (Lacht laut) also, das hat eigentlich schon bis zum letzten Teil gedauert. Das liegt vielleicht daran, dass ich meinem Job nicht ausüben durfte in der SS. Ich musste im Büro für ein halbes Jahr arbeiten. Und das nur weil ich schwanger bin. Das war ein ganz anderes Rhythmus, Tages Rhythmus, Wochen Rhythmus.</p>	<p>"Don't ride your bike." Fuck—okay. Acceptance of pregnancy—acceptance of "mitmischen" of others.</p> <p>Pregnancy—work role changed just because she was pregnant. Loss of familiar rhythm/ loss of professional tasks.</p> <p>Job radically altered because of pregnancy. From interesting to office work.</p>	<p><u>Moral obligations</u> <u>Risk actually</u></p> <p>activities you shouldn't do:</p> <ol style="list-style-type: none"> ① Eat what you ate before ② certain behaviours ③ Ride a bicycle. ④ Work as before. <p>AND Must be happy to be pregnant.</p> <p>→ <u>Food, life, work.</u> <u>Everything, right?</u></p>
<p>Ich habe mich nicht so doll mit meinem Beruf identifiziert, aber es war ganz anders jeden Tag um 7 Uhr aufzustehen (USW--sie redet über ihren Beruf) Ich war am Anfang, unabhängig davon—war ich echt fertig, weil ich diesen Rhythmus nicht kannte. Es ist ja auch schon bald wieder vorbei. (Lacht)</p>	<p>Had not identified with profession, but new schedule was uncomfortable.</p> <p>"It's almost over." Pregnancy Altered job that she doesn't like. Rhythm that she doesn't like.</p>	<p><u>Daily life</u> <u>rhythm</u> changed from a place of <u>authority - no choice.</u></p> <p><u>Infantilisation</u> <u>State caring for woman.</u></p>
<p>N: Dieses fast vorbei sein-- die Geburt kommt auf dich zu bevor es vorbei ist.</p>		
<p>Ich versuche die Geburt auszublenden. Ich vertraue einfach drauf dass es irgendwie schon funktioniert. Eigentlich würde ich gern den Schritt rauslassen.</p>	<p><u>'Bracketing out' birth.</u></p> <p>Trust that birth works.</p> <p>Wants to skip that step.</p> <p>(She wants to have a child but wants to skip pregnancy and birth. Does not like her body 'used or utilized' for the tasks—does not like her</p>	<p><u>Birth works</u> <u>Trust in physiology/ nature.</u></p> <p>Jokes around: Leave out step of giving birth. <u>Can't think about having a child - w/o needing to be pregnant or give birth.</u></p>

Dora

<p>Und uhm, beim 2. Teil, manchmal ist das dann störend/wenn man das Kind so spürt aber es geht halt wirklich. Man fühlt sich nicht mehr so schlecht wie am Anfang und auch nicht so unbeweglich wie danach aber es ist präsenter weil es jeder weiß. Jeder guckt mich anders an. Das ist schwierig weil ich denke, ich bin immer noch ich. Behandle mich nicht anders weil ich schwanger bin. Behandle mich wie „Dora“ normal. Ich bin ja immer noch gleich. Das fand ich schwierig.</p>	<p>SECOND PART OF PREGNANCY IS WHEN SHE CAN FEEL THE BABY MOVE!!</p> <p>Different pregnancy phases than the three trimesters. 3 trimesters are medical explanation. But second phase as defined by the woman is sensing the baby.</p> <p>Felt better than at the beginning. Could move better. Pregnancy (and/or baby) is more present. Other people know.</p> <p>Gaze from others: her status changed. Now she is her same self—wants to be treated the same. Uncomfortable.</p> <p>Boundary around self—Self is the same; body is not.</p>	<p>THIS</p> <p>Fetal movements create change in character (sensing) of pregnancy.</p> <p>“Woman’s” pregnancy definitely different than medical.</p> <p>Baby’s movements “disrupt” → ^{not to sense} sensory body (changes).</p> <p>Defining presence: ^{she know} movements. Other know - her change in body shape. (Sensing = Fetus/baby)</p>
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Yvonne

