Dissolving the Solid Body
An Ethnography of Birthing in an Australian Public Hospital

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Abstract

Based on ethnographic fieldwork undertaken in the maternity unit of an urban Australian public hospital, this thesis explores metaphors derived from material density as major ordering principles in western understandings of the world, and argues that logics of solidity and fluidity underpin lines of contestation in scientific, academic, and biomedical/health discourses.

Through an exploration of social and scientific understandings of the human body, the thesis argues that the body as a fluid, dynamic phenomenon is frequently understood, in biomedical culture, through a logic that is inherently ‘solid’. Solid logic is privileged over fluid logic in hospital environments, which has particular consequences for maternity and birthing care.

While medicalised birthing has contributed to improvements in maternal and infant safety and well-being across the western world, inappropriately medicalised birth can be both traumatising and iatrogenic. Feminist contestations to the medicalisation of pregnancy and birth, and obstetric resistance to these contestations, can be seen as contestations between epistemologies centered on (more) fluid or (more) solid understandings of the world.

Risk management is shown to be reliant on strategies of material and symbolic solidification, often to the detriment of the inherent fluidity of the maternal body. Constructions of individual autonomy rely on the construction of a bounded body that is often in contradiction with experienced biological corporeality. The thesis argues that fluid logic offers space for maternal corporeality, however the individual autonomy required by the western health consumer is only achievable within a framework of solid logic.

Ethnographic engagement with pregnant and birthing women, their partners and families, midwives, obstetricians and other hospital professionals allows for an analysis of embodied and discursive beliefs and practices. The rich complexities of technologised birthing are highlighted in explorations of clinical encounters and key decision making moments in birthing and maternity care.
Chapter 1

Introduction:

Investigating Biomedical Culture

The technical, textual, organic, historical, formal, mythic, economic, and political dimensions of entities, actions and worlds implode in the gravity well of technoscience - or perhaps of any world massive enough to bend our attention, warp our entities, and sustain our lives. (Haraway 1997a:221)

Maternity and birthing is such a world: having babies is an experience that demands attention, shifts our being, and sustains us as individuals and as communities. Like Haraway's technoscience, biomedicalised birthing is a world in which "potent categories collapse into each other" (1997a:221). This thesis, based on ethnographic fieldwork undertaken in the maternity unit of an Australian public hospital, explores ways in which potent categories are made, ways in which categories are made potent, and ways in which categories collapse, shift and slide in the massive, messy world of gestating and birthing bodies.

the field and the research methods

When I entered 'the field', my central research question was to examine beliefs and practices of the body fluids blood, milk and semen. Body fluids threaten the integrity of the autonomous, bounded individual, by diffusing our bodily boundaries and making them insecure. In this insecurity of the individual comes the potential for being connected to other individuals, and central to my exploration of meanings of body fluids were ideas of family, kinship, connectedness and relatedness. I chose to look at body fluids in an environment where new families are coming into being: a maternity hospital. I undertook twelve months of ethnographic fieldwork, from October 1999 to September 2000. The principle fieldsite, where I carried out participant-observation, was the obstetrics unit of an Australian public hospital, which I call The Princess Grace Hospital, or 'The Grace'.

There were three wards through which pregnant and birthing women moved: the antenatal clinic for outpatient visits during pregnancy; labour ward, where women laboured and babies were delivered; and the postnatal ward where mothers and their newborns were cared for. Women who required hospitalisation during their pregnancy were placed on the postnatal ward. My fieldwork in the hospital involved a number of activities, including: following midwives and obstetricians through antenatal clinics, the labour ward and birthing unit, and the postnatal ward; following individual women through their clinic sessions, their labour and delivery, and their postnatal care; sitting in on night shifts on the labour ward and postnatal ward; and attending antenatal classes.
I observed clinic sessions of twenty-three midwives and nine obstetricians – most for at least three sessions, although the number of sessions with individual clinicians varied from one to more than ten. I observed more general activities, or had other interactions with a further five obstetricians and fifty or more midwives during their ward shifts. In all, I had some form of contact with more than two hundred women who birthed at the Grace, ranging from very superficial to much more in-depth. I followed twenty-eight women through most if not all of their antenatal and postnatal appointments. Of those, I met the partners and/or other family members or friends of sixteen women. I spoke to some of the partners and family/friends in some depth, with others the contact was more superficial. I undertook around forty taped interviews with birthing women and health workers. In most cases, the formal interviews were only undertaken after extensive other contact, and they were undertaken with the goal of eliciting particular information that had emerged from ethnographic observations and less formal discussions. The length of the interviews varied, ranging from fifteen minutes to three and three quarter hours. I was present at all or parts of thirty-three labours, and was present at twelve births, including straightforward vaginal deliveries, vaginal deliveries with instruments, one breech birth, one vaginal twin birth, and two caesarean sections.

I also observed ward venepuncture rounds in other parts of the hospital (where a technician with a trolley does rounds taking blood from people for doctor-ordered tests). I spent a month in the hospital laboratory, looking at what happens to fluids once they have been taken from bodies. I participated in staff training sessions run by the occupational health and safety nurse on handling bodily fluid exposure incidences, followed cleaners around, and observed a major waste management audit.¹

In addition to my observations in the hospital, I visited women and their families in their homes during their pregnancies, and after their births, for both formal interviews and informal chats. I also followed the activities of and took part in activities organised by various community organisations, including birth support and lobby groups, and I attended the almost weekly coffee mornings of the local Nursing Mother’s Association group, accompanied by my breastfeeding toddler.²

These activities involved differing levels of participant-observation: as someone who does not have a clinical background, sessions in clinical spaces of necessity involved more observation than participation.³ This was especially true in the antenatal clinic. On the labour and postnatal wards, participatory activities were more accessible and varied: holding vomit bowls, rubbing backs, phoning in errant husbands, fetching cups of tea and Swiss balls⁴ were activities I was used for on labour ward. Midwives on postnatal ward actively assigned me duties: holding babies, talking to mothers, making tea,

¹ In addition to approval from the university and hospital HRECs (Human Research Ethics Committees), my research proposal was
² I joined the Nursing Mothers group (now known as the Australian Breastfeeding Association) in my role as a ‘researcher’, with permission of the coordinator of the group, and the knowledge and consent of the other members. My research was discussed at meetings. I was open about my own position on breastfeeding, which is compatible with that of the organisation. As it was the group in the locality of The Grace, many of the women had birthed there, and their experiences have also added to my insights.
⁴ Swiss Medicine Balls are large inflatable vinyl balls sometimes used for sitting on and leaning on during labour.
and accessing academic literature were all tasks I was assigned at various times in my fieldwork. A few
months into my fieldwork, the antenatal educator conscripted me to co-teach the education session on
breastfeeding with her for a number of antenatal education sessions.

All names of non-public figures used in this thesis are pseudonyms, and generally follow the format
that midwives used in referring to people. Patients, midwives and student obstetricians are referred to
by first name (Marilyn, Jenny, Steve, Liz), obstetricians, anaesthetists, paediatricians and lab scientists
are referred to by the first and second names (Jacqui Fisher, Barry Stevens), while senior obstetricians
are referred to by “Dr” and last name (eg: Dr Dickensen or Dr Fox).

Sources on birthing discourses which have been accessed for this thesis include: medical training
material; medical (ie: obstetric and midwifery) journals and textbooks; clinic encounters; antenatal
classes; brochures and other material produced by government sources and advocacy/support groups;
women’s magazines; newspapers, television and radio news, television documentary, drama and
consumer programs; novels, films, anecdotes from friends and family; written and spoken birth stories;
pregnancy and parenting advice books and magazines; and my fieldwork material.

Women birthing in Australia have a range of options to choose from for their pregnancy, birthing and
postpartum care. Not all women have access to all options, with access depending on geography and/or economics. Some options are available only to those with private health insurance or those wealthy enough to pay for private care. Interestingly, although the fieldwork was undertaken more than a decade ago, and Australia has been through a major reform both of maternity services and of midwifery training, surprisingly little has changed in terms of the parameters of care offered, and the choices available to women. The section below outlines maternity care as it was offered during the time of my fieldwork.

Typical of Australian public maternity hospitals, the Princess Grace offered antenatal clinics for
check-ups during pregnancy, birthing facilities and postnatal care. The Princess Grace is a teaching
center for midwifery training and obstetrics.

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1 In addition, some potentially identifying details, for example, a highly specialised profession or potentially identifiable sport, have been changed.
2 As specialists, obstetricians, like surgeons, are usually referred to as "Mr Surname". However, at The Grace, obstetricians were referred to by patients, midwives, clerical and other medical staff as "Dr Surname". When an obstetrician referred to another obstetrician in front of patients or midwives, the older male obstetricians were referred to as "Dr Surname", the younger obstetricians and older female obstetricians were referred to by their first and last names. Talking to each other, obstetricians used "Dr Surname" for older male colleagues, and just first names for younger colleagues of both genders and older female colleagues.
3 Australia’s public hospital system, based on the British model of socialised health, was, at the time of my fieldwork, frequently described as being ‘in crisis’, with readjustments and cuts to services happening in many areas of health care. In spite of this funding crisis, women birthing in Australia generally receive very high quality care compared with much of the rest of the world. Major reforms to funding models have since taken place in most states in Australia, and there are on-going negotiations around balance between state and federal funding models. In general, maternity funding is not seen to be in the same level of crisis in 2014/2015 compared to what it was in 1999-2000. Although there have been radical reforms to midwifery training and the organisation of maternity care in the last decade, the actual care being offered has not particularly changed. A major review of Australian maternity services was undertaken in the mid 2000s, and the results were published as Improving Maternity Services in Australia: The Report of the Maternity Services Review (Commonwealth of Australia 2009). For discussion of developments in Australian maternity care since the early 2000s, see Reiger (2000); Buckley (2009) and Monk et al (2013). Although there are differences in ways in which health systems in western-style countries are organised, there are remarkable resonances in the international literature. See, for example: Jomeen (2010), Reiger & Morton (2012) and Frith et al (2014).
4 Health care services in rural areas are usually much more limited in terms of ‘choice’ compared to Australia’s urban centres.
teaching domain" (Foucault 1973:109). In a Foucauldian sense, the Princess Grace was a 'clinic' environment.

During the course of a pregnancy, a woman would normally visit the hospital a minimum of twelve times for antenatal care, more if there were any complications with her pregnancy. Births occurred in the labour ward, birthing unit or operating theatre, and women spent between one and five days on the postnatal ward with her baby, and, upon returning home, received between one and three home visits from a domiciliary midwife. The hospital offered antenatal classes to women and their partners and/or birth support people, which about 35% of women attended, usually accompanied by a support person, either the father of the baby or a female family member or friend. Women most usually attended antenatal clinics on their own, although occasionally the baby’s father or a female friend or relative would accompany her. During the birth, it was seen as 'normal' for the father to 'be there', and in some cases there were other support people, mostly female relatives or friends.

As a public hospital, care was offered on a needs-basis. The most senior of the obstetricians would tend to see the pregnancies which were defined as the most 'complicated' or 'high risk'. Women did not have a choice of which clinician they saw, and there was little if any continuity of obstetric care. Apart from women labelled 'high risk', it was possible that a woman would see a different person almost every time she had contact with the hospital.

There was a midwife program at The Grace offering continuity of care. Run by a pair of midwives, this program was available to women who had been cleared by an obstetrician as not having medical complications or specific risk factors in their pregnancy. The two midwives in the program carried out antenatal, birthing and domiciliary postnatal care for women birthing in the program, and came to know women and their families quite well. Unlike other midwives and obstetricians, both of the midwives working in the midwife care program often developed close emotional ties with the women they cared for.

Outside of the public hospital system, continuity of obstetric care was available for those with private insurance or those who could afford to pay for private health care. Private obstetricians offer antenatal care, and birthing in private or public hospitals. Continuity of antenatal care is also offered in the shared care system, open to private and public patients. Shared care involves birthing at the hospital in the public system, with whichever midwife and/or obstetrician is working at the time, but with antenatal care and postnatal checkup being handled by the woman’s GP.

Women could also choose to have a private midwife handle antenatal care. Private midwives offer the opportunity to birth at home, and some also have arrangements with maternity hospitals to allow

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9 Barring complications, a woman may stay in the postnatal ward a maximum of three days after a vaginal delivery, and a maximum of five days after a Caesarean section. A very small number of women went home within hours of a birthing unit delivery.

10 Perceived advantages of private hospitals are: not being exposed to medical or midwifery students, nicer surroundings, tastier food and more privacy. Many people with private insurance do still opt to give birth in a public hospital: intervention rates are lower, and teaching hospitals are regarded by many Australians as having a greater level of medical facility and higher standards of medical expertise.

11 2% of Australian women birthed at home during my fieldwork period. The one insurance company offering indemnity insurance to private midwives withdrew its coverage from home births shortly after the end of my fieldwork, greatly reducing the already small number of home births in Australia. In 2000 the proportion of home births had reduced to 0.3% (de Costa & Robson
them to be present at birthing unit births.

A number of births occur in 'accidental' places, such as in a toilet or in a car, or in an 'unplanned' home birth.\textsuperscript{12} These occur either when labour progresses much more quickly than expected, or very occasionally when the woman is unaware that she is pregnant or when she is trying to hide that she is pregnant.

As with most large public hospitals in Australia, there were three types of space at The Princess Grace in which a baby can be born. At The Grace they were all on the same floor, and easily accessible, so if a decision was made to move a labouring woman from one space to another it could be done relatively easily.\textsuperscript{13} The most 'natural' space to deliver a baby was seen to be the birthing unit. This space was not unlike a hotel suite, with a double bed, a lounge suite and recliner chairs, coffee table, bathroom with large bath, and a separate kitchenette/dining area with dining table and chairs, fridge and microwave. Furnishings were in soothing salmon pinks, blues and soft greys, and the stated aim was to create as 'home-like' an atmosphere as possible. The birthing unit at The Grace was a doctor-free zone. Both the labour and the birth were handled by midwives, unlike on labour ward, where (in the view of most midwives) the midwives did the 'hard work' of the labour, and the obstetricians came in right at the end to 'catch the baby', that is, do the delivery. The labour ward rooms were furnished with a hospital bed, a range of shiny metal equipment behind a curtain, and a Jason recliner.\textsuperscript{14} There was one bathroom, with a toilet and shower, per two rooms. Curtains and paint colour schemes were similar to the birthing unit. The third space where babies were delivered was in the operating theatre at the end of the corridor. At the time of my fieldwork at the Princess Grace, there was one operating theatre, six rooms on labour ward and two birthing units for approximately 1200 births per year. The birthing units had a waiting list, and not everyone who wanted to use the birthing unit was able to. If a woman booked for the birthing unit arrived in labour and both birthing units were in use, a labour ward room was used instead, but with birthing unit staffing (ie: midwife only care). In the time I was there, there were no shortages of space associated with the labour ward or the operating theatre.

The community serviced by the Princess Grace covered a range of socioeconomic statuses, from people living in subsidised council accommodation, surviving on incomes significantly below the poverty line, to relatively well-to-do upper-middle-class families living in nearby lake and seaside housing developments. This socioeconomic variety is represented in the women in my study. The women whose pregnancies I followed were all native or near native English speakers, predominantly from Anglo-European, Northern European or Mediterranean Australian family backgrounds. The community

\textsuperscript{2004:438} and in 2003, 0.2\% (Laws & Sullivan 2005:10). In 2005, responding to calls for home birth to be made a more available option, homebirth programs were instigated in which the midwives were covered by the host hospitals' professional indemnity insurance. In 2010 there were 12 homebirth midwives programs running in five states in Australia (Caling-Paull et al 2013:616). The most recent data available shows that the rate of homebirths in 2010 was 0.5\% (Li et al 2012:63), and for 2011 was 0.4\% (Li et al 2013:65).

\textsuperscript{12} For an example of this, see Chapter 6. These are labeled as "born before arrival". Interestingly, there are more than double the number of "born before arrival" births recorded than home births. In 2009, for example, 1766 births were recorded as "born before arrival", while 863 births were recorded as home births (Monk et al 2013:215).

\textsuperscript{13} This is not the case with all maternity hospitals, where being moved in the middle of labour may involve long journeys, walking, in a wheelchair or being wheeled on a bed, down corridors or in elevators to move between floors. The Grace's spatial design was similar to the integrated midwifery and obstetric unit described in Miah & Adamson (2015), which was guided by current NHS best practice models designed to offer choice and "safe normality" for birthing women (2015:505).

\textsuperscript{14} A brand of comfortable lounge chair with a reclining back and foldout footrest.
segments at the Grace which are unrepresented in my study are Asian women, who made up in excess of ten percent of the Grace’s birthing women, Aboriginal women, and women of non-English speaking backgrounds. Although the Grace had a fairly high proportion of teenage pregnancies, I followed only one teenage mother through her pregnancy, and she was not ‘typical’.15

At the commencement of my fieldwork my son, who was born in a public maternity hospital in Australia (not The Princess Grace), was nearly two years old. Towards the end of my fieldwork I fell pregnant, and subsequently miscarried. My medical care for this pregnancy and miscarriage was handled by The Grace. A number of my friends had used the services, or have since used the services of the maternity unit at The Grace. Although they were not part of my fieldwork, their reflections and anecdotes have added to my understandings of birthing women’s experiences. Similarly, I have a number of friends who are health care professionals who trained or worked at The Grace, and although they were not part of my ‘field’, their reflections have informed my understandings and interpretations of fieldwork data.

contemporary relevance of the data

The data on which this thesis is based was collected a decade and a half ago. When I began to finalise the thesis, after a long break, I assumed I would be offering a historical perspective that would be useful as longitudinal data for more recent studies. However, I have found to my surprise, from the current literature, how little has changed since the time of my fieldwork. My experience has echoed that of anthropologist Robbie Davis-Floyd, writing in the preface to the second edition of her classic work *Birth as an American Rite of Passage*:

> Various individuals, including students, have questioned the contemporary relevance of the theories and data in *Birth as an American Rite of Passage*. I have to say, in all honesty, that twelve years after its publication, this book is as relevant as it was when it first came out. The contemporary situation is simply an intensification of what I describe in these pages. The scientific studies cited in this book date from the 1980s and early 1990s because the book came out in 1992. Although the evidence has not changed significantly since then, current medical practice continues to flout it ... for the most part, the picture I paint in these pages remains much the same as it was a decade ago. (2003:xii)

Midwife-anthropologist Melissa Cheyney, publishing in 2011, notes that even twenty years later Davis-Floyd’s material is still relevant (2011:520).

It isn’t only anthropologists who are finding that ‘little has changed’. This is also being reported with surprising regularity within midwifery literature, especially in terms of communication, and the impact that clinician-patient communication has on quality of care (see, eg: Porter 1990; McCourt 2006:1380, Porter et al 2007:525; Iomeen 2010:2).

> ... there is much discussion in the medical world of the importance of “evidence-based care” – so much so that ... instead of the “evidence/practice gap” birth analysts used to discuss, we have an “evidence-

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15 She was 19 years old. Her mother accompanied her to all her antenatal visits. The father of her baby was actively involved in her pregnancy, and lived with her at her mother’s house. This particular woman and her mother approached me about joining my study when I met them during antenatal classes. I did not attend her birth, but I did have contact with her after the birth and was told her birthing story.
discourse-practice gap” (Davis-Floyd 2003:xii)

There has been surprisingly little ethnographic work focusing specifically on birth (Caffrey 2014:17). Midwives have embraced ethnographic data collection and analysis (Squire 2015), and academic midwifery has a strong discursive relationship with both sociology and anthropology (McCourt 2014). However, given its centrality to all human societies, there remain relatively few ethnographies of pregnancy and birthing. The ethnographic material contained in this thesis, documenting and analysing interactions among and between midwives, obstetricians, birthing mothers and their families, collected during participant-observation both inside and outside a hospital maternity unit, contributes to the ethnographic literature on birthing, and to current discourses on quality of birthing care in hospitalised settings.

the researcher

As a feminist anthropologist, my academic tradition involves researcher reflexivity as a prerequisite to professional data collection, data analysis, and data (re)presentation (Abu-Lughod 1993; Behar & Gordon 1995; Wolf 1992; Delaney 1991; Behar 1993 & 1996; Davis-Floyd 1992 & 2003; Davis-Floyd & Sargent 1997; Jordan 1978 & 1993; Rapp 1984 & 2014; Cheyney 2011). The following section informs the reader as to my journey into my fieldsite and topic, and aspects of my Self that may impact on the interpretation of my text.

I came to the study of body fluids as a follow-on from fieldwork in a small farming village in Turkey, where I undertook research on milk kinship (Long 1996 & 2003). Milk kinship is a form of relatedness, written into Islamic family law. A milk relationship is established when a woman breastfeeds a child who is not her biological child. Her child and her milk child become milk siblings, and if they are of different genders, may not marry or have sexual intercourse when they grow up. There is a belief that, as they have suckled from the same woman, they are of the same substance and their children would be deformed. Physical, intellectual, emotional and moral characteristics pass through milk, and these same characteristics can be passed through blood and semen. Hence I came to be interested in the body fluids which are understood in both western and Islamic cultures to be procreative and nutritive: blood, milk and semen. A maternity hospital, at a time when fluid-borne viral infections were seen as one of the major public health threats, seemed to be a suitable site to explore the complexities of ideas around fluids which are understood as both generating life and transmitting disease and possible death.

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16 As can be seen throughout this thesis, there is an abundance of literature from sociologists and/or midwives based on qualitative interviews with pregnant and birthing women, which offer rich and valuable insights into many aspects of pregnancy and birthing experiences. However there remains relatively little ethnographic research based on immersive, (semi) participant-observation in this area (Kaufman & Morgan 2005; Caffrey 2014).

17 Ethnographies and ethnographic anthologies of pregnancy and/or birthing include: Jordan (1978, 1993); Kay (1982); Davis-Floyd (1993, 2003); McCormack (1994); Davis-Floyd & Sargent (1997); Franklin (1997); Rapp (2000a); Layne (2003); Unninathathan-Kuman (2004); Liamputtong (2007); McCourt (2009); Han (2013); Lupton (2013); Gammeltoft (2014). I also include Pollock’s (1999) narrative analysis of birth stories, for its ethnographic-style immediacy.

I was not led to the area of obstetrics via my own obstetric encounters, however my experiences of pregnancy and birth necessarily influenced my research. Although my feminist inclinations have led me to view pregnancy and birth as normal, healthy experiences which in ordinary circumstances should require little intervention, my own experiences of pregnancy and birth have been, in Katz-Rothman's words (1986), both tentative and anxious. I had three miscarriages prior to, and one subsequent to, the birth of my child. In terms of medical systems I've had contact with, one miscarriage occurred in Germany, two pregnancies and miscarriages were handled within the Dutch medical system, and two pregnancies, one miscarriage and the one birth were managed within the Australian medical system. In the one pregnancy I have carried to term, I experienced hyperemesis,\(^{19}\) pre-eclampsia\(^{20}\) and postpartum haemorrhaging.\(^{21}\) As I was well cared for in a well resourced health care system, my life was never in danger. Had I lived a hundred years ago, I most probably would have died twice. I am still a passionate believer in low-intervention pregnancy and birthing, however my own experiences of reproductive vulnerability have brought home to me the value of appropriate intervention.

**the thesis**

In the chapter that follows this, Chapter 2, I outline my argument that symbols and metaphors of fluidity and solidity are major ordering principles in western scientific understandings of the world, and show how this understanding may resolve an impasse in poststructural feminist work on embodiment.

Chapters 3 through to 7 present textual and ethnographic explorations of aspects of corporeal and symbolic fluidity and solidity. Chapter 3, ‘Mechanics of Separation’, argues the centrality of aesthetics to the medical gaze. That aesthetics is central to the medical gaze has often been commented on: the significance of aesthetics in a biomedical context as an integral symbol of value, virtue and moral authority, has been, I suggest, underexplored. The power of the gaze is the power of the right to define: being gazed upon implies levels of experience that are unable to be self-defined or expressed. I discuss areas of mutedness within obstetrics. Experiences that do not find space for articulation within dominant and dominating obstetric discourse include ways in which experiences of sexual abuse can manifest in labour, and unacknowledged midwifery knowledges of postnatal depression. The second section of chapter 3 explores ways of coming to know the maternal body.

Chapter 4 explores Australian birthing discourses, where ‘midwifery’; ‘obstetric’ and ‘home birthing’ discourses offer contesting frameworks for ‘safe birthing’. Commencing with stories of three hospital births and a discussion of ‘optimal outcomes’; this chapter describes the interventionist continuum integral to hospital birthing in Australia; interrogates ideas of naturalness in birthing; describes

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\(^{19}\) Extreme nausea and vomiting, which I experienced for the duration of the pregnancy. At eight and half months pregnant, I was eight kilos lighter than my pre-pregnancy weight. In all, I lost twenty-five kilos over the course of the pregnancy.

\(^{20}\) Also known as toxemia, for which I was hospitalised at thirty-six weeks for the remainder of my pregnancy. The pre-eclampsia, combined with the hyperemesis, resulted in an ‘elective’ caesarean section delivery at thirty-eight weeks (eight and half months).

\(^{21}\) Necessitating a blood transfusion, with the first day and a half after the birth spent with the luxury of one-on-one care in a high dependency unit.
connection, separation and professional touch; and discusses solidity and fluidity in birthing discourses.

In Chapter 5, which explores the importance of the concept of rationality in decision making in hospital based maternity care, I discuss fear and the way it is managed within a medicalised maternal environment. I look at the way in which choice can become non-choice, using induction as an example. I discuss hospital attitudes to pain, and explore issues surrounding the ‘on-going’ aspect of ‘informed and on-going’ consent by examining the consent procedures involved in an emergency caesarean section.

Chapter 6 sets out an ethnography of hospitalised body fluids. I argue that blood is used to metonymically gloss other body fluids in discourses on infection and infection control. I suggest that this is specifically because blood does not ‘naturally’ cross body boundaries in the same way other fluids, especially milk and semen, do. Constructions of individual autonomy rely on the construction of a bounded body that is often in contradiction with experienced biological corporeality: bio-logic is conceptualised (con-structed and re-structured) to be understood in ways which support this concept of bounded individuals. Separation is privileged, connection is muted. Thus the major fluid metaphor for connection becomes the one reproductive fluid which specifically does not normally join and connect actual bodies. In examining infection control practices, I discuss assumptions of ‘bad’ blood, where control of the risky fluid becomes control of the risky person; and I look at the far from universal application of so-called 'Universal' Precautions. I explore cases of and attitudes to women breastfeeding other women’s babies, which highlights contestations revolving around appropriate levels of connectedness and separation. I also suggest two attributes of blood, milk and semen: that they are fluids which ‘stain’, and that in an important, fundamental way, they are not ‘gendered’.

The second section of Chapter 6 explores the maternal body as a dynamic, shape changing body. In a health belief system in which a stable body is inscribed as a healthy body, a dynamic body is difficult to accept as healthy. Feminist contestations to the medicalisation of pregnancy and birth, and obstetric resistance to these contestations, can be seen as contestations between epistemologies centered on (more) fluid or (more) solid understandings of the world.

Chapter 7 examines knowledge construction within medicalised maternity. 'The case of the undiagnosed pregnancy' highlights the importance attached to knowing. The point of knowing is discussed: for example the aim of needing to gain knowledge about the unborn fetus through increasing levels of maternal screening is to monitor fetal norms, and prevent births of fetuses which fall outside those norms. I examine the experiential impact on pregnancy of one maternal screening procedure: maternal serum screening. I explore one of the more challenging outcomes of widespread maternal screening: the increasing normalisation of termination of second trimester pregnancies.

The final chapter, Chapter 8, summarises the arguments in my thesis, suggesting that an understanding of logics of solidity and fluidity, and a conscious reflexivity on the appropriateness of epistemological density for particular tasks, would enhance processes and practices within biomedical environments, and in particular, hospital based maternity care.
Chapter 2

Dissolving Solid Systems: Logics of Fluidity & Solidity

In this chapter I suggest that metaphors based on material density act as major ordering principles in western understandings of the world, and that Logics of Solidity and Fluidity underpin lines of contestation in scientific, academic, and biomedical/health discourses. By examining social and scientific understandings of the human body, I will argue that the body as a fluid, dynamic phenomena is frequently understood through a logic that is inherently “Solid”. I suggest that Solid Logic is frequently privileged over Fluid Logic in biomedical environments, and that this is not always useful. I suggest that an articulation of the ways in which solidity and fluidity are used as metaphors has the potential to enhance biomedicalised health care practice.

I suggest that within western\textsuperscript{1} cultural styles of understanding and coming to know the world, physical, material solids and fluids provide symbols and metaphors for an abstract logic of fluidity and solidity. The relationship between the physical and the symbolic is similar to the relationship between biological sex and gender, in that gender is a symbolic system of ordering the world based on metaphors of biological sex, but not necessarily reflecting actual biology. I would like to suggest that a logics of solidity and fluidity underpins lines of negotiation and contestation in a number of domains, including scientific, academic and biomedical/health discourses. Like gender, metaphors of density can be understood as, and are expressed as, existing on a continuum, as well as in the form of exclusive dichotomous categories of Solidity and Fluidity.

Modernist, scientific ways of knowing frequently privilege solidity over fluidity. Fluids are the abject Other to a solid modernist Self. Solid, bounded objects and bodies have perceivable and measurable limits, as opposed to fluid matter, which is less easily contained, less easily measured, less easily mapped. If something is measurable, it is knowable. If something is knowable, it is, in modernist scientific thought, malleable and controllable.

While hegemonically dominant scientific and biomedical knowledges may privilege solidity over fluidity, there are other rich and powerful discourses within health, including biomedical health, in which the relationship between a logic of fluidity and solidity is more dynamic, and discourses where flexible, fuzzy boundaried logics make more sense than rigid, bounded understandings of the world. Postmodernist epistemologies challenge concepts of boundedness, knowability and scientific controllability (Schepot-Hughes & Lock 1987; Lock 2010). Alternative healing and natural therapy discourses, privileging holistic paradigms, challenge biomedical division of the body into knowable,

\textsuperscript{1}Western, of course, is not an unproblematic term. In talking about western epistemologies I mean ways of thinking about and knowing the world which have been expressed in academic, biomedical, media and other discourses in Euro-American style industrialised societies, within which I include Australia.
treatable component parts (Martin 1994:122; Baer et al 2013:48-9). British biosociologist Nikolas Rose and Dutch medical anthropologist Annemarie Mol have explored non-mechanistic ontologies of embodiment present in bioscience and medicine: Rose’s molecular model (2006; 2012:3) and Mol’s ‘body multiple’ (2002) describe more fragmented, less mechanistic biomedical engagements that question and critique biomedical hegemonies. Somewhat ironically, research into the brain is challenging Cartesian mind/body dichotomies to their very foundations. Medical developments of the last decade in neuroimmunology (eg: Weasel 2001) neural plasticity (eg: McGilchrist 2009); neuropsychology (eg: Kendall-Tackett 2014) and neuroendocrinology (eg: Einstein 2007) have “spawned whole new areas of research” (Einstein & Shildrick 2009:295) in which our understandings of reciprocities between systems are moving beyond “separation and individualisation of body parts into independent systems” (2009:295), as well as moving beyond biomedical separations of biology from environment.

successful functioning cannot be extracted from the world ... there is no guarantee of an unchanging biology as the material base for a stable, normative self ... [the] importance of context [is being] uncovered ... in biomedicine itself (Einstein & Shildrick 2009:295-6)

Sociologist Ulrich Beck and anthropologist Emily Martin suggest that social theory often lags behind experienced social worlds (Beck 2000:203; Martin 1994:65). In one way, this is inevitable: it is the job of social science theory to make sense of the world as people experience it – it is not logical that it should pre-empt lived experience. However, Beck (2000:203) and Martin (1994:65) join Einstein & Shildrick (2009:194) in suggesting, all in quite separate contexts, an unreasonable lag between what social scientists are writing about and actual lived experience.

In this chapter I illustrate ways in which an understanding of metaphors of density offers a framework for moving beyond this impasse that has been identified in social theorising in health.

Building on Shildrick’s earlier work in her book The Leaky Body (1997), Einstein & Shildrick (2009) “urge”: an uncovering of the places in which the applications of unexamined normativities, simplifications, and idealizations obscures the very real complexities, impasses, and misunderstandings that characterize decision-making and treatment in health matters and thus, the shortcomings of rule bound action. The result will have application both in the realm of the everyday and in the face of life and death decisions. More pragmatically, we argue that replacing these modernist conventions with the theory-practice alignment that takes account of the contingency, situated lives, and the messiness of the material world is a practical way to deal with concrete contemporary conditions. (2009:294)

An understanding of Logics of Solidity and Fluidity addresses these concerns, creating discursive and material frameworks “to adopt an openness allowing for systems that are flexible, adaptable and dependent on context” (2009:295).
Mechanics of Fluids & New Materialisms

Jagger describes "new materialisms"² as "an emerging new paradigm" within feminist theory (2015:321). According to Howie & Shildrick (2011), philosopher Christine Battersby's "groundbreaking" (2011:117) work on embodiment, including her concept of fleshliness (Battersby 2006), "shows how to avoid succumbing to a static and frozen mythical idea of femaleness, whilst using the idea to elaborate a concrete and material representation of subject identity that can provide grounds for political judgement and intervention" (Howie & Shildrick 2011:117-8). The work of French poststructuralist philosopher Luce Irigaray is central to New Materialism discourses (Battersby 2006:291-6; Green 2011; Jagger 2015:334; 338).³

Irigaray suggests a fluid framework for women's multivalent wor(l)ds. In her essay Mechanics of Fluids, she points out "a systematics that re-marks a historical 'inattention' to fluids" (1985:107).⁴

So we shall have to turn back to "science" in order to ask it some questions. Ask, for example, about its historical lag in elaborating a "theory" of fluids, and about the ensuing aporia even in mathematical formulation. (1985:106)

She demands that we be aware of the pervasiveness of the mechanics of solids: "what structuration of (the) language does not maintain a complicity of long standing between rationality and a mechanics of solids alone?" (1985:107). A mechanics of solids offers poor scope for understanding the world, according to Irigaray, because of its need to simplify. Reductionism rules out acknowledgement of complexity.

Now if we examine the properties of fluids [we see] a physical reality that continues to resist adequate symbolization and/or that signifies the powerlessness of logic to incorporate in its writing all the characteristic features of nature. And it has often been found necessary to minimize certain of these features of nature, to envisage them, and it, only in light of an ideal status, so as to keep it/them from jamming the works of the theoretical machine. (1985:106-107)

In a system which "grants precedence to solids" (1985:110), males inhabit individuality, their only form of connection being women, who form the "copulative link" between men (1985:109), their "primacy" derived from an appropriating "reabsorption of fluid in solidified form" (1985:110).