<p>Ich hatte starke Ängste—es passiert dem Baby was, ich kann es nicht spüren, ich kann es nicht kontrollieren.</p> <p>Von dem Zeitpunkt an wo ich es fühlen konnte, was ich sehr früh konnte, in der 15. Woche, hat alles Urplötzlich gewandelt. Also ich habe ihn gespürt und dadurch, mir hat es wirklich gelockert und gelöst.</p>	<p>Fear stemming from not feeling the baby.</p> <p>Fetal movements affected her emotions positively.</p> <p>Caused sudden change to her emotions.</p> <p>Relaxed because she felt baby move.</p>	<p>Not sensing → not knowing = FEAR</p> <p>Fetal movements create change in sensing of pregnancy.</p> <p>Change in emotions.</p> <p>Fear → relax</p> <p>↳ Loosened up - not with technological “knowing” from “I” centred knowing</p>
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Marie

<p>Nancy: Wie war das für dich als du noch keine KB hattest? Was hat sich geändert als du es gespürt hast?</p> <p>Also es gibt natürlich mehr so eine Sicherheit, dass es da ist. Und auch so ein Bisschen: ist es wirklich da? Es geht ihm gut. Man hat so mehr eine Kontrolle darüber und muss halt nicht immer zum Arzt gehen. Es ist natürlich, es wird dann dadurch auch ein bisschen realer. Man verliert die Angst.</p> <p>Es ist nicht mehr so abstrakt. Und je größer und stärker es wird, desto mehr denkt man, dass es ein Charakter hat. Also ich weiß halt mein erster, er hatte sich immer hier unten so weggedrückt und dann habe ich ihm immer gesagt—komm jetzt, beruhige dich. Also sie turnt auch schon ganz viel, aber sie fühlt sich einfach wohl und zufrieden.</p>	<p>My focused question: What was it like for you before you felt the baby move? What changed since feeling the baby move?</p> <p>Sensing fetal movements is certainty that it is there. Before this: questioning existence and well-being</p> <p>Sense of control—less visits to doctor, = less ultrasound! It becomes more real. Caused change in emotions → Less fear</p> <p>Baby was abstract.</p> <p>She could imagine or sense that the baby had it’s own character. I became a person.</p> <p>Explains first pregnancy—character of baby. Sensed moods of baby. Senses moods of this baby, also. Baby is feeling good and satisfied.</p>	<p>Fetal movements create change in sensing of pregnancy.</p> <p>Change in emotions.</p> <p>↳ More real to sense baby than see on the screen!!</p> <p>Movement = character. Defines baby as a person (to her).</p> <p>↳ Mirrors midwives’ question: How is your baby feeling? Movement tells her how baby is feeling.</p>
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Initial discovery of the importance of fetal movements from Dora’s interview.

Code:

Fetal movements create change in sensing of pregnancy

Next step:

Searched in other interviews for comments about fetal movements. This is from Yvonne’s interview.

Next step:

Asked focused questions in interviews.

In situ quote comes from Marie’s interview:

“It becomes more real”: Building on Women’s Experience of Fetal Movements

Appendix 9. Translation of the Supplementary Contract between the Central Association of Statutory Health Insurance Funds and the two midwifery associations in Germany (German Association of Midwives and German Association of Independent Midwives)

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- §6 Documentation

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(**Attachment 5** Description of the quality management audit procedure including process descriptions)

§13 (Participation in the) statistical surveying of midwife-led institutions

(**Attachment 6** Statistical survey form)

§14 Country-wide quality presentation of midwife-led institutions

§15 Initiation of transport from the midwife-led institution to a hospital

Other

§15 Initiation of a transfer from the midwife-led institution to a hospital

(**Attachment 7** form for the initiation of a transfer from the midwife-led institution to a hospital)

Attachments

- 1 List of materials to fulfil the minimum requirements concerning the material resources.
- 2 Process description, registration, and further care of the insured person at the midwife-led institution.
- 3 Regulations concerning the verification of audits.
- 4 Results of the audits and proof of this for the Central Association of Statutory Health Insurance Funds.
- 5 Process description of the review process of quality management.
- 6 Statistical survey form
- 7 Form for the initiation of a transfer from the midwife-led institution to a hospital.

Preamble

The quality agreement offers a framework for the requirements concerning structural quality, process quality, and outcome quality in institutions led by midwives.

Structural quality

Structural quality includes the requirements for the organisation (of the birth centre), personnel, (type of) rooms, and (necessary) objects in order to provide service delivery according to the supplementary contract in terms of §134a of the Social Code Book V.