Fluids defy categorization, classification, definition. "It eludes the "Thou art that". That is, any definite identification" (1985:117). As opposed to the supposed stability of the solid, "Fluid ... is, by nature, unstable" (1985:112). Solids invoke competition and hierarchy, rejecting coexistence. "The object of desire itself ... would be the transformation of fluid to solid ... Which seals ... the triumph of rationality" (1985:113). In a rationality of solids, fluidity/femininity is seen as untrustworthy, promiscuous even, in its flexible heterogeneity.

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² According to McNeill, post-millenial feminist theory can be characterised through three interrelated interrogations of embodiment: new materialism, "post-humanism" and "the ontological turn" (2010:429). See also the volumes edited by Alaimo & Heckman (2009) and Coole & Frost (2010).
³ These analyses build on earlier work of feminist philosophers who have used Irigaray, for example Grosz (1994), Battersby (1998) and Pollock (1999).
⁴ All italics and quotation marks within the quotes from Irigaray's text in this next section are from the English translation (1985).
that woman-thing speaks ... it is continuous, compressible, dilatable, viscous, conductible, diffusible ... resistance to the countable; that it enjoys and suffers from a greater sensitivity to pressures; that it changes - in volume or in force, for example - according to the degree of heat; ... that it mixes with bodies of like state, sometimes dilutes itself with them in an almost homogeneous manner, which makes the distinction between the one and the other problematical; and furthermore it is already diffuse "in itself", which discords any attempt at static identification (1985:111)

Irigaray sees solidity as being inscribed as male, and fluidity as inscribed as female. Her mechanics of solids is a masculine mechanics, and her mechanics of fluids determined by a flowing female body, corresponding to Cartesian dualisms. I suggest that what I am calling an epistemology of solidity encompasses Irigaray's mechanics of both solidity and fluidity. She is describing a logic of reductionist, exclusive, hierarchical categorisation. Within this logic, fluids and solids are gendered, and one set, solidity/masculinity, is valued more highly than the other, fluidity/femininity.

![Epistemological Solidity](image1)

**Epistemological Solidity**
- metaphors of the material body ordered in hierarchical, disconnected relationships
- Irigaray’s mechanics of solidity
- masculine
- "rational" etc

![Epistemological Fluidity](image2)

**Epistemological Fluidity**
- metaphors of the material body ordered in non-hierarchical, interconnected relationships
- Irigaray’s mechanics of fluidity
- feminine
- "emotional" etc
- (un)gendered bodies
- interacting
- negotiating

*Figure 1:*

Irigaray’s mechanics of solidity and fluidity, expressed within a framework of epistemological fluidity and solidity

**Solidifying Blood**

I suggest that scientific ‘breakthroughs’ in biomedicine have frequently involved ‘solidification’ of fluid, corporeal processes. Perhaps the most iconic example of that is the development of scientific understandings of blood. According to Douglas Starr, the “story of blood is one of metamorphosis, of a

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5 Similarly, I would situate Bauman’s characterisation of modernity as “liquid” as being situated within a “solid/liquid” dichotomous relationship, and being expressed from within an epistemology of solidity (2000:2-3), as I have described with Irigaray in Figure 1. (see page 13). See also Bauman & Lyon (2013).
liquid that became symbolically transformed as society learned how to deconstruct and manage it” (1999:xii). The transformation that Starr describes in his book Blood: an epic history of medicine and commerce (1999) is, I suggest, a process of conceptual solidification.

Blood is one of the world’s most vital medical commodities: the liquid and its derivatives save millions of lives every year. Yet blood is a complex resource not completely understood, easily contaminated, and bearing more than its fair share of cultural baggage. (1999:x)

Biomedical understandings of material fluids are most usually formulated by breaking them down into their constituent parts. We understand blood by breaking it down into red cells, white cells and platelets. When blood is left to stand, or when it is centrifuged, it separates into three layers: red cells; white cells and platelets; and plasma, a clear amber liquid (Starr 1999:93).

The Encyclopaedia Brittanica’s (15th edition, vol 15, 1993:125-134) explanation of blood and the way it works illustrates the way in which fluids are treated as solids in order to be known and understood. Blood is described in terms of its functionality, and its constituent parts. The section on plasma is one page long, the section on other constituent parts, the various cells and platelets, takes up five and a half pages. There are no illustrations in the section on plasma: fluid cannot be easily scientifically visualised.

The section on the conceptually solidified cells and platelets contains ten photos, diagrams and charts. Things which can be understood as solids - microscopic cells with boundaries and characteristic shapes in three dimensions - can be visually represented in two dimensions. Red cells and white cells have well-described tasks and functions. Although the clinical benefits of plasma are known and exploited, it is much less well understood, and its functions are much less able to be articulated.

Recorded experiments in blood transfusion date back to the late seventeenth century (Starr 1999:4), and the history of this experimentation is laced with tales of deep and bitter scientific competition, and often the political imperatives of warfare (1997:7). The development of blood fractionation, a process "analogous to the distillation and cracking of petrol to yield oil" (1999:104) resulted from research funded by the American military in preparation for entering WW2. Fractionation tackled what was seen to be problematic with plasma, that is was unstable and easily contaminated (1999:102-104). The most useful derivative was Fraction V, produced after the fifth round of fractionation, the "highly stable protein" albumin (1999:104).

Fractionation involves breaking down the undesirable characteristics inherent in the fluidity of blood to make it more medically useful. This is achieved by making it more like a solid. Whole blood, a dynamic, changing fluid, had a short shelf life. Plasma has a longer shelf life, but it is still 'connected': picking up things from the outside world, it is easily contaminated. Complex and unstable proteins require separation, classification, control and stability to make them useful. The potential usefulness of blood is dependent on its stability, and its stability is predicated on it not being able to be contaminated. In other words, the usefulness of blood as a product is dependent upon enhancing its capacities for separation, disconnection and boundedness.

The second world war brought about "transformations of blood from a magical substance to a component of human anatomy, capable of being isolated and studied" (1999: xiii). In August 1944, "a
world in which transfusion was a novelty just a few years before now seemed awash with blood and its derivatives" (1999:137). By the end of the twentieth century, the "blood trade" involved "collecting a liquid resource, breaking it into components, and selling the products globally" (1999:xi). Modernist medical scientific research and development has effectively transformed the fluidity of blood into a substance which can, when processed appropriately, behave like a solid.

**fluid flexibility: immune systems thinking**

Just as biomedical understandings of the material fluid of blood are predicated through breaking it down into solid, bounded parts, so biomedical understandings of the body are predicated in knowledge being bounded and containable. Emily Martin's work on understandings of the immune system illustrates this. Martin's *Flexible Bodies: Tracking Immunity in American Culture - from the Days of Polio to the Age of AIDS* (1994) traces North American conceptualisations of the body, health and illness. There are clear historical shifts in conceptualisations of corporeal solidity/fluidity in her discussion of what she calls germ and hygiene thinking, and the transformation of images into immune systems thinking (1994:16).

Martin characterises hygiene thinking as an epistemology in which the body is envisioned as a castle or fortress which has to be defended. If there are gaps or holes in the defences, the body can be breached by germs, which attack with angry intent (1994:26). The predominant metaphors of this mode of thinking, according to Martin, are the body as a machine (1994:28), and military images (1994:34-35; 53; 57). In equating the body with a machine, the body is being imagined as being made up of discrete, bounded parts which work together to perform intended functions. Illness was referred to as belonging to parts of the body: "ear trouble", 'kidney trouble' ... 'suffering with my back" (1994:29) and "although the parts of the body can be fixed so that it can once again function smoothly, there is ... very little sense of anything that holds the whole body together" (1994:29).

These bounded, individual body parts, housed inside the fortress-body, need to be protected from hostile onslaughts from the outer world. Martin reprints an illustration of the body as a medieval fortress housing blood cells dressed as armoured knights being attacked by a fierce, hairy "germ army" from Hindley and King's 1975 book for children *How Your Body Works*. The illustration is entitled "How Bodies Fight Germs", and the surrounding text warns of the dangers of "powerful armies of germs" that "cannot get through healthy skin" but can "get into your body through openings like your mouth and nose". Germs "make poisons", "have secret weapons", and launch "surprise attacks". The body

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1 This applies, too, to the increasingly commodified and globalized trade in both body organs and reproductive material and services (eg: embryos, surrogate wombs) (see, eg: Scheper-Hughes 2000; Scheper-Hughes & Wacquant 2002). I suggest that twenty-first first century transnational commodification of bodies and body parts relies on symbolic solidification.

2 Her project was a multi-sited study, involving nine ethnographic researchers, geographically situated in and around the city of Baltimore. Research sites included: immunology labs; university courses in immunology; volunteer support group for people with HIV/AIDS; AIDS activist groups; a corporate training program; alternative health practitioners; low income housing program; high school biology classes; corporate management seminars and a number of residential neighbourhoods.
retaliates by "work(ing) out how to destroy" germs and being "prepared for an attack." White cells have specialist tasks, "some of them corner the germs and others kill them" (1994:34-5).

In what Martin terms germ or hygiene thinking, there are two levels of solidity. There are the internal organs and limbs, which are envisaged as discrete, bounded entities "nourished by the body's blood just as the workers in a busy factory depend on the surrounding community for their nourishment" (1994:29). These parts are held together inside a body bounded by skin, the function of which is to provide an impermeable barrier to the surrounding environment.

![Pre-1950: the body as a set of bounded organs held together](image)

*Figure 2*

From the 1950s onwards, hygiene thinking began to be challenged by an alternative way of envisioning the body: immune system thinking. Martin, appropriately, does not typify the two systems in a dichotomous relationship. There is a clear chronology, in that hygiene thinking predates immune systems thinking, however many of the concepts present in hygiene thinking are also present in immune systems thinking. She describes "immune systems thinking "nudging" hygiene over to make room for itself" without pushing it completely out of the way. "The complex of immune systems concepts and practices that I ... describe is emergent" (1994:16). Although theories of immunology had been around since the end of the eighteen hundreds, Martin marks the shift of the immune system into something which was conceptualised by the general public, outside the science laboratories, as being the 1950s, with a second radical transformation taking place in the 1970s.

Martin typifies immune system thinking as inherently more flexible than hygiene thinking. I argue it is also more fluid. Reading Martin's descriptions of immune systems thinking with an eye to solidity and fluidity, two models of the immune system appear. In the model (re)produced in mainstream media and biomedicine, imaginings of the body have connected up the internal organs through the fluidity of blood. However, the integrity of the skin, of the individual, remains solid and intact.

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1 Current at the time of her fieldwork - late 1980s/early 1990s.
While the body as a machine made up of bounded parts no longer prevails, images of warfare and the
body as a site to be defended remain.

The portrait of the body conveyed most often and most vividly in the mass media shows it as a defended
nation-state ... In this picture, the boundary between the body ("self") and the external world ("nonself")
is rigid and absolute ... The maintenance of the purity of self within the borders of the body is seen as
tantamount to the maintenance of the self ...

The notion that the immune system maintains a clear boundary between self and non-self is
often accompanied by a conception of the non-self world as foreign and hostile. (1994:51)

In the late 1940s and early 1950s, the skin was the front line in military images of the body. For "the
body whose surfaces are its best protection against disease" the soldiers defending the system were
"medical teams, public health organisations or the National Foundation for Infantile Paralysis". (1994:30)
After 1954, when gamma globulin became widely available, "elaborated images of military
defences inside the body" emerged (1994:31).

When "outer fortifications (the skin or mucous membranes) are breached", the immune system was
there to defend this new, inner front line (1994:32). In this image of the body, immune systems and/or
various parts of it have been described as "internal bodyguards", "armed forces", "infantry", "warriors",
"armoured units" and "determined defenders" who are "relentless" as they "shoot", "strike, attack,
assault", "fend off", "blast", "crush", "annihilate", "explode" or "detonate like a bomb" in their "battle"
against the "threat" of "masses" of "foreign", "hostile", "encroaching" "invaders", a "threatening horde"
of "ruthless invaders", a "vast array of invisible enemies" "bent on our destruction". Our "besieged"
body is a "scene of total war", a "battlefield", a "blitzkrieg" (1994:53-54). Ironically, these soldiers could
also turn traitor. They can "mutiny", "self-destruct" and declare "civil war". "In one television show,
autoimmunity was described as 'we have met the enemy within and the enemy is us' " (1994:62).

Martin asked why military images were seen to be apt:

The basis for choosing military metaphors is said to be that they maintain a sharp clear boundary between
self, which is to be kept in, and nonself, which is to be kept out. [in a biomedical environment] I was told
in a variety of ways that maintaining the integrity of the system (distinguishing self from nonself) is the
fundamental concept in modern immunology. (1994:100)

Other metaphors that Martin describes in the biomedical view of the body and its immune system are
that of the body as a police state where foreign, illegal aliens are detected and executed in/by death
cells (1994:54); immune cells operating in "antiterrorist squads" (1994:270) and that of the immune system as "a scavenger system where all the time the integrity between the inside and outside is violated ... you have this wall that separates you from the outside, but it's not 100% inviolable" (1994:107).

The ways in which component parts of the immune system are described are also telling. T-cells are depicted as Rambo (1994:57), Mr T (1994:58), a quarterback (1994:59), a fullback, "the conductor of the immune orchestra", "the main specific protagonist who regulates all" (1994:101), and even as a jealous husband (1994:59). There is a clear hierarchy in images of immune system cells. In contrast to the ultra masculinity of T-cell mythology, B-cells were less valorised, and more likely to be depicted as feminine (1994:103). At the bottom of the heap, and negatively feminised, are the macrophages. Although macrophages are acknowledged as being "of great potential practical importance", they are clearly ranked lower in immune cell pecking order typologies. "What a macrophage does is not as conceptually challenging as what the T cell does" (1994:105). According to Martin, macrophages are presented as the "most primitive" of cells in the immune system, they "are made to seem inferior in many ways", they are like garbage collectors ... they cannot distinguish self from nonself and so are not critical to the immune system" (1994:101). They "do not have the capacity" to name, identify or categorise "the nature of the things they indiscriminately gobble up"; they are not very smart; they are slovenly immature, unsophisticated, out of shape (1994:102). Macrophages, "angry and engulfing, or scavenging and cleaning up" (1994:56), are "housekeepers", "little drudges" with poor table manners: "After it finishes its meal, it burps out pieces of the enemy" (1994:55).

Epistemologies of rigidity and separation are linked to militaristic metaphors, and these in turn are gendered in fiercely hierarchical terms. Epistemologies of flexibility and connectedness are linked with harmony, conflict resolution and less hierarchical, more interdependent metaphors of identity (Martin 1994:147). Along with biomedical and media images of a fluid, connected body held together and kept apart from other bodies by the integrity of its skin barrier, Martin found an even more fluid, interconnected model of the body and immune systems.

What becomes clear is that the media coverage of the immune system ... does not encompass very well the body imagery with which people are in fact operating. The dominant message of the media, clothed in the accoutrements of warfare, ... would be very misleading if we were to take it as evidence of how people were thinking. Other, subordinate messages present in the media, not as vividly brought to the fore - depictions of complex, nonhierarchical systems embedded in environments composed of other complexity interacting systems - are what many people have already given a lively existence in their daily lives and commonsense conceptions. (1994:65)

Contestations to the view of a militarised self needing to be defended against non-self were articulated by some immunologists as early as the 1930s (1994:108). Fleck argued that the immune system can only react to what it can recognise, and "a completely foreign organism could find no receptors capable of reaction and thus could not generate a biological process" (Fleck 1979:59-61). 9 “This approach moves

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9 Fleck (1979:59-61), cited in Martin (1994:109). Originally published in German in 1935, Fleck's work wasn't translated into English until 1979. It appears that many of his insights lay dormant in both German and English language discourses for nearly half a century. In the last couple of decades, there have been profound reformulations of immune systems in biomedical research (Weasel 2001; Harding 2006), significantly, much of it along the lines articulated by some of Martin's informants, supporting Martin's argument that science can and sometimes does lag behind lay knowledge (1994:62). This is also illustrated in a case study
from a paradigm of the immune system not seeing the self (lest it attack) to a paradigm of the immune system not seeing the foreign" (Martin 1994:110). Images emerge of mutual dependence (1994:104); the "body as a regulatory-communications network"; and a "complex system held together by communications and feedback, not divided by category and hierarchy" (1994:61). These images are clearly differently gendered from masculinised military images, presenting the "immune system as nurturing mother" (1994:97), "a prevailing complex systems model that constantly erodes the significance of body borders and emphasizes the interconnection of everything" (1994:136). In this model, the relationship between T cells, B cells and macrophages is understood as mutually dependent rather than hierarchical (1994:104).

Contrast the hierarchical images of immune system cells described above, with Haraway's description:

There are two major cell lineages to the [immune] system. The first is the lymphocytes, which include several types of T cells (helper, suppressor, killer and variations of all of these) and the B cells (each type of which can produce only one sort of the vast array of potential circulating antibodies). T and B cells have particular specificities capable of recognizing almost any molecular array of the right size that can ever exist, no matter how clever industrial chemistry gets. ... The second immune cell lineage in the mononuclear phagocyte system, including the multi-talented macrophages, which, in addition to their other recognition skills and connections, also appear to share receptors and some hormonal peptides with neural cells. (Haraway 1991:217-8)

Haraway's description of macrophages offers a reframing in which flexibility is valued, rather than lack of specialisation being devalued. This reframing does not elevate macrophages above other immune system cells, but it does not depict them as lesser, either: it expresses an appreciation of both flexibility and specialisation.

In the most fluid of Martin's collection of imaginings of the immune system, the skin dissolves into more of a membrane than a barrier. It is a filter through which a body is connected with its surroundings, rather than a fence safeguarding the integrity of the individual.
In an interview with a female acupuncturist, a healthy immune system was represented as "the body's rivers flowing without interruption". For someone else, keeping healthy involved "building a bridge between the outside and the inside, as opposed to keeping anything out ... it's more about a healthy meeting of the outside and the inside as opposed to keeping it out because, of course, it's going to be coming in" (Martin 1994:88). Images of fluidity are offered as alternatives to solid, fortified, military images. One interviewee described the immune system as "more like a piece of almost tides or something ... the forces, you know, the ebbs and flows." This interviewee drew a diagram to illustrate this, which she labelled "the waves" (1994:75). Another said that he imagined the immune system as "somehow less of a clash, more of a 'convince it to go away' kind of thing. Show it the door ... somehow that seems more peaceful to me, that it takes in and somehow digests the cell and then fits into the life cycle" (1994:71).

Rather than the inherent 'goodness' or 'badness' of a cell, which was emphasised in the military good soldiers vs. enemy cells images, context was deemed important. A medical practitioner who practised homeopathic medicine talked about balance: "... if any of them gets out of hand - out of balance - it can easily result in disease. Even quite normal flora in an abnormal place" (1994:88).

There is a strong cosmological/theological strain in these images: interviewees were not only talking about alternative imaginings of immune systems, but were tying these into broader worldviews. A male nutritionist argued that alternative therapies in their many forms work because:

...this [pointing to his body] is our universe. It's the same as the universe out there. ... So it ebbs and flows like the tides [of the ocean]. The sun rises, it sets. Things change. That's how our body works. Now to try and change that is like trying to make it stop raining. (1994:87)

Martin makes this link with spiritual belief explicit:

Imagine a person who has learned to feel at least partially responsible for her own health, who feels that personal habits like eating and exercise are things that directly affect her health and are entirely within her control. Now imagine such a person gradually coming to believe that wider and wider circles of her existence - her family relationships, community activities, work situation - are also directly related to personal health. Once the process of linking a complex system to other complex systems begins, there is no reason, logically speaking, to stop. This cosmic view of the body is the kind of thing that people are trying to express ... (1994: 122)

Ed Cohen extends Martin's work both forward and back in time, suggesting that the militarised images described by Martin are an aberration, historically. He suggests that from "antiquity to the mid-nineteenth century, almost all cultures recognize that nature exercises a curative power in the organism, a power which medicine at best emulates or enhances" (2012:68), and that the idea of hostility and defence as metaphors for healing are particularly idiosyncratic to western biomedicine (2012:66).

In Martin's work on constructions of biomedical and other knowledges of the body and the immune system, patterns in solidity and fluidity both contest and coexist. Recognition of self and non-self on a genetic level is crucial to militarised, bounded conceptions of the body. Self/nonself boundaries are fuzzier in less militaristic, more fluid understandings of the body and the immune system.

I think of these patterns as either ends of a continuum, rather than in a dichotomous relationship. However, the 'ideal types' of solidity and fluidity are dichotomously related. Epistemologies predicated
on solidity, or where solidity is valued, are more likely to value individualism, separation and hierarchy, whereas epistemologies predicated on fluidity are more likely to value collectivism, connection and non-hierarchical interdependence. Fluids, not necessarily easily locatable nor able to be represented in space and time, are understood as flexible and dynamic. Solids, representable and locatable in space and time, are understood as stable and absolute. In solid understandings, there is an illusion of completeness, and intolerance with contradictions. In fluid understandings, partiality is seen as necessary, and contradictions are tolerated. Solids are rigid, and allow defence of boundaries, hostility and combativeness. Clearly marked gender and other identity labels and boundaries are produced and policed. Fluids are flexible, and gender and other identity categories are amorphous, multivalent and contingent.

**characteristics of epistemological fluidity and solidity**

The following table (Table 1) illustrates characteristics associated with Solid Logic, and with Fluid Logic.

<table>
<thead>
<tr>
<th>fluidity</th>
<th>solidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>connection</td>
<td>separation</td>
</tr>
<tr>
<td>collectivism</td>
<td>individualism</td>
</tr>
<tr>
<td>egalitarian</td>
<td>hierarchical</td>
</tr>
<tr>
<td>interdependence</td>
<td>(in)dependence</td>
</tr>
<tr>
<td>not fixed in space and time</td>
<td>fixed in space and time</td>
</tr>
<tr>
<td>flexible</td>
<td>rigid</td>
</tr>
<tr>
<td>dynamic</td>
<td>stable</td>
</tr>
<tr>
<td>contextual</td>
<td>absolute</td>
</tr>
<tr>
<td>diversity</td>
<td>conformity</td>
</tr>
<tr>
<td>complexity</td>
<td>reductionism/simplicity</td>
</tr>
<tr>
<td>messy</td>
<td>elegant</td>
</tr>
<tr>
<td>partiality</td>
<td>completeness</td>
</tr>
<tr>
<td>tolerance with contradictions</td>
<td>intolerance with contradictions</td>
</tr>
<tr>
<td>avoids strict classifications/taxonomies</td>
<td>demands strict classifications/taxonomies</td>
</tr>
<tr>
<td>conflict resolution:</td>
<td>conflict resolution:</td>
</tr>
<tr>
<td>negotiated consensus</td>
<td>negotiated militaristic</td>
</tr>
<tr>
<td>cosmologically mystical</td>
<td>cosmologically mechanical</td>
</tr>
<tr>
<td>(world is ultimately unknowable)</td>
<td>(world is knowable, understandable)</td>
</tr>
<tr>
<td>nature is treated with: trust</td>
<td>nature is treated with: suspicion/fear</td>
</tr>
<tr>
<td>ontological security</td>
<td>ontological insecurity</td>
</tr>
</tbody>
</table>

*Table 1: characteristics of Logics of Solidity and Fluidity as a series of dichotomies*
The relationship between fluidity and solidity that I illustrated in Martin's analysis of media and biomedical notions of the body is to be found extensively in western constructions of knowledge. Western scientific thought, dependent for its understanding of the world on breaking phenomena into knowable sections, fragments the whole in the effort to understand it. It solidifies messy, difficult-to-measure phenomena into portions which can be measured and understood.10

The relationship between Solid and Fluid logic can be treated as a series of dichotomies, as in Table 1. However, it can also be viewed as a set of layered continuums, similar to Carol Hagemann-White’s (1989) analysis of gender dichotomies. A dichotomous gender system is based on the supposed biological 'fact' of the human race being made up of two sexes, however there is, in reality, no way of measuring the two sexes that includes every human being. 'Liminal groups' can include hermaphrodites, transsexuals and others, depending on which definition is being used, for example: absence or presence of a penis, hormone levels or social identity (Herdt 1994; Fausto-Sterling 2003).

Hagemann-White suggests that a two dimensional, dichotomous view of gender can be developed into a more complex, multi-dimensional model. There are two aspects to this model. Firstly, characteristics of gender are modeled along a continuum, and secondly, these continuums are modeled in layers. Some examples of 'layers' of gender construction referring to a western European individual could be:

<table>
<thead>
<tr>
<th>Female</th>
<th>Biological Sex</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;feminine&quot;</td>
<td>Choice of Clothing/Hairstyle etc</td>
<td>&quot;masculine&quot;</td>
</tr>
<tr>
<td>&quot;feminine&quot;</td>
<td>Body Language</td>
<td>&quot;masculine&quot;</td>
</tr>
<tr>
<td>&quot;passive&quot;</td>
<td>Assertiveness</td>
<td>&quot;aggressive&quot;</td>
</tr>
</tbody>
</table>

Table 2: gender expressed as layered continuums

10 Philosophical and social science critiques of modernist scientism have been taken up to a limited extent in (some) biomedical discourse and practice, as have principles of nonlinear physics. In an article entitled "Nonlinear systems in medicine", cardiologist John Higgins argues that "Behaviour of the system is distinct from the behaviour of its parts or elements" (2002:247), which is a distinctly radical stance for one of the most mechanistic specialisations in medicine. See also Rai et al (2012) and Glass (2015) on medical applications of nonlinear biology.
Similarly characteristics of epistemological fluidity and solidity can also be mapped onto a set of layered continuums (see Table 3). This creates possibilities for complexity in a number of ways. It provides for more nuanced choices than just the end points of each pair of characteristics.

In the dichotomous scheme (Table 1), which was present in my fieldsite, especially among the more conservative obstetricians and midwives, there was an assumption that if you were tolerant of contradiction, then you would also be messy, flexible and egalitarian. If you were conformist, there was an assumption that you would hierarchical, stable and rigid in your ordering of the world.

If the characteristics of Solidity and Fluidity are treated, however, as a series of layered continuums (Table 3), then it is possible to have, for example, high tolerance for complexity, slight tolerance for contradictions, to support collectivism and egalitarianism and yet still be quite conformist. This mapping describes a particular midwife who worked in antenatal clinic and was regularly allocated to work with one of the more charismatic, hierarchical obstetricians, one of the few who operated in the ‘Dr as God’ mode. He was regarded as brilliant but quite challenging to work with. This particular midwife ‘handled’ him seemingly effortlessly, and had a very particular set of professional attributes that is more complex than can be expressed through the dichotomous model.

<table>
<thead>
<tr>
<th>fluidity</th>
<th>solidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>connection</td>
<td>separation</td>
</tr>
<tr>
<td>collectivism</td>
<td>individualism</td>
</tr>
<tr>
<td>egalitarian</td>
<td>hierarchical</td>
</tr>
<tr>
<td>interdependence</td>
<td>(in)dependence</td>
</tr>
<tr>
<td>not fixed in space and time</td>
<td>fixed in space and time</td>
</tr>
<tr>
<td>flexible</td>
<td>rigid</td>
</tr>
<tr>
<td>dynamic</td>
<td>stable</td>
</tr>
<tr>
<td>contextual</td>
<td>absolute</td>
</tr>
<tr>
<td>diversity</td>
<td>conformity</td>
</tr>
<tr>
<td>complexity</td>
<td>reductionism/simplicity</td>
</tr>
<tr>
<td>messy</td>
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<tr>
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</tr>
<tr>
<td>conflict resolution: negotiated consensus</td>
<td>conflict resolution: negotiated militaristic</td>
</tr>
<tr>
<td>cosmologically mystical (world is ultimately unknowable)</td>
<td>cosmologically mechanical (world is knowable, understandable)</td>
</tr>
<tr>
<td>nature is treated with: trust</td>
<td>nature is treated with: suspicion/fear</td>
</tr>
<tr>
<td>ontological security</td>
<td>ontological insecurity</td>
</tr>
</tbody>
</table>

Table 3: characteristics of Logics of Solidity and Fluidity expressed as a set of layered continuums
In a thought system of Solid Logic, the world is understood by dividing it into bounded, labeled, defined areas, and then comparing these bounded areas with other bounded areas. Solid logic, privileging boundaries, comes to know the world through separation and difference. In a thought system operating within a mode of Fluid Logic, the world is understood by privileging connections, between areas which are fuzzy-bounded and not necessarily exclusive. Fluid logic is premised on a Self which is defined through 'things which are like me and the ways in which they are like me'. Solid Logic is premised on a Self being defined through an Other: 'things not like me and the ways in which they are not like me.'

Being less dependent on classification and categories, more concerned with connection and context, epistemological fluidity is both potentially genderless and genderful. I suggest that Braidotti’s nomadic subjectivity (1994), Haraway's cyborg body (1991) and second millennium witness (1997b), Barad’s processes of intra-action (2003; 2007) and Kirby’s quantum anthropologies (2011) are examples of concepts that inhabit logics of fluidity. In many ways their work moves beyond gender, into slippery spaces that defy mapping and simplistic categorisations.

One of the reasons that these are “slippery spaces”, I suggest, is because they are muted spaces. Epistemological Fluidity often becomes rendered as ‘illogical’ in language and metaphor systems that privilege Epistemological Solidity. Following Ardener (1972; 1975), I understand mutedness to apply to the unsaid, the unsayable, the unheard and the unhearable. It can be difficult if not impossible to articulate concepts that operate with fluid logic, because we do not have the vocabulary or the cultural scripts.

For example, one of the core contestations in materialism discourses within feminist philosophy revolves around articulations of (the relationship between) nature and culture. Central to feminist writing since Mead (1935) and de Beauvoir (1953), attempting to disentangle the complex relationship between nature and culture has occupied a key place in feminist scholarship. I suggest that much feminist philosophy remains challenged by the impossibility of “dismantling the master’s house” with “the master’s tools”, and that the dichotomous, oppositional relationship between the concepts of nature and culture is the result of an artificial and unhelpful containment of these concepts within a rigidly Solid Logic. By rejecting any form of oppositional or dichotomous relationship between the body and the environment, and embracing Barad’s “intra-action” (2007), or Jagger’s “intraimplication” (2011) of nature and culture, where each coproduce the other, and asking, as Kirby does, “What if Culture was Really Nature All Along” (2011:68), pathways are created for feminist scholarship that are, as Jagger puts it “more respectful to the agency of matter” (2011:321). Inhabiting a Logic of Fluidity allows for innovative new imaginings that have to potential to move us beyond the impasse that Battersby has identified in Irigaray’s work (2006:291), and that Green has in turn argued remain stuck in material determinism in Battersby’s work (2011:144-5).

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Because Solid Logic is privileged in western understandings and articulations of the world, the vocabulary available to express Fluid conceptualisations of the world is less developed, less sophisticated and less able to be heard or understood than Solid Logic articulations. With cultural scripts available to us, Solid Logic conceptualisations are more easily accessible. With fewer cultural scripts available, Fluid Logic conceptualisations, of necessity, frequently have to be articulated through the language of Solid Logic, rendering the articulations clumsier and less accessible than they would be if Fluid Logic was less muted. Current articulations of the mutually coproducive characteristics of the embodied natural-cultural self illustrate ways in which embracing a more fluid logic can open up metaphors that have the potential to take us to new and truly radical places.

Although there is of course a relationship between corporeal fluidity and solidity and epistemological fluidity and solidity, it is important not to conflate the two. As I have shown with blood, fluids can be 'known' through a paradigm predicated on solidity. Similarly, 'solid' flesh and bones could conceivably be explored through paradigms of fluidity. In fact, simply attempting to define the idea of 'flesh' in terms of solid or fluid immediately highlights potential inadequacies of the paradigm of the body as a bounded, solid entity (Battersby 2006).

As I discuss in Chapter 4, in my fieldsite a ‘solid’ obstetric model was dominant, with serious contestation from a more ‘fluid’ midwifery model. Often they were presented in dichotomous, oppositional terms, however that does not mean that was the only construction of birthing that was present. Models which, using the density metaphor, could be described as ‘gaseous’, quite literally ‘floated around’ my fieldsite: wafting like an enigmatic perfume. Difficult to hold onto, ephemeral if you attempted to grasp too tightly, but nonetheless an echo or a shadow serving as a reminder that obstetric and midwifery models were both conservative in comparison to home birth models. Table 4, below, illustrates this. It takes a partial set of the pairings presented in the Fluid/Solid model, and shows how ‘opposites’ slide into ‘points along a continuum’ when examined from the point of view of a triadic relationship. This presents an idiosyncratic, idealised version of homebirthing, which may or may not represent values and behaviours present in practice. Unlike the other two sets of characteristics, which are based on analysis of textual data as well as data gathered via fieldwork observation, the home birth model is not based on direct observational data. However, it was present in my fieldsite as a sort of Deviant to triangulate the Self/Other obstetric/midwifery construction.

For example, as is discussed in Chapter 4, in the hospital, obstetricians set protocols around timing, and if a birth was not progressing as it ‘should’ a number of measures could be and were taken to ‘hurry things along’. Birthing centre, or midwifery-led births were much less likely to be seen to require intervention, with a practice of ‘letting the baby take its time’. However, some timing protocols were adhered to: midwives worked on rostered shifts; women whose water had broken would be given longer before their birth was induced, however artificial induction was still occasionally used to ‘move things along’. In home birthing practice, midwives don’t work on rosters, and induction techniques are both much less intrusive and much less likely to be used.
<table>
<thead>
<tr>
<th>‘density’</th>
<th>solid</th>
<th>fluid</th>
<th>‘gaseous’</th>
</tr>
</thead>
<tbody>
<tr>
<td>birthing model</td>
<td>obstetric interventionist</td>
<td>midwifery non-interventionist</td>
<td>homebirthing active birth model</td>
</tr>
<tr>
<td>distance</td>
<td>separation</td>
<td>connection</td>
<td>interconnection</td>
</tr>
<tr>
<td>personhood</td>
<td>individualism</td>
<td>individual as part of a collective/community</td>
<td>indivisible interconnection</td>
</tr>
<tr>
<td>power</td>
<td>hierarchical</td>
<td>egalitarian</td>
<td>radical democratic</td>
</tr>
<tr>
<td>dependency</td>
<td>(in)dependent</td>
<td>partial interdependence</td>
<td>interdependence</td>
</tr>
<tr>
<td>relationship to time</td>
<td>rigid</td>
<td>flexible</td>
<td>free-floating</td>
</tr>
<tr>
<td>relationship to contradictions</td>
<td>intolerance</td>
<td>tolerance</td>
<td>embrace</td>
</tr>
<tr>
<td>relationship to taxonomising</td>
<td>demands strict classifications/taxonomies</td>
<td>avoids strict classifications/taxonomies</td>
<td>hostile to strict classifications/taxonomies</td>
</tr>
<tr>
<td>nature</td>
<td>separate from self, treated with suspicion/fear</td>
<td>separate from self, treated with relative trust</td>
<td>celebrated/welcomed as part of self</td>
</tr>
<tr>
<td>response to difference</td>
<td>demands conformity, intolerant of diversity</td>
<td>tolerates diversity whilst conforming to structure</td>
<td>demands diversity, does not tolerate conformity</td>
</tr>
</tbody>
</table>

Table 4: characteristics of density logic model, expressed as a triadic system

Many other models of birthing are possible, and indeed exist. If US style obstetric birthing was inserted into the table, or obstetric or midwifery or homebirthing or traditional birthing models, in New Zealand, or America, or Nepal, or even private hospital birthing in Australia, relative values would shift. From an etic perspective, it would be possible to do this. From the emic perspective of the clinicians in my fieldsite, however, there were two main models in contestation with each other. Some birthing women and their families were aware of the dichotomous care models, others, especially those birthing in the obstetric model, could be relatively unaware that there was more than one way of doing things.