§1 Personnel Requirements

(1) Professional Management

- a) The professional management and responsibility for the organisation of the service care delivery for births is the responsibility of a midwife. This can also be undertaken by an executive board, as long as this board is comprised only of midwives. The professional manager or one of the midwives in the executive board must be designated formally as the person in charge and made known to the Central Association of Statutory Health Insurance Funds according to Attachment 2.1 (new intake form).

- b) The professional manager must prove that she has been practicing in the area of birth assistance for at least three years full-time after the completion of (her) midwifery training; and within the period of the last 8 years before taking on the position of professional manager.
- c) The professional manager of the institution is responsible i.a. for:
- The establishment of an emergency plan;
 - The organisation of the continual reachability of the institution;
 - The cooperation with other institutions and care delivery health practitioners in the healthcare system named in §4;
 - The internal quality control according to §10.
- d) The responsible body of the midwife-led institution must guarantee that during periods of vacation, advanced training, illness, or other periods of absence, the professional manager, or in the case of an executive board, the lead midwife, will be replaced by a qualified midwife who meets the conditions according to §1 Part 1b and that she has been familiarized with the internal quality management system according to §7 of the supplementary contract. A midwife from another midwife-led institution can also act as a replacement, as long as she fulfils the above mentioned requirements.

(2) Organisational Management

- a) The organisational management is i.a. responsible for:
- The adherence to the reporting obligations to the health insurance companies
 - The invoicing of the operating costs and
 - The proof of existence of compulsory insurance
- b) The carrier of the midwife-led institution must guarantee that there is a replacement for the organisational management during times of vacation, continued training, illness, and any other absence, and that she has been trained and is familiar with the tasks according to section 2a).

(3) Further personnel requirements

- a) In midwife-led institutions, only midwives are permitted to carry out services pursuant to the contracts in §134a Social Code Book V.
- b) The number of midwives at the midwife-led institution is oriented on the number of birthing women. Every labouring woman is being cared for. One-to-one care given by a midwife is the rule for each birth. The responsible midwife at a birth is authorized to call a second midwife to each birth.

(4) Requirements concerning the operation of the midwife-led institution

The carrier of the midwife-led institution ensures that at least one midwife who is certified to give care during labour and birth is constantly reachable (accessible) and ready to work. If the midwife planned to give care is unforeseeably unable to do so, either the midwife herself or the professional manager must immediately find an adequate replacement for the insured woman according to §1, Section 1, Nr. d. In this case, the midwife who replaced the midwife who became unforeseeably unavailable, must be ready to give adequate care to the insured women at all times.

If a replacement cannot be guaranteed due to certain structural requirements (i.e. a small midwife-led institution), the insured woman must be informed in advance about this as well as about the planned procedure (birth companion, referral to a hospital or referral to a different midwife-led institution). This must be noted on the informed consent forms.

In times of planned closings, care through the midwife can be guaranteed through cooperation with a:

- Different midwife-led institution and/or
- A replacement midwife and/or
- A maternity unit in a hospital

The insured women are to be informed at the time of informed consent about all planned closings, as well as the prearranged procedure for dealing with this.

§2 Minimum Requirements Concerning Space

The institution must have at least the following rooms:

- a) A birthing room
- b) A bathroom
- c) A room for examinations and consultation
- d) Sanitary facilities and a waiting room for relatives, as well as
- e) A meeting room for the staff

The required rooms are oriented on the number of births per year. The rooms used for births must also be, in case of an emergency, readily accessible and able to accommodate a gurney or a neonatal incubator. The entrance/exit must be easily accessible for a rescue vehicle.

§3 Minimum Requirements Concerning Material Resources

The institution must have the material resources to not only accomplish care at births without complications, but also care for mother and baby in the case of unforeseeable complications during and after the birth until a doctor arrives or until a transfer in a hospital is possible. The minimum requirements concerning material resources can be found in Attachment 1.

All of the materials and equipment utilized must be technically appropriate and functional, and must also be suitable according to safety standards and other legal stipulations. The regulations in the medical products law as well as the regulations relevant to the medical products law (i.e. operational regulations and medical products regulations), hygiene regulations and accident prevention regulations are to be respected by the carrier of the institution as well as the staff.