This demonstrates how contingent dichotomies are. They are constructs: they only maintain their shape in the ignorance (Tuana 2006) – willful or unknowing - of third or fourth or multitudinous further perspectives. With each new perspective, values shift, because they are always ‘in relation to’. Dichotomies are dependent, on their very existing, on the muting of alternate perspectives. In my fieldsite, alternate perspectives were muted extremely effectively, and the solid/fluid dichotomy presented in Table 2 held its shape in the face of other perspectives not being granted legitimacy.

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12 This description resonates with Davis-Floyd’s (2001) model of technocratic, humanistic and holistic paradigms of childbirth.
Discourses and practices of pregnancy, birthing and the maternal body are riddled with apparent contradictions. Donna Haraway, theorising on the (fluid) cyborg body, suggests that "Irony is about contradictions that do not resolve together into larger wholes, even dialectically, about the tension of holding incompatible things together because both or all are necessary and true." (1991:149). Following a fluid logic through to its ultimate conclusion can lead to other ways of understanding contradiction. Just as Douglas showed us there is no such thing in and of itself as dirt, that dirt is always Matter out of Place (1966), I would like to suggest that there is no such thing as inherent contradiction, in and of itself. For things to contradict each other, they have to be placed in a framework that includes them in a dichotomous relationship. If concepts are contradictory, and if that contradiction is a problem, then the problem may be resolved by shifting the framework in which the concept are embedded, and/or by providing context. Contradiction, I suggest, involves Concepts out of Context.  

**feminist fluidities: postmodern embodiment and the maternal body**

Epistemological fluidity and solidity are not necessarily mutually exclusive, however, they can have quite different consequences. I argue that an awareness of these consequences allows for making more informed decisions when choosing epistemologies that are appropriate for the analytical task at hand. In taking fluidity and solidity for granted, we may not have been adequately reflexive about our paradigms.

Two feminist theorists who have focused specifically on fluidity, Elizabeth Grosz (1994) and Margrit Shildrik (1997), envisage possibilities that are inclusive and flexible. They argue for a reinscription of the corporeal, material body into feminist theorising, and both argue that body fluids offer a fruitful way of carrying out this reinscription. I would argue that as well as looking at (material, textual and discursive) fluids, epistemological fluidity may be useful to feminist theorists.

In understandings of the immune system, an epistemology of solidity privileged the centrality of definition and recognition of self and nonself on a genetic level, whereas constructions reproduced within epistemological fluidity were more comfortable with fuzzier boundaries between self and nonself. Central to postmodern feminist discourse on embodiment is a critique of the Cartesian mind/body dualism, which is conceptually linked with constructions of Self and Other, self and nonself.

The notion of a rational, self-reflective subject, which has dominated Western thought since the Enlightenment, is based on the displacement and/or derogation of its 'other'. Thus the notion of rationality is privileged over the emotions, spirituality over the material, the objective over the subjective. One dualism of central importance to classical thought is the Cartesian opposition between mind and body. This dualism privileges an abstract, pre-discursive subject at the centre of thought and, accordingly, derogates the body as the site of all that is understood to be opposed to the spirit and rational thought, such as the emotions, passions, needs. (McNay 1992:12)

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13 An example of this might be seeing an operating theatre as both a ‘safe’ and ‘dangerous’ place to give birth. It can be a safe place if the context is an emergency caesarean that is necessary to save the mother and/or child’s life; it can be dangerous if a caesarean is being undertaken unnecessarily. The ‘safety’ or ‘danger’ of an operating theatre as a place to give birth is dependent on the context of each particular birth. This is particularly relevant to discourses of risk (aversion) and birth, which Scamell argues remain underdeveloped in the health sociology literature (2014:917)
The mind/body dualism has a long history in western philosophy. Feminist theorists have argued that this dichotomy produces ideas, beliefs and practices that are particularly damaging to women’s realities, and stress the importance of deconstructing concepts of corporeality.\footnote{See eg: Best (1995:187); Grosz (1994:vii,3-14), Komasaroff (1995a:8-9); Shildrick (1997:81); McKenzie (1995:51-2); McNay (1992:12); Waldby (1995:270).}

On a fundamental level, a notion of the body is central to the feminist analysis of the oppression of women because it is upon the biological difference between the male and female bodies that the edifice of gender inequality is built and legitimised. The idea that women are inferior to men is naturalised and, thus, legitimised by reference to biology. ... man, unlike woman, is understood as being able to transcend being defined in terms of his biological capacities via the use of his rational faculties. In contrast, women ... are entirely defined in terms of their physical capacities ... this derogation of the female body through comparison with the male body, and the consequent definition of femininity through reference to biological capacities, leads to a series of different strategies of corporeal oppression ... (McNay 1992:17-18)

Despite decades of challenges to Cartesian dualisms, they are remarkably persistent (Einstein & Shildrick 2009). Within the humanities, the body has been long neglected. According to Einstein & Shildrick “feminist theory ... with some notable exceptions ... turned away from the biological body to discuss a more discursive approach” (2009:194) and this resulted in a “postmodernist feminist theory unaligned with current women’s health practice” (2009:194). The 1990s saw a spate of publications from within medical sociology and postmodern feminism which enthusiastically resurrected the body.\footnote{See, for example, Bodies that Matter (Butler 1993) Troubled Bodies (Komasaroff 1995a), Imaginary Bodies (Gatens 1996), Regulating Bodies (Turner 1992), Volatile Bodies (Grosz 1994), Flexible Bodies (Martin 1994), Sexy Bodies (Grosz & Probyn 1995) and Leaky Bodies (Shildrick 1997).} Although encompassing an enormously diverse range of approaches, something most of these texts had in common was their assertion that a purely dichotomous split between mind and body (or the social and the material) is an artificial one, and that a more integrated approach, in both the humanities and in medicine and biology, is desirable in studies of human beings.\footnote{See eg: Grosz (1994:21-3,86); Waldby (1995:270); McNay (1992:17-8); McKenzie (1995:52).}

Grosz (1994) and Shildrick (1997) envisaged important potential for alternatives to dichotomies in the fluidity and porousness of women’s bodies. They argued that women’s identity and/or subject positions are particularly fluid, and that this fluidity is responsible for the precariousness of a woman’s autonomous self.

Bodily fluids attest to the permeability of the body ... to the perilous divisions between the body’s inside and its outside. They afford a subject’s aspiration toward autonomy and self-identity. They attest to a certain irreducible "dirt" or disgust, a horror of the unknown or the unspecifiable that permeates, lurks, lingers, and at times leaks out of the body, a testimony of the fraudulence of the "clean" and "proper". ... Body fluids flow, they seep, they infiltrate; their control is a matter of vigilance, never guaranteed. ... In our culture, they are enduring, they are necessary but embarrassing. They are undignified, nonpoetic, daily attributes of existence ... (Grosz 1994:193)

Fluids are problematic, and fluidity is ascribed (more often) to bodies which are female. "[W]omen’s corporeality is inscribed as a mode of seepage" (Grosz 1994:203). Fluids, flowing out into the world as they do, breach the boundaries of the body. Body fluids are liminal substances, both part of the body and not part of it. They unsettle fixed borders, unfix fixed categories of self and other (Shildrick 1997:34).
Shildrick argues that the fundamental underpinning of western philosophy's denial of full, autonomous moral agency to women is the female body's (apparent) intrinsic leakiness. The ability to transcend the purely physical, seen as necessary for full personhood, is denied women in philosophical discourse, because the supposed fluidity of female bodies ties them to the material, corporeal world (1997:34).

Grosz writes that the "body is ... what the mind has to expel in order to retain its integrity" (1994:3), and that the "coding of femininity with corporeality ... leaves men free to inhabit what they (falsely) believe is a purely conceptual order" (1994:14). The body is, in western philosophical tradition, "a source of interference with and a danger to the operation of reason" (1994:5). For Shildrick, the "indeterminacy of body boundaries" (1997:34), the inherent leakiness of categories (1997:60), the fluidity assigned to female bodies (1997:100) and the excessive and leaky female body (1997:14), threaten "to undermine the basis on which the knowing self established control" (1997:34), "self certainty" (1997:99) and the "idea of a healthy unbreached body" (1997:100). They unsettle ontological certainty (1997:34), challenge "fundamental uncertainty between self and other" (1997:34), present "women as less capable of mature personal morality" and result in the "exclusion of women from full moral rationality and agency" (1997:81).

Shildrick and Grosz see the cultural devaluation of fluidity and body fluids as being a factor in women's secondary status as non-rational, non-autonomous beings, and express poignant longings for new imaginings of more fluid, more interconnected ways of being. They both encourage the exploration of alternative paradigms whereby women, and other deviations from the corporeal norm of the healthy white western male, would not be excluded from full moral agency and autonomous personhood. Perhaps looking at the possibilities offered by epistemologies of fluidity would move (some) feminist theorists in directions they are keen to take. An epistemology of fluidity could not, however, lead us to a destination of autonomous personhood. "A science and culture of boundaries generates an ethics of autonomy, of the proper, of rights and interests, and of contracts; an ethics of fixed limits rather than an ethics of the lived and changing body" (Shildrick 1997:215). The concept of autonomous personhood implies intense individuation. Individuation is central to epistemological solidity, whereas epistemological fluidity offers a breakdown of hierarchy and individualism, both of which are central to autonomous self-personhood. Implicit in the idea of autonomy is not only control of self, but also to a greater or lesser extent control over others. In a condition of epistemological fluidity, this autonomous self would be neither possible nor desirable. Discomfort with the implication that fully engaging with women's boundary-breaching Self makes fully autonomous Selfhood an impossibility may well be the reason that feminist engagement with the body reached an impasse in the 1990s. Shildrick and Einstein appear to be lonely voices arguing for a rethink of Autonomous Selfhood (Shildrick 1997; Einstein & Shildrick 2009). I join with them in arguing that if feminist engagement with the body is to

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37 This longing re-positions a desire expressed in a number of earlier feminist texts, often expressed as an almost physical yearning for new ways of imagining connectedness. Rejecting the idea that lack of autonomy equates with lack of mature personhood, many theorists argue that greater connectedness equates with greater sense of social responsibility, and therefore a more mature, adult, desired way of being-in-the-world. This, in essence, is what the ethics of care vs the ethics of justice debate centered around. See, for example, Gilligan (1982); Vasterling (1993) and Larrabee (1993). For other expressions of this 'longing for connectedness', see, for example, Grey (1993); Daly (1984); Brügmann (1993) and Raymond (1986).
have scholarly value (and I believe it does), then we have to be prepared to be radical enough to accept the somewhat uncomfortable, messy epistemological consequences of our explorations.  

Shildrick and Grosz both refer to Julia Kristeva's concept of 'the abject'. The abject, according to Kristeva, is that which falls away from the body, that which is both of the body and not of it: sweat, pus, tears, urine, faeces and, of course, blood, milk and semen. It is that which "disturbs identity, system, order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite" (Kristeva 1982:4).

The abject inspires fear and desire, repulsion and attraction. As much as we try to expel it from our existence [it] ... threatens our identity... Although the subject rejects the abject, the subject needs the abject as a defining and reminding tool, ... the subject needs the abject in order to know what it is not, as well as what it is. The 'abject' reveals that we can never trust or be sure of our imagined unity, cleanliness or rationality. The abject exposes the futility of borders, boundaries and taboos, while simultaneously establishing and reinforcing them. ... (locco 1998:2)

From an anthropological perspective, what Kristeva is describing is intense liminality: that which is betwixt and between, neither this nor that and at the same time both this and that (Turner 1977:37). The "impure is what shows no respect for limits, what mixes structures and identities" (Kristeva 1998:20). Kristeva's examination of abjection leads her directly to the maternal body, the sight of greatest ambiguity, greatest liminality, greatest anxiety. According to Braidotti, it can "be thought of as the point of intersection, as the interface between the biological and the social" (1994:97). Women's ability to give birth "is abject because it challenges any imaginary boundaries between inside and out." (locco 1998:4) The fluidity of the female body, as discussed above by Shildrick and Grosz, is in contradiction and contradistinction to rationality.

Kristeva's theory of the abject ... provides a revealing insight into the ways in which the horror and the abject have been explicitly and implicitly linked to women and the specificities of women's bodies. Kristeva holds that the construction of the female body as abject, and the male body as clean and rational, has provided the basis for western law and morality. (locco 1998:2)

One of the specificities of a female body is that it has borders which refused to stay fixed (Lupton 2012). Grosz examines body dynamics using the phenomenon of phantom limbs (1994:41). Phantom limbs, which occur in cases of limb amputations, is the phenomenon whereby a person continues to 'feel' sensation in a limb even after it has been amputated. Schilder's (1978) work on phantom limbs in war veterans shows that the "body image is always slightly temporally out of step with the current state of the subject's body ... there seems to be a time lag in the perception of and registration of real changes in the body image" (Grosz 1994:84). The phantom limb "testifies to the pliability and fluidity of what is usually considered the inert, fixed, passive biological body" (Grosz 1994:41). Grosz discusses perceptions of the body and the actual body during puberty, claiming it to be a time of discord between the lived and the transcended body (1994:75). She argues, in psychoanalytic terms, that the differences between

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18 As an example, the ‘radical’ feminist theology of Mary Daly (1978) appears far less radical in framework of epistemological fluidity.

19 Kristeva’s abjection was initially introduced into this project through Grosz (1994). I benefited enormously from Melissa locco’s generosity in sharing her understandings of abjection with me, and similarly from Megan Warin’s generous sharing of her development of abjection in her work on anorexia (see Warin 2003 & 2010).
girls and boys experiences of puberty are fundamental to the development of the gendered self (1994:75).

Shildrick also discusses implications of physical changes to the body, arguing that in medical terms, normative health is a condition of stability, implying lack of change. Change is associated with broken or breaking down. Being broken is associated with ill health. Discussing inappropriate medical surveillance of disabled people, she argues that the "inescapable and distinctive embodiment of those persons deemed to be in less than normative health becomes a determinate of their being treated as less than full subjects, as less than capable of independent moral agency" (1997:169). She goes on to say "what concerns me ... is that those things which for women constitute the usual lifelong and continuous capacities of, and changes to, the body - such as puberty, menstruation, reproduction, lactation or menopause - are characteristically posed nevertheless as medical problems" (1997:169).

The 'shape-changing' propensity of women has consequences for ideas of autonomous selfhood in another way.

... while women are represented as more wholly embodied than men, that embodiment is never complete nor secure. And nowhere perhaps is female excess more evident and more provocative of male anxiety than in reproduction. The capacity to be simultaneously both self and other in pregnancy, which is the potential of every woman, is the paradigm case of breached boundaries. (Shildrick 1997:35)

Not only do women's bodies go through more shape-changes than men's, but they have the capacity to perform the ultimate shape-changing trick in their production of an entirely new human being from their bodies. As Kristeva tells us, this instability is threatening in a philosophical cosmology which constructs a healthy body as a stable, unchanging one.

A shape changing, shape shifting body is indeed problematic within a paradigm which values stability. A paradigm predicated on fluidity could resolve that: a shape shifting body within a paradigm which understands the world as dynamic and tolerates contradictions becomes immediately less problematic. In fact, it may even become the norm. However, an acceptable and accepted shape shifting body, a body which shape-shifts as a norm, cannot be granted full autonomous personhood. Full autonomous personhood is not possible within a fluid epistemology; shape changing as a norm is not possible within a solid epistemology.

Discussions of abjection and shape-changing highlight the problems of the mind/body dichotomy, with its privileging of rationality, for feminist theorists. Grosz and Shildrick wish to move beyond mind/body dichotomies. Grosz asks:

By what techniques and presumptions is a nondichotomous understanding of the body possible? ... What, ideally, would a feminist philosophy of the body avoid, and what must it take into consideration? What criteria and goals should govern a feminist theoretical approach to concepts of the body? (1994:21)

Shape changing – both symbolic and corporeal - is central to pregnancy and birth. As the ethnography chapters that follow illustrate, I suggest that epistemologically fluid understandings of the body are not only possible, but are being expressed in maternity care in both discourse and practice.

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20 Shildrick (1997; 2009) uses surveillance in the Foucauldian sense, thus also implying self-surveillance.
Above, I have suggested that there were two epistemologies at work in Martin's exploration of flexibility and the immune system, based on ideas of bodily boundedness and permeability. Douglas stated that a body can stand for any bounded system (1970:ix), which indeed it can and does within western modernist epistemologies of solidity. I suggest that the body, that ultimate Natural Symbol, can also be understood as a central metaphor in less bounded and unbounded systems of thought.

In the chapters that follow, I present the results of my ethnographic engagement with the materiality and corporeality of my fieldsite, as well as with its metaphoric and discursive practices. I suggest that this engagement – corporeal as well as discursive – has the potential to provide insights into theoretical meta-meanings without sacrificing the particularities of micro(embodied) experience.
Chapter 3

Mechanics of Separation

Throughout this thesis I am arguing the centrality of ordering systems based on symbols of fluidity and solidity, and suggesting that symbolic solidification - increasing (perceived) stability - is a central logic behind biomedical management of the maternal body. I have argued that connection is inscribed as symbolically fluid, and that separation was inscribed as symbolically solid. In this chapter I develop that idea further by exploring, to paraphrase Irigaray (1985), 'mechanics' of separation and connection. Understanding maternal and fetal bodies as interdependent and connected inscribes health to complex, dynamic, flexible and negotiable relationships. Understanding maternal and fetal bodies as independent and separate inscribes health to stable, autonomous, bounded individuals. Understanding the relationship between maternal and fetal bodies and their caregivers as predicated on either connection or separateness has implications for what is regarded as optimal care.

conflating gazes: the gaze medical and the gaze aesthetic

The concept of the gaze, both Foucault’s medical gaze (1973) and Berger’s aesthetic gaze (1972), are useful in understanding mechanisms of connection and separation in biomedical discourses of intervention. Medical gazes manifest in a variety of forms, and give definition to the maternal and fetal bodies upon which they are gazing. The medical gaze, focusing on the "essential purity of phenomena" (Foucault 1973:120), decontextualises and distills knowledge to a knowable single truth, rather than allowing a complex number of contextualised truths to coexist. Aesthetic gazes, working within a framework of beauty which is competitive, hierarchical, judgemental and conformist, underpin both historical and current constructions of the medical gaze.

This does not mean that pregnant and birthing women are passive under that gaze: they have and enact their agency. However, women’s room to manoeuvre under the scrutiny of the gaze is defined by their desire for appropriate medical care, and the terms under which (and women’s understandings of the terms under which) different types of medical care may be offered or withheld.¹

Around ninety-eight percent of Australian births take place within a hospital,² an environment where illness both fully defines the body and at the same time is disconnected from it. This double decontextualisation separates individuals (health care worker/patient) from each other emotionally, and patients from (parts of) themselves physically (often surgically) and symbolically. Pregnancy and

¹ See Gibson (2004) for examples of this in a South African setting.
² See Chapter 1, note 11.
birthing, which are not illnesses, but supposedly 'normal' parts of the human life-cycle, are anomalies in institutions built around catering to the ill and the diseased. Commenting on, and correctly predicting, increases in the role of medical technology in diagnosis of disease, Samson writes:

Medical technology has served as a crucial determinant of the directions pursued in the development of biomedicine. While historically physicians diagnosed through the outward appearance of disease, perceiving the clinical manifestations with their senses, disease is increasingly apprehended and mediated through machines. (1999:15)

The photograph illustrating this text is titled "pregnant woman undergoing ultrasound examination" (1999:15). The ultrasound remains an archetypal image for medical diagnostic technology, and the image of a sonographer scanning a pregnant woman's belly, with both sonographer and woman looking smilingly at the screen, has become an icon of the technology that Nelkin and Tancredi, more than two decades ago, called the "new diagnostics" (1989:3). Colin Samson's introduction in his edited volume Health Studies: A Critical and Cross-Cultural Reader offers insightful analysis of biomedical constructions of health and the body, however even a critical thinker writing on the social construction of biomedicine manages to conflate pregnancy with disease.

In contemporary medical practice, a synchronicity between the human as machine and the machine as healer presents itself. A 1993 special issue of Scientific American celebrating the achievements of medicine began by illustrating the current state of the field with glossy photographs of a child in an oxygen balloon, a team of surgeons doing open-heart surgery, a colour scan photograph of the head, an ultrasound of a pregnant woman, a CAT scan, a man with artificial limbs playing basketball and the AIDS quilt. With the exception of the quilt, all of the pictures depicted machines as solving problems of the body. What was celebrated was the health of the machine-like humans, who owed their recovery to the powers of the machines, and of the doctors manipulating them. (Samson 1999:15)

Only the quilt is exempted from being a picture depicting "machines as solving problems of the body". However, ultrasound scans do not "solve problems" of pregnant bodies. There is no "recovery" being offered by the "power" of the ultrasound machine to a supposedly machine-like pregnant human. Samson is unconsciously reproducing and reinforcing the concept of pregnancy as a disease, and the ultrasound as a healer, rather than a tool with which to view.

Although we popularly think of the hospital as an institution for the healing of the sick, as Foucault tells ... it also produces sickness. (Samson 1999:9)

Pregnancy and birth in an Australian hospital environment produce and reproduce certain types of knowledge about maternal and fetal bodies. These knowledges are not completely canonic, and they are not uncontested, but they do permeate a woman's birthing experience whether she wishes them to or not. The "act of seeing, the gaze" (Foucault 1973:ix) is a crucial concept in understanding how a body comes to be known in a medical context.

... the clinician's gaze becomes the equivalent of fire in chemical combustions; it is through it that the essential purity of phenomena can emerge: it is the separating agent of truths. (Foucault 1973:120)

Discussing the gaze as a mode of domination (1973:39):

Foucault suggests not only that the way physicians 'look' (gaze) upon the body is a representation of the subjectivities of the perception of the physician, but also that such gazes manufacture and perpetuate distinctive power relations. Medical knowledge that is the product of the clinical gaze establishes an authoritative 'truth' about the body and the person. (Samson 1999:9)

Women's perceptions of their bodies are often subtly, and not so subtly, challenged by health care
workers. In my research, these situations often resulted in both the pregnant women and the health care worker taking on the definition of the health care worker. The following conversation took place on the postnatal ward between Marilyn, a day after her son's birth, and Lucy, a midwife.³

Lucy, checking through things on her chart: "Are you voiding OK?"
Marilyn: "Yes, I managed to go this morning".
Lucy: "It's not stinging when you pass urine?"
Marilyn: "No."
Lucy: "How's your blood loss?"
Marilyn: "More than yesterday, but not too bad. It's a sort of orangey colour."
Lucy, not looking up from her chart: "Yes, the reddy-brown is what you'd expect. Bright red at first, and then the red-brown."

By the end of this conversation Marilyn was calling it brown as well, rather than orange. Although Lucy hadn't actually seen Marilyn's vaginal bleeding, both of them privileged Lucy's definition of the colour over Marilyn's. The medical gaze in pregnancy defines: how much weight is acceptable, how much growth is acceptable, how much nausea is 'normal', how much discomfort should be felt without complaining, how a woman should and shouldn't feel about herself. Women start looking for the signs they are taught to look for, they start seeing themselves through clinicians' eyes.

A woman must continually watch herself. She is almost continually accompanied by her own image of herself. Whilst she is walking across a room or whilst she is weeping at the death of her father, she can scarcely avoid envisaging herself walking or weeping. From earliest childhood she has been taught and persuaded to survey herself continually. (Berger 1972:46)

The power that rests in the gaze is essentially the power to name, the power to define, and hence, reshape behaviours. Gisela Ecker explores the power of being able to define an-Other in an article which discusses award winning Swiss author Erica Pedretti's novel Valerie oder Das unerzogene Auge (Valerie or the Uneducated Eye). Drawing on the historical relationship of Swiss painter Ferdinand Hodler with his lover Valentine Godé-Darel, the Valerie of the supposedly uneducated eye is model, muse and lover of the fictional painter Franz, who draws and paints her as she is dying.

Valerie, who for a brief moment holds on to the illusion that she and Franz can enjoy a beautiful summer day, is summoned back. "Oh, you should see yourself now! Because of the laughing play of coloured shadows" ... says Franz ... instead of being grey, he says, they are "in fact saturated with blue and purple with orange reflections in the middle". Valerie feels reduced to "a question of patches of colour which are difficult to reproduce, of reflected light, of the drawing of lines". Similarly, she feels reduced by Franz' ideas of proportion ... [Franz tells her] "The totally uneducated eye is unable to perceive the colour and form of objects like the eye of the practiced person" ... and, "to grasp the proportions of an object which rises from a flat surface is impossible for an unprepared eye ...". Thus he questions her own right to see. (Ecker 1993:56)

Laying claim to 'the gaze' is laying claim to the right to define someone else's being, or indeed, non-being. Ecker translates passages from Pedretti's novel:

"I listen to his pencil on the paper and under his gaze that concentrates on detail I fall apart into pieces:

³ Quotes from my fieldnotes are presented as indented, but with the same type size and line spacing as the main text.
nose and lips and chin and forehead and eye and neck and hair and hand" and “She feels as if with every stroke of the pencil he would tear off a piece of the surface, her skin, piece by piece a piece of her life.” (Ecker 1993:63)

The gaze as it is used in art criticism is intensely gendered. Foucault overlooks gender in his discussion of the medical gaze, which the doctor/clinician, in a position of power, directs at his patient. The passive patient is always referred to with a generic 'he' in English translations of Foucault. Samson notes:

Although Foucault did not consider gender ... it is important to understand the clinical gaze as a masculine gaze, informed by the belief that observed social difference between the sexes are themselves rooted in nature. (1999:13)

The 'gaze', medical and aesthetic, constructed and grounded in eighteenth century European cosmologies, cannot exist free of gender. Its very foundation is one of production and maintenance of gender difference.

Men survey women before treating them. Consequently how a woman appears to a man can determine how she will be treated. To acquire some control over this process, a woman must contain and interiorize it. ... men act and women appear. Men look at women. Women watch themselves being looked at. This determines not only most relations between men and women but also the relations of women to themselves. The surveyor of woman in herself is male: the surveyed female. Thus she turns herself into an object ... (Berger 1972:46-47: italics in original)

Indeed, Kathy Davies argues that the gender of the role the doctor is coded as male, irrespective of the biological sex or social gender of the person occupying that role. Similarly, the gender of the patient is coded as female, irrespective of the biological sex or social gender of the patient (1993:119-120). The professional roles of nurse and midwife are archetypically female, to the point where if a man is a nurse, he is labeled a ‘male nurse’. Wife, as in mid-wife, is a term normally used exclusively for women, and male midwives are even more of an anomaly than male nurses (Walsh 2009b). The history of the medical specialisation of obstetrics is documented as more than two centuries of contestation between male obstetricians and female midwives (Ehrenrich and English 1973; Daly 1978:293-312; Papps & Olssen 1997; Murphy-Lawless 1998; McIntyre et al 2012).

In obstetrics, the patient body is always female (the maternal body) or infant (the fetal/newborn body). The obstetric gaze is an intensely masculinized gaze. Disconnection, in the form of objectivity, is valorised. The obstetric gaze is legitimated through biomedical discourse and medical dominance (Willis 1983).

In my fieldsite there were two identifiable types of midwife gaze. One, which I will label the hegemonic midwife gaze, is also legitimated through obstetric discourse. A hegemonic midwifery gaze values hierarchy, and demands obedience and deference of midwives to doctors. Professionalism in this mode of working involves following 'doctor's' orders, and remaining relatively emotionally disconnected from pregnant and birthing women. The other midwifery gaze, which I will call the non-interventionist midwifery gaze, is informed by the midwifery and active birthing discourses discussed in Chapter 4. The non-interventionist midwifery gaze is identifiable by terms such as 'empathy' and 'compassion', and is less comfortable with hierarchy. However, midwives who occupied this role at the Princess Grace did not openly challenge medical hierarchies. Obedience and deference of midwives to doctors was regarded a necessary evil within a system which could be improved upon, but this was rarely if ever
challenged through open confrontation. In this way of working, connectedness with birthing and pregnant women was seen as essential to midwifery professionalism. The non-interventionist midwifery gaze, although occupying valid, valued and acknowledged space within obstetric care at The Grace, was clearly in a subordinate relationship to the obstetric gaze, and operated with a workable but not always comfortable relationship with the hegemonic midwifery gaze.\footnote{For other examples of comparisons of different midwifery approaches within systems of maternity and birthing care see McCourt (2006) and Cheaney (2011).}

One of the aspects of the genderedness of the gaze in obstetrics is the conflation of the medical gaze and the aesthetic gaze. This has a long history in western medical discourse.

... it is not just the visible aspects of the body that physicians sought to unveil, but also the elusive quality that made a woman, especially in terms of aesthetic beauty. The mapping of women’s bodies ... represented an extension of the clinical gaze. (Samson 1999:14)

Commenting on eighteenth century European medical discourses, Jordanova writes:

There was a strong aesthetic component in medical writings on women in this period. Discussing the beauty of the breast in the same breath as its vital nutritive function was not undisciplined confusion but indicative of the conflation of social and physiological functions. The breast was good, both morally and biologically, hence its attractiveness and the resultant sociability between the sexes. Indeed the family and thus society were predicated on natural sociability, a quality which Roussel characterized as a major universal law. In these ways the physiological, the social and the aesthetic aspects of human existence were brought together. (1980:43)

Many women having babies at The Grace were aware, consciously or subconsciously, that they existed as subjects of both a medical and an aesthetic gaze. Body hair, a cause of concern and a topic of conversation with many pregnant women in my study, illustrates this. The following is a quote from my fieldnotes. Kerry was nearing the end of her pregnancy, and was about to have a vaginal examination. Barry, her husband, is with her. Liz is an obstetrician-in-training, and Michelle is a midwife working in the antenatal clinic.

Liz said she’d just call the midwife in. I’m not sure why Michelle was called in, it looked like chaperoning, which was a bit strange with Barry and I there as well. ... I moved away from the ‘business end’ and up towards Kerry’s head. Kerry said to Barry ‘you can stay’. Barry looked indecisive ...

Liz gave Kerry a sheet, and she took her shorts and knickers off under it with us all there. Liz gloved up, Michelle got a sachet of gel and wiped it on Liz’s fingers. Liz ‘parted the labia’, told Kerry that it would be uncomfortable but to try to relax. "I know that’s not easy."

Kerry looked at Barry and me and grinned, and said “all that bikini line and it turned out to be a woman”. She was referring to the waxing. We giggled a bit, and then stifled it like naughty schoolkids when Michelle and Liz didn’t laugh.

In the waiting room prior to this appointment, Kerry had told me how she had enlisted Barry to wax her bikini line the night before, so she’d be “neat for the doctor”. With her enormous pregnant belly, she couldn’t see, let alone reach, her pubic hair, and so he’d done it for her.

Partners often get this job. Defoliating is common topic of conversation among pregnant women. It came up again in a conversation I had with one of the senior male obstetricians, Dr Fox. He’d just seen a
woman, and in the presence of a midwife, given her a vaginal examination. I’d waited in the consulting room. As they returned, the woman made a joke about being glad she’d shaved her legs. After she left, I said "Is it just me, or is this hair stuff common?". Excitedly, Dr Fox turned to me, one of the few times I’d actually had his full attention.

Have you noticed it too? It’s bizarre. The pain these women inflict on themselves for my sake. I mean, I’d much rather they weren’t all hairy, but that’s not the point. They don’t have to do it, but they all do. They put themselves through agony.

Leg hair waxing or shaving not infrequently takes place in early labour, as one of the preparations for coming in to hospital. Sometimes aesthetic concerns go even further.

Annabella had been in labour for a number of hours. ... She was looking stunning, with her make-up just right. A little later when she was in a lot of pain I put a cold washer on her forehead. She pushed it away, telling me she didn’t want it because it would ruin her makeup for the first photo. [she asked for it back a few minutes later, because ‘it did feel good’]5

Berger comments that women, unlike men, occupy their own body with a constant awareness as to how it appears to others.

In the art-form of the European nude the painters and spectator-owners were usually men and the persons treated as objects, usually women. This unequal relationship is so deeply embedded in our culture that is still structures the consciousness of many women. (1972:63)

Even in labour, women "survey ... their own femininity" (1972:63). As discussed above, there were a number of medical gazes operating in my field site. The modes I have labeled the hegemonic midwifery gaze and the obstetric gaze correspond closely to Foucault’s model, in which the doctor is an all-seeing, all-knowing subject gazing on a passive, non-interactive, muted, objectified patient. In this mode the pregnant women is all but invisible, and is seemingly separated out from her condition (pregnancy). In The Birth of the Clinic, Foucault writes that in nineteenth century medicine 'disease' was reified as a concept, and separated out from the body of the person with the disease. "Paradoxically, in relation to that which he (sic) is suffering from, the patient is only an external fact; the medical reading must take him (sic) into account only to place him in parentheses" (1973:8). The doctor, in having to ‘see’ the patient through their disease, cannot see the whole patient, or the patient as a whole (1973:8).

For Foucault, the medical understanding of illness was bound up with the identification of body parts and functions through a form of ‘mapping’ on the anatomical atlas ... Anatomical drawings clearly followed from the idea of the body as a transparent object. ... As represented in anatomical drawings, the body became something that was defined as separate from the person. The goal of medicine, in Foucault’s view, is to ‘subtract’ and ‘abstract’ the patient, who becomes ‘an external fact to the disease’. In medical encounters, the persons of the doctor and the patient are simply ‘disturbances’ that must be brushed aside in order that the complexities of the disease entity can be apprehended... observations, which eventually form the basis for the medical categorisation of illness, ignore the individual patient as a person. (Samson 1999:9)

The separation of ‘patients’ from ‘diseases’ also entails a separation in the relationship between patient

5 My fieldwork was undertaken prior to the introduction of smart phones. In Australia, as in many parts of the world, smart phone technology and selfie culture have introduced new aspects to visual representations of birthing. See: Lupton (2015); Nash (2012); Leaver (2015) and Wills (2015).
and clinician. Taussig critiques the denial of "human relations" in clinical encounters, arguing that in "in our standard medical practices... social ‘language’ emanating from our bodies is manipulated by concealing it within the realm of biological signs" (1980:3). Reification of the patient, he argues, separates patients and doctors from each other as human beings, to the detriment of clinical care: “our modern clinical setting perniciously cannibalizes the potential source of strength for curing which reposes in the inter-subjectivity of patient and healer” (1980:10).