§4 Cooperation with other Healthcare Institutions

- (1) The midwife-led institution (for example through allocation) cooperates with the following regional, responsible services in the healthcare system with the goal of delivering adequate service care to the insured women and the newborn:

- A hospital with a maternity unit and/or a paediatric unit (dependent on the case)
- Laboratory
- Obstetrician/Gynaecologist and a paediatrician with experience to diagnose and treat a newborn in the outpatient sector or respectively a doctor in a relevant hospital
- Pharmacies
- Transport services

The possible transfer hospitals and the distances to these (kilometre and expected transport time) must be explained to the insured women at the informed consent appointment, and documented either/or in the treatment contract or on the informed consent form.

- (2) The midwife-led institution must have case-related emergency plans in place so that, in case of an urgent transfer, the insured woman and/or the newborn can be immediately transported to the next hospital with an obstetric and/or paediatric unit.
- (3) The midwife-led institution guarantees, where appropriate, the treatment of the insured woman and the newborn using medications for which midwives are authorized to use.
- (4) In so far as a quality circle for midwives takes place regionally, the midwife-led birth centre assesses their participation in these.

§5 Verification

- (1) The carrier of the midwife-led birth centre must expressly present the relevant documents to the Central Association of Statutory Health Insurance Funds (by delivering the) form for new registrants according to §4 Section 3 of the supplementary contract the following:
 - a) The conclusion of an adequate operational and organisational liability insurance for personal, material, and asset damage according to §10 of the supplementary contract;

- b) Proof from each midwife on staff of the conclusion of an occupational liability insurance according to §10 of the supplementary contract;
- c) Certificate of recognition for the midwife who is working as professional manager;
- d) Proof of registration (of the midwife-led institution) at the responsible health office via copy of the notification from the health office;
- e) Proof of the status of the quality management system according to §7 of the supplementary contract in conjunction with §§10 and 11 of this attachment;
- f) The name/names and the identification numbers of the owner (carrier) of the midwife-led institution;
- g) The names and identification numbers of all of the independent midwives on staff offering birth assistance.

Only after receipt of all of the necessary verification/information according to Section 1 by the Central Association of Statutory Health Insurance Funds is the midwife-led institution entitled to submit claims for reimbursement of the operating costs according to Attachment 3. The midwife-led institution will receive a confirmation of acceptance as a contract partner according to §4 Section 5 of the supplementary contract from the Central Association of Statutory Health Insurance Funds.

(2) Concerning the following, the fulfilment of the requirements according to this attachment regarding changes will be promptly communicated by the carrier of the midwife-led institution in writing to the Central Association of Statutory Health Insurance Funds:

- a) Information concerning the institution (Address, institutional number, etc.);
- b) Status of the quality management system (begin, implementation, completion, continuation (with the pertinent proof according to §11, Section 3))
- c) Legal structure of the institution;
- d) Membership in one of the contracting midwifery associations;
- e) Name, institutional number of the partners of the midwife-led institution including proof of the liability insurance policies of new staff members, as long as these are offering birth assistance. This includes reporting staff who has left.
- f) Professional manager and/or replacement (Name and institutional number)

- g) Further midwives offering birth assistance (names, institutional numbers including proof of the professional liability insurance policies of new midwives as well as staff who has left.
- h) Proof of the professional liability insurance policies of each of the midwives and the operational and organisational liability insurance of the midwife-led institution (expiration, cancellation, renewal, changeover);
- i) Cancellation of the participation by the midwife-led institution in the supplementary contract;
- j) Closing of the midwife-led institution.

The notification of changes can be sent informally in writing. The relevant documents must be enclosed.

Process Quality

The term process quality describes the quality of the working processes within the framework of care. Process quality is understood as the quality in the delivery of care and services.

§6 Documentation

Documentation at the midwife-led institution must include the following general information and documents:

1. General information about the institution (where required, a stamp)
2. Information about the insured woman
 - Personal data
 - Health insurance data
 - Due date or corrected due date, number of pregnancies, blood group and Rh factor and all further information documented in the mother's record book or other documents i.e. laboratory results, and, where required, other results from the medical history
 - If applicable, the name of the supervising obstetrician and paediatrician

3. Documentation concerning antenatal care
 - Medical history
 - Antenatal examinations including laboratory results and, if applicable, results of fetal heart monitoring
 - Information concerning stationary care pertaining to the pregnancy
 - Recommended and implemented treatments
4. Protocol of the birth (including the results of the U1—the first examination of the newborn postpartum at the midwife-led institution)
5. Report of transfer (including the indications for transfer, whether insured woman and/or child and the name of the transfer hospital)
6. If applicable, the documentation regarding physician medical rounds (Gynaecologist and paediatrician)
7. Discharge report for the gynaecologist who will continue care, the midwife, and, if applicable, the paediatrician.