Ecker equates separation with lack of empathy and compassion.

Franz uses a ‘Dürerschiebe’ [drawing device: a screen with a grid] between himself and the model "as if it were urgently necessary to separate", thinks Valerie. And towards the end the narrator mentions Franz' "pleasure in every successful stroke, a pleasure in the most cruel representation, if only it is correct, if it reproduces the impression, this satisfaction and proof of mastery". (Ecker 1993:56)

Health care workers working within an interventionist paradigm worked with extensive degrees of physical and emotional separation between themselves and pregnant and birthing women. Wolf equates lack of empathy and compassion with poor quality health care and poor medical outcomes (2001:18).

... when you listen to women talk about birth, their horror stories about the medical profession are about something deeper and more fundamental than too much intervention; the thread that unites many is the experience of a telling, subtle, but distinctive lack of compassion. ... to be so dispassionately cared for was dangerous. (2001:17)

El-Nemer et al (2005) also see medical lack of empathy, in which women are not taken account of in the birthing process, as providing less than optimal care. 6

... a narrow emphasis on the technical in the hospital setting failed to provide best care for women and babies ... the practices of staff observed in this setting seemed to be predicated on a certain way of knowing, and therefore seeing, childbirth. This was a knowledge that constructed birth as a mechanical, measurable, and predictable process. It was a construction in which the woman herself was absent, and which she did not therefore need to comment on, contribute to, or be taken account of. (2005:2-3)

Obstetricians and midwives working within this paradigm looked at test results, figures and records, frequently to the extent that they would talk to the woman’s file rather than the woman. 7 Josie, a recently qualified obstetrician, arrived to examine Lisa, who was 28 weeks pregnant. Lisa had a medical condition which had to be closely monitored during her pregnancy. The midwife and a medical student had already taken Lisa’s blood pressure, and Lisa had been sitting in the examination room for ten minutes or so waiting for Josie (in addition to three quarter of an hour’s wait in the waiting room). The following description of the clinical encounter is taken from my fieldnotes.

Josie walked in, and didn’t look at Lisa. She looked at her file, and talking into it, said "so you're 26 weeks are you?" Lisa didn’t disagree [even though she was actually 28 weeks pregnant]. Marie [the midwife] filled Julie in on Lisa’s blood pressure. Josie asked Lisa, still with her back to her, "Are you still on any medication?" Then she named [a medication]. Lisa said yes, [even though that wasn't the name of the medication she was on]. ...

At this stage Lisa was sitting on the chair next to the bed, and Josie, still with her back to her, was consulting her notes on the notes stand. Still without looking at Lisa, she asked "No

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6 See also Davis-Floyd (2003:xiii), Walsh (2009a:486); and Walsh & Evans (2014).
7 See also Baxter (2009) and Nishizaka (2013).
headaches, anything like that". "No". Still at her notes, Josie directed Mark, the medical student to have a feel of Lisa's tummy.

Without any reference to Lisa, Josie said to Mark: "What did you find?" Mark said he needed to get the tape measure. He did, and measured 30 cm. ... Josie went and got the "new sonic monitor", and said to Marie [the midwife] as she was putting it on Lisa "This is the same as the one we've got, but it hooks up to a printer".

Josie listened for the baby's heart rate, but didn't tell Lisa what it was. Josie asked Lisa: "It's your first baby, isn't it?" She took the tape measure, and did a measure. Mark said he wasn't really sure where the fundus [top of the uterus, where 'the measurement' is taken from] was. Josie said she measured 30 cm as well. There was no feedback to Lisa about what that meant.

Josie had a feel of Lisa's tummy, saying to her she was "just checking where baby's head is". She helped her up off the bed, and said "Let's see you again in a fortnight."

In the following case, this attention to the notes rather than the person resulted in a different type of misunderstanding. Jackie Fisher, the doctor, was seeing Susie, who was thirty-two weeks pregnant with twins. David, the midwife, had already taken Susie's blood pressure.

Jackie: "What did you get, David?"

David: "I got 135 over 80"

Jackie wrote it down, and Susie asked "Is that good?" There was no reply, as Jackie had her nose in the file.

Susie said the babies were really beating her up [ie: kicking a lot]. Jackie only half heard, and turned around in concern and dismay: "Who's beating you up?" David, Susie and I laughed, and Susie said “the babies". Jackie laughed a relieved laugh and went back to ignoring Susie and reading the file.

In this case, the misunderstanding was cleared up. In a number of other situations I observed, inaccurate information was recorded by doctors who were not listening or responding to the women.8

The mode favoured by less interventionist practitioners, often but not always utilising a non-interventionist midwifery gaze, was more interactive. In this mode, the woman's body comes to be known through an interplay of communication between an active, speaking, listened-to 'patient' and her health care worker. Compare the following clinical encounter between Rennai and Jasmin with the one above between Josie and Lisa. Jasmin, who is pregnant with her fourth child, has a history of gestational diabetes in her previous pregnancies, and has again developed gestational diabetes. Like Lisa, Jasmin attended a monthly 'complications in pregnancy' clinic. Also like Lisa, she was 28 weeks pregnant at this particular visit to the antenatal clinic. Rennai is a midwife working in the midwives

8 Once a 'fact' was entered in 'the file' it became sacrosanct information that could not be challenged. 

Taussig also gives an example of this, where an unconfirmed, tentative opinion became a definitive diagnosis with the stroke of a pen in a patient's notes (1980:9). McCourt comments that patients' notes, often used as archive sources for research into quality of care, may not give researchers the full picture (2006:1308). Even more worryingly, in some cases medical notes used as data sources in research may well be delivering inaccurate as well as incomplete information.
clinic, which provides continuity of antenatal and birthing care. Rennai took a few minutes to read Jasmin's file before she came out to the waiting room to get her.

Rennai: How've you been? How's the finger pricking going? [blood testing for her sugar levels that Jasmin has to do twice a day]

Jasmin: OK. It's higher this time than last time, still within the range, but higher.

Rennai: You're due April 3rd, that makes you 28 weeks. Does that match with where you think you are?

Jasmin: Yep [yawning - there was lots of yawning from Jasmin the whole way through - she said later she's pretty much tired all the time].

Rennai: How's it going at the diabetes clinic?

Jasmin: They wanted me to come once a fortnight, but it's only on Tuesdays, and I've got all the kids home with me Tuesdays, so I'm only going once a month. It's OK.

Rennai: And the medical complications clinic? [discussion about what had been happening at the med comps clinic]

Rennai: How's the nausea?

Jasmin: Fine

Rennai: Heartburn?

Jasmin: Better

Rennai: Good [surprised]

Jasmin: Well I can't eat nothing. [she explained she'd now gone on to a diabetic diet, which was horrible, but her heartburn had stopped] ....

Rennai: Do you have any swelling, are your ankles OK?

Jasmin: No, that's fine.

Rennai: It hasn't been too hot, has it?

Jasmin: [talked about how they'd got a pool for the kids for Christmas, but had hardly been able to use it]

Rennai: Are you feeling a lot of movement? Is the baby active?

Jasmin: Yes

Rennai: Any patterns?

Jasmin: No, not really.

[Rennai then took Jasmin's blood pressure, wrote it down. There was a longish pause while she referred to Jasmin's file]

Rennai: [turning back to Jasmin] Your blood pressure was good.

Jasmin: It always is.

[Rennai helped Jasmin up on to the bed to 'have a feel of the baby']

Rennai: [feeling Jasmin's tummy] Ooohh, the baby's grown since last time.

Jasmin: It's in a funny position, it's like I'm bloated on one side.

Rennai: Have you had any back ache this time round?

41
Jasmin: No. I'm starting to get a sore hip. I did with Toby, too.
Rennai: Are there any particular positions that are painful?
Jasmin: Just when I've been sitting down.
Rennai: [still feeling Jasmin's tummy] It's hard to work out where this one is. Is this sore, with all this poking and prodding?
Jasmin: No, it's fine.
Rennai: Where are you feeling most of the movement?
Jasmin: All over.
Rennai: There's a little head.
Jasmin: [surprised] Can you feel things like that, can you?
Rennai: [Rennai describes it, and moves Jasmin's hand to where she has felt the baby's head so she can feel it too.]
Rennai: [measuring her] 27 cms. That's good, that's wonderful. You've certainly grown since last time

In a non-interventionist mode of care, knowledge in the sense of getting acquainted and coming to know the woman as a person is considered to be crucial to quality of care. Along with knowing her medical and birthing history, knowing about her family, her home situation, her personality and disposition are seen as important, and as being significant to a woman's medical experience. In a more interventionist mode of care, knowledge is framed almost solely as 'information', and this type of knowledge is privileged over relationship-type knowledge.

An interventionist mode of interaction only allows space for problems which can be 'solved' by the health care worker. Other problems, outside the domain of the practitioner, are not dealt with, even with they are directly concerned with and impact upon a pregnant women's well-being.

In the waiting room, before her appointment, Kim talked to me a little about the lousy week she'd been having. She was a single mum with a primary school age daughter. Her relationship with Steve, the father of the child she was now pregnant with, was extremely rocky. She was concerned about how he was acting with her daughter, and felt that he was too strict and cranky with her. He had not been violent, but she was worried that it might come to that. She'd been to visit her brother last night, "had a good cry", and asked his advice about the situation. Steve wanted to move in with her, but she was having her doubts. She said she was going to speak to someone at the single parents support group.

A midwife came out to call Kim into her appointment with the obstetrician, Pauline Flanagan. The midwife took Kim's blood pressure. Pauline asked what it was. 100 over 60. Pauline said "That's good." Kim said "That's not so bad, after last night ..." There was an uncomfortable silence, and Pauline turned to the notes. Eventually the midwife asked: "what happened last night?" Kim said tentatively "Oh, the pregnancy hormones ... I got a bit weepy." Pauline and the midwife made soothing noises, and Kim got the message not to take it further. Pauline continued
the examination, and then wrote some notes in Kim’s file. She finished writing, turned around to look at Kim, and asked "How's it going, are there any problems?" Kim said she had pains up the sides of her pelvis when she coughed. She showed Pauline where with her hands. Pauline talked about the back being weaker with second pregnancies, and the visit continued.

Kim understood that when she was being asked if she had any problems, her care giver was not interested in the type of problems Kim had talked to me about in the waiting room. Shortly after this visit, Kim terminated the pregnancy. When the antenatal clinic rang to ask why she didn’t show up for her next appointment, she told them she had miscarried.9

In Geraldine’s case, there were physical pains. She had been in and out of hospital since she was 27 weeks pregnant, having painful premature contractions. A number of doctors had been consulted, and eventually one of the most senior obstetricians had been brought in. Even he was puzzled. He called in a psychiatrist. Geraldine was furious about it.

He thinks I’ve got problems at home. He thinks I just want an excuse to be in here. I don’t want to be in here, I’m missing home, my kids need me. You think I want to be in here? He thinks it’s my husband or something. Just because he can’t find any answers. The psychiatrist looked at the monitor and said of course it’s real. She could see it immediately.

Robyn, one of the midwives on the ward who had been caring for Geraldine, felt that Geraldine’s anger was justified. "They always end up blaming the woman if they can’t find an answer."

Health care workers operating within a non-interventionist framework actively worked at reinforcing women’s knowledge, and were swift to acknowledge a woman’s own expertise. The stated aim of this was to reinforce, rather than undermine, women’s confidence in their own parenting ability. When Marilyn bought Zac in for his six week check up, she saw Kate, a GP with her own practice who also worked at the Grace in the postnatal check-up clinic. Kate came in with two medical students in tow. One of the first things she said to Marilyn, who had four other children, was "you’ve had five, so you know more than me".

A practitioner working from within a non-interventionist framework is less likely to feel pressured to come up with answers for everything they are confronted with. There is an acknowledgement of physical symptoms and discomfort and/or emotional distress, even when they fall outside the scope of the health care workers’ role or ability to deal with.

Seren was debriefing with Bridget, who had wanted to deliver in the birthing unit but had ended up being induced and then having an emergency caesarean. Bridget was in her late thirties, and said that she was keen to have a second child fairly quickly "because of her age". Her main concern was whether she would need another caesarean or not. Seren spent a lot of time talking the birth through with Bridget, and Bridget kept coming back to whether she’d be

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9 I had recorded in my fieldnotes that Kim had miscarried. I ran into her a few months later, outside of the hospital, and we had a coffee. Kim told me then that she had terminated the pregnancy, but that she hadn’t wanted to tell “the hospital” that.
able to have a vaginal delivery next time. She said the thing that concerned her most is that when she goes to have another child a lot of fears will come up about the birth because of what happened this time. Seren said that there was nothing to indicate that she'd have to have a caesar again. The reason for the section was that the baby was in distress, not that there were any problems with her. She had dilated, things were progressing, just extremely slowly. There was no reason why she should have problems next time. Bridget grinned and said "of course, there's no guarantees, but at least I can try".

Seren told me later that she felt that by allowing Bridget time to talk about her concerns, and by acknowledging them, Bridget had been able to have "the space to come to terms with something that could have been a major source of anxiety in her next pregnancy". This type of debrief is understood in non-interventionist midwifery as an integral aspect of preventative caring, a crucial part of normal maternity care (Robertson 2004:179-80). Practitioners operating from a more interventionist mode treated similar queries from women with an offhanded "you should be right" or "we can talk about that when you come back pregnant again".

This off-handedness is experienced by many women as profoundly insensitive. Feminist literature, nursing mothers coffee mornings, websites, playgroups, in fact any forum where women get together and talk about their experiences of pregnancy and birthing abound with stories about insensitive obstetricians. One of my stories involves being six weeks pregnant, having had three previous miscarriages. I had round-the-clock morning sickness, and had lost eight kilograms since becoming pregnant. When I told the obstetrician, a senior professor who I had been informed I was very lucky to be seeing, that I was throwing up round the clock, couldn't keep any food down, and had lost eight kilos in the last four weeks, he looked at my tummy and said, offhandedly, "oh well, that's good, you can afford to lose some weight." One of the women Naomi Wolf interviewed told her: "I complained to the doctor that the drugs made my breasts painfully big. He told me 'Don't complain. Many women wish they had that problem'." (2001:39).

This insensitivity, objectification and inappropriate sexualisation keeps clients/patients at a distance. Hegemonic midwifery and obstetric gazes involve high degrees of separation and de-contextualisation. There is a perceived need to categorise and define a woman's 'symptoms', and an intolerance of anything unrecognised, or of things which fall outside the accepted categories of diagnosis. There is little eye contact, and physical contact is confined to the absolute minimum necessary for clinical procedures.

This was in marked contrast to the non-interventionist midwifery gaze. Pregnant and birthing women came to be known as complex members of contextualised, interconnected networks of family, friends and community. "Every pregnancy is unique, at least to the woman who is pregnant" was repeated so often as to almost be a slogan. The maternal body is not separated from the women whose body is pregnant, nor was it separated as strictly from the health care worker. This interaction involves eye contact and physical touch: a hand on an arm; sitting on the edge of a bed and putting a hand on
her leg while explaining the procedure for the epidural and emergency caesarean section a woman’s about to have; an automatic hand under a heavily pregnant woman's shoulder to help her sit up off an examination bed.

Although most health care workers could be described as operating in predominantly one mode or the other, the majority had access to and on occasions used both modes of interaction. For even the most interactive of midwives, there were occasions when professional separation was seen as 'necessary'. And even the most separated of obstetricians or the most macho of midwives showed occasional points of connection with their 'patients'.

mutings

Constructions of individuality privilege certain aspects of personhood, and mute others. Boundedness is valued and reinforced, fuzziness of boundaries is acknowledged but devalued. Muting involves both not-saying some things and there being no way of saying others. Muting involves both the unsaid and the unsayable.10

Rennai talked to Chris a few hours after the birth of her daughter. It had been a relatively uncomplicated 'normal' first delivery, neither excessively long nor particularly short. Rennai asked Chris if the birth was anything like she expected. Chris just shook her head. Absolutely not, her wide eyed look said. Her mouth opened, but no sound came out. Rennai gave her time, and a couple more prompts, but she wasn't ready or able to talk about it. Talking to Rennai later about Chris’ reaction, I asked if it was unusual.

Not really. Birth is really big, it’s a big thing. Nothing really prepares you for it. And we don’t have words to describe exactly what it’s like. If you’ve been there you know, but there’s some things you can only talk about to people who have been through it. And the first time, sometimes women don't have the words to talk about what happened to them. You have to give them time, come back and debrief with them later.

Midwives on the postnatal ward often commented that there was little time to actually talk to the women ‘now’. According to them, ‘in the past’ women stayed in hospital longer, and midwifery staff were better resourced and working under less pressure. Many experienced midwives felt that the lack of time to just sit with women was detrimental to their postnatal care. My fieldwork period on the postnatal ward coincide with a period of work experience for Ally, who was training to be a chaplain. The midwives were extremely positive about our presence, and would often line up women for us to

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10 The concept of muting I am using stems from Edwin Ardener's idea of 'muted groups' (1975). Ardener used the term muted as an adjective, I find it useful to use it as a verb. Deane Fergie's articulations, early in this project, contributed to my utilisation of the term here.
talk to. As I arrived for night shift one night, Jen said: “I was hoping you’d be in tonight. You’d better go and sit with the woman in 12b. She’s really withdrawn, and she was having a cry before. I told her what you were doing, and that you were interested in birth stories. She needs someone to talk to.”