§7 Provision of Information (informed consent)

A midwife at the midwife-led institution provides the insured woman with information concerning an out-of-hospital birth. In the case that the insured woman does not want to be provided with information about risks, she must give signed confirmation of this.

The provision of information must take into account at the very least the following:

- Exclusion criteria of the respective midwife-led institution with regard to the minimum requirements in attachment 1 §9
- Clarification of the individual risks, and, if applicable, taking into account medical specialist findings
- Information concerning the equipment at the midwife-led institution, especially pointing out the differences to the hospital
- Information concerning the availability and replacement of the midwives in case of a planned or unforeseen hinderance of the midwife (on-call)

- Information concerning the consultation with a doctor and the transfer of the insured woman and/or the newborn to a hospital during and after the birth including: reasons, non-emergency transfer, emergency transfer, the mode of transport including the respective distances (distance in kilometres and the average time for transfer). This includes information about the specific transfer rate of the midwife-led institution
- Information about the newborn-screening after the birth according to the guidelines of the early detection of illnesses in children before their 6th birthday according to the Federal Joint Committee §92 Social Code Book V in the respective current version
- Liability according to §10 of the supplementary contract
- Attachment 2

Further provision of information concerning an out-of-hospital birth shall remain unaffected by this. The provision of information is in accordance with the current stand of midwifery sciences and jurisprudence.

§8 Admission/Treatment Contract and Informed Consent

The admission/treatment contract and/or informed consent must take into account at the very least the following:

- Information concerning the carrier of the midwife-led institution
- Description of the services offered by the midwife-led institution
- Information concerning data protection and professional confidentiality
- Information concerning the optional services (paid out-of-pocket), for example on-call fees
- Information in accordance with § 7

The admission/treatment contraction and the informed consent form must be discussed with the insured woman. The insured woman receives respectively a copy of the signed documents.

§9 Exclusion Criteria for Births in a Midwife-led Institution

(Status: 12.03.08)

The following is a list of diagnoses and risks that rule out a birth in a midwife-led institution according to the supplementary contract and, in addition, are only possible under specific conditions.

This catalogue of criteria was compiled with regard to existing guidelines of the contractual midwifery associations and with the enlistment of medical services of the Central Association of Statutory Health Insurance Funds. It must be taken into account that the exclusion criteria are not evidence based and that future evidence including new treatment methods may be integrated into the catalogue.

The exclusion criteria pertain to the evaluation of risks before the birth, whereby a differentiation is made between the risks in the medical history and (other) risks which have been detected. The wishes of the insured woman should be integrated into the decision process, as well as her patient rights.

In light of a birth planned at the midwife-led institution, whereby an unfavourable prognosis or intrauterine death of the fetus has been diagnosed in the course of the pregnancy, the birth in the midwife-led institution is possible after assessment of the potential risks for the mother.

Quality is primarily based on the form and content of care; quality cannot solely be guaranteed based on the exclusion criteria. The following catalogue is an orientation giving direction to the concept of service delivery provided by the midwife-led institution with regard to their service profile which has been decided upon in correspondence with the Federal Joint Committee. This concerns quality assurance measures for the care of premature newborns and term newborns, (respectively) in its current valid version.

(1) Criteria that rule out a birth in a midwife-led institution within the meaning of the supplementary contract

a) Risks pertaining to medical history

- Serious general illnesses, unless a medical specialist has no objections
- Previous uterine rupture

- Previously two caesarean sections not followed by a vaginal birth
- Previous uterine surgical procedures (excluding caesarean section) according to the following OPS-code:
 - 5-681.1 Excision of a congenital septum
 - 5-695 Uterine reconstruction
- HIV positive pregnant women
- Drug addiction
- Blood group incompatibility
- Insulin dependent diabetes
- If a newborn cannot be guaranteed directly after birth immunization when the mother is HBs-AG positive
- Febrile miscarriage directly before this pregnancy

b) Diagnosed risks

- Birth (or premature rupture of the membranes) before 37 + 0 weeks of pregnancy
- Placenta praevia
- Uterine bleeding in the last third of the pregnancy
- Placenta insufficiency diagnosed by a medical specialist
- Hypertensive condition in the pregnancy, HELLP syndrome
- Thrombosis in this pregnancy

Furthermore, conditions that have not yet been diagnosed can arise at the commencement of labour or during labour that would prevent the admission to the midwife-led institution:

- Suspected amnio-infection syndrome
- Pathological bleeding at the time of admission
- Pathological position/presentation of the fetus

(2) Criteria that do not prevent a birth in a midwife-led institution according to the supplementary contract after a thorough assessment and further diagnostics, a consultation with a medical specialist and a team decision, including specific explanation of the risks

a) *Risks pertaining to medical history*

- Previous placenta abruption
- Previous excessive blood loss with haemodynamic repercussions
- Previous shoulder dystocia
- Suspicion of injury to the myometrium as a result of repeat curettages in the medical history
- Thromboembolism in the medical history
- Coagulation disorders
- Stillborn baby or impaired child in the medical history with the probability of reoccurrence
- Previous uterine surgical procedures (excluding caesarean section) according to the following OPS-code:
 - 5-681.2 Eucleation of a fibroid tumour
 - 5-681.3 Excision of other diseased uterine tissue
 - 5-699 Other uterine or parametrium surgeries

b) *Diagnosed risks*

- Suspected fetal macrosomia
- Hydramnios, oligohydramnios
- Suspected fetal anomalies, if these do not require immediate treatment postpartum
- Fibroid tumour
- Pelvic anomalies
- Suspected disproportion between the child and the birth canal
- Unclear due date, suspected late term pregnancy (past the due date)
- Therapy resistant anaemia with iron levels under 10 g/dl

If the presence of an obstetric specialist can be guaranteed during labour and at birth, then it is also possible to have a breech or twin birth at the midwife-led birth centre.

§ 10 Requirements concerning the Quality Management System in Midwife-led Institutions

(1) Goals of the internal quality management system for the institution

The quality management system (QM-system) in the midwife-led institution has first and foremost the goal to guarantee and further develop the quality of midwifery care, medical provisions, and quality of care in all (other) areas of the midwife-led institution. In doing so, the effort must be commensurate with the personnel and structural facilities.

Accompaniment of the pregnancy, as well as advice given antenatally and at the birth is carried out in a cooperative form. It is based on the principles of informed consent and the shared responsibility of the pregnant woman and birthing woman.

All of the relevant processes and procedures in the midwife-led institution must be systematically mapped out together with the structural principles and examined in regard to the outcome goals which have been specified.

(2) Foundational elements of the internal quality management system for the institution

The foundational elements of the internal quality management system stem from the respectively valid version of the ISO 9001. These following areas are the minimum that must be systematically outlined:

a) Management

- Management processes (structural data, if relevant areas of responsibility, guiding principle, quality policy, goals)
- Quality management including assessment and optimization (annual assessment, audits, error analysis, and improvements)
- Personnel management (including internal trainings sessions and seminars, where applicable a plan for training new employees, where applicable a description of the position)
- Internal and, in case of a small midwife-led institution, also external communication processes (i.e. team meetings, case discussions, supervision, and networked quality circles)
- Cooperation partners and other interfaces regarding care
- Public relations

- Risk management: This must specifically include the documentation of the following procedures/issues:
 - Information / informed consent
 - Emergency procedures (tocolysis, the management of shoulder dystocia, bleeding, and resuscitation of the child)
 - Transport to a hospital, calm as well as urgent
 - Accompaniment at the hospital or, where applicable, the involvement of a physician
 - Procedures in the case of an unplanned home birth
 - Emergency plan

b) Core Processes

- Care during pregnancy
- Care during labour and at birth
- Care after the birth

c) Supporting Processes

- Provision of medical and other necessary supplies
- Laboratory
- Hygiene and disinfection
- Equipment maintenance
- Occupational safety and health protection
- Data security, data privacy, and the proper handling of personal insurance data
- System of documentation

§ 11 Implementation and Continuation of a Quality Management System

Commencement of the Implementation

- 1) The midwife-led institution must begin their QM-system within 6 months of entering into the contract, must have completed the system within two years of the start date of the contract, and must give proof of this to the Central Association of Statutory Health Insurance Funds.
- 2) Proof of the commencement of the implementation of a QM-system must be given in the form of the following:
 - a) The closing of a contract with a consulting firm or certifying body or relevant person
 - b) Proof of a not less than 3-day seminar for the appointed quality management representative at the midwife-led institution

Completion of the Implementation

- 3) Proof of the successful implementation of a QM-system in the respective midwife-led institution for the Central Association of Statutory Health Insurance Funds is the following:
 - a) The results of an audit for the Central Association of Statutory Health Insurance Funds (Attachment 4 in conjunction with Attachment 3—Regulations for the proof of auditing procedures) concerning the implementation of a successfully implemented audit procedure (in accordance with the structural specifications of ISO 19011) or
 - b) Certification of the midwife-led institution in accordance with ISO 9001 through an accredited certifier

Continuation

- 4) The continuation and maintenance of the QM-system in the midwife-led institution is guaranteed through the internal audits that are conducted in regular intervals in accordance with the structural requirements laid out in ISO 19011. Internal audits must be conducted yearly and can be led either by the quality management representative at the midwife-led institution or a quality management representative at a cooperating midwife-led institution.
- 5) At the midwife-led institutions utilizing the audit procedure according to section 3a), a review of the implemented QM-system must take place at the latest after three years. At this time, verification of the corrections made to the system at the previous audit must be presented with potential improvements. Attachments 3 and 4 should be used for this.
- 6) After this, the Central Association of Statutory Health Insurance Funds will conduct a sampling inspection yearly to verify the following audits according to section 3a) and can be so chosen that all of the midwife-led institutions will be audited once in five years. The Central Association of Statutory Health Insurance Funds will inform the midwife-led institution and will receive a deadline of 4 months to send the required documents according to section 3a). Attachment 4 should be used for this.
- 7) If the midwife-led institution provides the certificate according to section 3b), this must be sent in writing to the Central Association of Statutory Health Insurance Funds at the latest after 3 years.

Verification for the First Audit and Following Audits

- 8) If the proper verification according to section 3 has not been received on schedule, the midwife-led institution will have 6 weeks' time to provide this. If this deadline is missed, the midwife-led institution will have another 6 weeks and will not be reimbursed for the entire sum of the operating costs. If this is not received after the second deadline, this is a severe infringement of the contract according to §13 Section 4 of the supplementary contract.
- 9) If the verification papers are incomplete according to section 3a), the midwife-led institution will have 6 weeks to make corrections. During this time, the midwife-led

institution will receive the full reimbursement for operating costs. If this deadline is missed, the midwife-led institution will have another 6 weeks and will not be reimbursed for the entire sum of the operating costs. If this is not received after the second deadline, this is a severe infringement of the contract according to §13 Section 4 of the supplementary contract.

§12 Taking part in an audit carried out by the Central Association of Statutory Health Insurance Funds

The certification of a successful audit according to the procedure described in § 11 (of the Central Association of Statutory Health Insurance Funds) is derived from the process description concerning the review of the quality management system in attachment 5 including the respective process descriptions.

Outcome Quality

The outcome quality is the result of an evaluation that shows the extent to which the goals of service delivery have been met according to §5 of the supplementary contract.

§13 (Participation in the) statistical surveying of midwife-led institutions

The midwife-led institutions must submit the results of the statistical surveying from the previous year, according to §7 Section 5 of the supplementary contract, to the Central Association of Statutory Health Insurance Funds on June 30th each year. The form as per Attachment 6 should be used. In place of this, it is also acceptable to submit a copy of the yearly results of the individual quality evaluation report prepared by the Association for Quality at Out-of-Hospital Births (QUAG)

§14 Country-wide quality presentation of midwife-led institutions

- 1) The Association for Quality at Out-of-Hospital Births (QUAG) publishes yearly quality reports.
- 2) The contractual partners are interested in the medium term in the perinatal outcomes of the midwife-led institutions in order to include these in the report published by AQUA (Institute for Applied Quality Improvement and Research in Healthcare).

§15 Initiation of transport from the midwife-led institution to a hospital

The form in attachment 7 (with regard to the principle of economy and sound financial management) can be used in the case of a transport from the midwife-led institution to a hospital—provided that a directive from a physician is not obtainable (usual model “Model 4”). In these cases—analogue the directive for the transport of an ill person—the form is valid as an enclosure for substantiating the invoice so that the patient transport companies can bill the health insurance company. The health insurance companies are to inform the patient transport companies.