Another time, when Ally and I arrived for the same shift, Sue greeted us with: “Oh good, you’re both here. Let’s see, I think 14a could use the chaplain, 15 the anthropologist. And whoever gets finished first might like to pop in on the woman in 9.”

Ally, a mother of four children, talked about a conversation she had with her supervisor when she told him she wanted to do her hospital work experience in maternity.

He said why maternity? Why didn’t I choose something where there was more drama, more happening, like oncology. He said I should go where things really happen, like people dying of cancer. As if birth isn’t dramatic! Some people focus on death, and forget that the church is about life, as well ...... and they don’t realise that childbirth IS about death ... life and death are right next to each other during birth.

Ally and I occasionally swapped notes in the lunch room, and wrote each other up in our fieldnotes.

Ally seemed focused a lot on pain, and on how it wasn’t dealt with, that women were expected to move on and get over it and weren’t allowed to ‘admit’ that childbirth was a cruddy experience. She said it’s like macho, but with women. I said that I called it the ‘machista’ aspect of motherhood [from Latin American feminist discourses]. She got excited by the term, and said she’d been looking for something to call it. Now it had a name.

There were a number of things that 'didn’t have a name' in my fieldwork. The two that I will attempt to describe involve indications of postnatal depression and how sexual abuse can affect the experience of childbirth.

For many women who experience postnatal depression, there is enormous relief at having the problem named. Narelle talked about her doctor diagnosing her with postnatal depression when her first child was nine months old. I asked her how she felt.

Relieved. Sooo relieved. I wasn’t mad, after all, I wasn't imagining it. I felt like such a bitch, what I was putting Craig [her husband] through, what I was doing to Sean [her baby]. I felt like I was being such a bad mother. I didn’t like the idea of being sick, but it was better than being mad or just an unmitigated bitch. And at least I could start doing something about it. ... I hated the idea of taking drugs [anti-depressants], I felt like a failure, but at the same time there was

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11 These talks were very special, and were useful to me as background, however it was inappropriate to use these as ‘data’ because of the ethical issues involved around informed consent. Immediately after the birth of a baby is not the time for a woman to decide if she wants to participate in a research project. I trusted the midwives’ judgement in suggesting I talk to particular women, but I have only quoted from these birth stories if I saw the woman again after her release from hospital, explained the project in full, emphasising that there was no ‘expectation’. If she was happy to participate in my project, I then carried out a follow-up interview. The only birth stories from immediately after the birth I quote are those in which I had contact with the woman before the birth, had gained her consent to participate in my project, or where I followed up at a suitable time afterwards, and gained appropriate consent. See also El-Nemer et al for a discussion about gaining appropriate informed consent for ethnographic research among birthing women (2005:3).

12 See also Wolf (2001:5) for a discussion of the danger of silences and myths in maternity care.
something that could help change the way things were.

For many people there was a stigma attached to being labeled with what may be regarded as a psychiatric illness.\footnote{This has changed since the time of my fieldwork. In the late 1990s/early 2000s, most women were reluctant to openly discuss a diagnosis of postnatal depression. Although there is still stigma attached to mental illness in general, and postnatal depression in particular, in 2014/2015 in many areas of Australia these are much more commonly and openly discussed. See Cunen et al (2014) for an overview of more recent midwife led PND interventions.} A midwife at The Grace, talking about the birth of her first child, over a decade earlier at another hospital, was furious when staff suggested she might be at risk of postnatal depression.

They bought the baby to me, and I looked at him. The first thing I said was “Gawd, you’re an ugly little thing, aren’t you?” Well, he was. They all are. They must have recorded that on my file, because two days later a midwife spoke to me, and said they wanted me to talk to the psych, that because I hadn't bonded well with my baby, I might be a PND risk. Can you believe it? Here I was, happily breastfeeding away, loving him, and just because I said he was ugly when I first saw him they thought I couldn’t bond.

One of the domiciliary midwives at the Grace, Shelly Brennan, specialised in postnatal depression. She was piloting various strategies to identify women at risk and offer intervention in the form of counseling. Like most of the midwives and many of the obstetricians, I found her work innovative and worthwhile, and yet there were levels of real unease. Shelly was attempting to break through some unspoken taboos, and it made many people, myself included, feel occasionally uncomfortable. A frustration for some of the midwives was that they often 'knew' women who would be potential risks for PND, but unless there were clinical indicators it was difficult to intervene. I found myself picking up on their scheme of labeling: a certain tone of voice, a certain attitude in a woman, and I would think 'ah, there's one for Shelly'.

Jen was waiting for me when I came out of Karen Thomas' room. I'd been in there for two hours, and while I felt really sad for all her anger, I also felt drained and bombarded. Jen sidled up to me while I was making a cup of tea and said casually, 'so, what do you think of 14a?' I couldn’t say what I really thought, so I answered, just as casually, 'has Shelly Brennan been to see her at all?' Jen pounced 'Ah, so you think so too.' She ushered me into the tea room and shut the door.

I spent the next hour with Jen and another midwife talking around the issue of how to suggest to Karen, without offending her, that she have a talk to Shelley. Jen told me that Karen had screamed "abusively" at her husband the night before, and yelled at the doctor who suggested she might want to talk to a social worker. It was 'clear' to all the midwives who worked with her that she was a prime candidate for postnatal depression, just as it was 'clear' to me. Our discussion was full of nods and ums and ah's and gestures, revolving around half sentences with unfinished endings:
... she was so angry with him ....

..... yeah ...... and he wasn't THAT bad ....

hmmmm ...no, not really .... [sigh]

.... have you seen her with a fork ...

hmmmmm...stabs at her food ....

.... brushes the baby away ....

[joint nods and hmmmmms]

.... gets angry at the baby, as if it's his fault ....

.... doesn't want to cuddle him ....

They did eventually send Shelley to see her. Karen was offended with the midwife who suggested it and consequently refused to talk to her. The midwives 'knew', and in this case I 'knew' as well. Like the midwives, I was somehow embarrassed at this 'knowledge'. Maternal anger is especially taboo (Wolf 2001:5), and there is strong reluctance to broach it as a possibility. I have no idea how accurate our assessments were in most cases. In this case, however, I ran into Karen again more than a year later, and she told me that she was only just coming out of severe postnatal depression.

Another taboo area was the way in which a history of sexual abuse and/or rape often showed up in labour. Experienced midwives knew about it, but it was rarely talked about. Some sexual abuse victims relive their abuse during their first labour, sometimes with terrifying flashbacks. Their behaviour can be regarded as hysterical. On labour ward one night:

There was shrill, high-pitched screaming "no, no, no" coming from room 14. Sue (a trainee midwife) looked at Leanne, raised her eyebrows and asked "teenager?" Leanne just shook her head. "Sexual abuse?" I asked. Leanne raised her eyebrows at me. "Sounds like it." She seemed surprised that I knew about it. ... I asked if it happened a lot. She said "Oh, not a lot, but regularly enough. A lot comes out at birth."

In a study of birth experiences of previously sexually abused women, Kitzinger found that more than half of them recalled their abuse during a variety of medical procedures, of which "childbirth was often particularly significant" (1992:219).

Women who have suffered some form of sexual abuse in their life ... may find many of the procedures and conditions imposed during labour extremely threatening. Being asked to lie down in a submissive position may be confronting, and elicit painful memories. Internal examinations may be intolerable for these women. Any handling of their bodies, particularly in the genital area, may cause acute anxiety and distress. Victims of sexual abuse are unlikely to reveal their history to caregivers, but their plight may be suspected by the empathetic midwife. Every woman should therefore be regarded as a possible victim and treated with respect, gentleness and reverence in conditions that provide privacy and protection during labour and birth. Counseling is often this woman's primary need, not invasive, insensitive procedures applied because of 'the protocols'. (Robertson 1994:116)

Robertson advises that given that, similar to most western countries, around 25% of Australian women have experienced rape or sexual abuse, current Australian hospital protocols about internal
examinations should be rewritten to avoid trauma to labouring women with a sexual abuse history (2004:32). Few GPs and obstetricians in my fieldsite seemed familiar with the phenomenon, and information was not made available to pregnant women to prepare them for this possibility.  

Many of the contestations between obstetric and homebirth/midwifery discourses about what is good birthing practice revolve around midwifery and homebirth discourses challenge to what is seen as denial and muting, within obstetrics discourses, of the negative aspects of childbirth: fear, pain, risk and danger. Western biomedical obstetric discourses do not accept many of the messy aspects of birth: birth is sanitised. At their most controlled, birthing women's bodies were shaved, enema-ed and stirruped into niceness (Kitzinger 1982). Although these areas of control are no longer so rigidly applied, other areas are tightly policed. Fetal and maternal death, reduced to microscopic proportions in the last two centuries, are factors to be battled against within obstetric discourse. To 'accept' a certain level of maternal and neonatal mortality, as Robertson (1994:101-2) suggests, is unacceptable in biomedical maternal management.

Some areas of death and loss cannot be avoided, but these are still seen as better when they are controlled. Fetal abnormalities are strictly monitored: if a child is not going to survive, there is pressure to control the path of its demise, rather than 'allow nature to take its course'.

Within western biomedicine, knowledge is the key to control: if something is to be controlled (eg: maternal and neonatal morbidity), it will need intervention, for intervention to be effective, the phenomenon needs to be thoroughly understood. In the following sections I discuss ways of understanding and of coming to know in a hospitalised maternity environment. Firstly, I talk about what I call medical dismemberment: attempting to understand the whole by dissecting it into smaller parts. Secondly, I explore modes of monitoring the maternal body.

**medical dismemberment**

The restraint of clinical discourse ... reflects non-verbal conditions on the basis of which it can speak: the common structure that carves up and articulates what is seen and what is said.' (Foucault 1973:xxix)

Just as blood is broken down into its constituent parts (red cells, white cells, platelets) to make it more easily understandable, knowable and controllable, so the maternal body comes to be known and understood in an obstetric environment by being broken down into constituent pieces. Feminists of both the scholarly and activist varieties have been articulate in expressing their discomfort with the dismemberment of the maternal body. Here again there is a conflation of the medical and the aesthetic: think of Picasso's paintings and the reaction they can stir up. Dismemberment of the female body is

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14 There was no lack of published material at the time of my fieldwork. See, for example, Kitzenger (1992); Robertson (1994 & 2004); Christensen (1992); Chaffen (1993); Parrat (1994); Rose (1992); Courtois & Courtois Riley (1992) and Walton (1994:119-29). Many thanks to Vicki Bennett for pointing me to much of this literature. Since then, there have been further publications, including two mainstream/general public books: Simkin & Klaus' When Survivors Give Birth (2004) and Sperlich & Seng's Survivor Moms (2008). In 2009 the journal *Midwifery Today* ran a special issue “Healing From Sexual Abuse and Trauma” (vol. 90).

15 See Chapter 7 for a discussion of genetic terminations.
critiqued as being damaging and disempowering to women. It is argued that it is fundamentally damaging to a woman’s sense of self to be asked to view and to experience herself as a breast over here, a set of legs there, a vagina somewhere else. 16

Dismemberment of the female body has a long tradition in European aesthetics. Berger comments on the disjuncture in Ruben’s painting of his second wife where the upper and lower parts of her body are almost imperceptibly, but nonetheless distinctly, out of alignment. "Its coherence is no longer within itself but within the experience of the painter" (1972:61). He goes on to describe Dürer’s concept of the female perfection:

Dürer believed that the ideal nude ought to be constructed by taking the face of one body, the breasts of another, the legs of a third, the shoulders of a fourth, the hands of a fifth - and so on. (Berger 1972:62)

Commenting on the use of perspective in European art, Berger notes that "Everything converges on the eye ... the visible world is arranged for the spectator as the universe was once thought to be arranged by God" (1972:16).

In the art-form of the European nude the painters and spectator-owners were usually men and the persons treated as objects, usually women. This unequal relationship is so deeply embedded in our culture that is still structures the consciousness of many women. They survey, like men, their own femininity. (1972:63)

Again there are resonances between the aesthetic gaze and the medical gaze. As Samson notes, one of the major gaps in Foucault’s theorizing of the medical gaze is gender blindness (1999:13). This allows Foucault to overlook the obvious: that the clinical gaze is a feminising/infantilising gaze. Irrespective of the social gender of the doctor or the patient, the doctor/spectator gaze is male, and the sight (site) of the patient/model is feminized. An integral part of the medical gaze, medical dismemberment is the ultimate in individuation, separating the maternal and fetal body from each other, and allowing clinicians to separate themselves from (bits of) their patients.

According to Foucault, anatomical dissection introduced a new dimension of knowledge construction into western medical discourse.

By means of physical examination, hospital (rather than home) treatment and anatomical dissections, the body became a material object that could be worked on by the emerging professional class of physicians in Europe. The anatomical dissection was perhaps the most crucial innovation in the development of biomedical ideas concerning the body. (Samson 1999:5)

Foucault points to the irony of attempting to understand a body and its "chain of connection" by "carving" it up and reconstituting it (1973:29). Understanding of the human body was, in the renewed nineteenth century enthusiasm for dissection, based on a singularly materialist perception of what it was to be physically human. The dead human body was seen to be able to teach us about the living body. "Pathological anatomy was given the curious privilege of bringing to knowledge, at its final stage, the first principles of its positivity" (Foucault 1973:124).

Women’s bodies as objects of medical enquiry as well as of sexual desire became the focus for a physiological literature which expressed a refined aesthetic of women’s natural beauty, and found in their bodies an expression of their social condition. To understand women was thus a scientific and medical task ... it was for this reason that when Jules Michelet wished to comprehend the condition of women in

16 See also McNay (1992), Hekman (1996) and Papps & Olsson (1997).
mid-nineteenth century France, his first port of call was the dissecting room, and his reading was anatomy
texts. In the cadavers of women, Michelet saw their lives revealed and explained before his very eyes. (Jordanova 1980:57)

As Jordanova (1980) points out, there is something about medical dismemberment that is intensely
paradoxical. Stated baldly, the 'logic' is that the best way to learn about and so improve the life and
health of a human being (a living, walking, talking human being, a human being able to express
themselves, to feel joy and to feel pain), is by cutting up a dead human being. The best way of
understanding the whole, is by breaking it up into pieces.

This is as applicable to western biomedical knowledge as it is practiced in Australia at the beginning
of the twenty-first century as it was in France in the middle of the nineteenth century. An illustration of
this is a gynaecology teaching program, which trains medical students and trainee midwives in the
provision of women-friendly pap smear and vaginal examinations. The teaching program is run
independently, as a cooperative, by the women who teach in the program. The cooperative contracts its
teaching services to the medical teaching universities in its state. In a teaching session, students view a
video and a live demonstration of a vaginal examination, and then work in pairs, with a pair of tutors, to
carry out the procedure themselves. They are taken through a role play of an interview with a female
client, and a three-stage clinical procedure, involving abdominal palpation, vaginal examination using a
speculum, and the 'bimanual', a vaginal examination using two (gloved) fingers. Medical students role
play the doctor, and tutors role play the client. Students undertake a vaginal examination of the tutor:
teaching is done, literally, through the speculum.

This program celebrated its twenty-first year of teaching during my fieldwork period. Prior to the
program being instigated, vaginal examinations were taught on dead women, on anaesthetised
women, or on plastic models. Teaching sessions work on use of appropriate language, appropriate
ways of negotiating pain and consent, and aim at focusing students' attention on the woman on the end
of the speculum who, tutors assert, should be taken into account in the clinical encounter. Students' reactions to these teaching sessions indicate that this is an extremely radical departure from their usual
clinical teaching sessions. At every student debriefing following the teaching sessions, tutors are told by
students how valuable the session has been in helping them relate to 'the patient' as 'a person'. Each
new batch of students commented that in their experience, learning to relate to patients/clients as
whole people is overtly and covertly discouraged in their medical degree.

It is not only medical students who are taught to know the patient body as a disconnected body.
Reminiscent of Dürer's understanding of the female body, pregnant women are asked to learn about
their own bodies in preparation for a 'natural' - ie vaginal - birth by learning about their body in pieces.

\[27\] I worked as a tutor in the program for four years, and was working in the program at the time of my fieldwork.
\[28\] Not always with their knowledge or consent.
\[29\] Comments away from the feedback session, out of earshot of tutors, are occasionally quite derogatory of the tutors and the
program. There is apparently fierce argument amongst the medical students over the program, with many seeing it as very
valuable, while a smaller number are quite confronted and/or offended by it.
\[30\] Subsequent to my fieldwork, I worked as a lecturer and supervisor in an undergraduate medical program, teaching health social
science and medical anthropology. Medical students often struggled with the tension between the way they were expected to learn in their 'mainstream' curriculum, and what was being required of them in our curriculum.
Antenatal education classes were offered to all women birthing at the Princess Grace free of charge, and were strongly recommended for women having their first baby. Classes were one night or afternoon a week for six weeks. Partners or support people were encouraged to accompany a pregnant woman, and most pregnant woman who attended had a husband or boyfriend in tow. Occasionally mothers, sisters or friends come along when there is no partner, or when the partner is reluctant or otherwise engaged. For those who already have children there are refresher classes. For those who wish to have a birthing unit delivery, there was an additional 'birthing unit' session. There is yet another session on pain relief run by a physiotherapist. The role of the antenatal educator is to prepare women to birth 'as well as possible' within a hospital environment.

As a consumer, Naomi Wolf is cynical about antenatal education in the USA, suggesting that the rationale for antenatal classes is to make mothers compliant with hospital policy. "The classes were sweet - and seemed educational; it seemed like a fun, tender, silly rite of passage. What I didn't realise, was that under the surface, there was a hidden agenda" (2001:74). "I was being inducted into a medical system that had very clear expectations of me - but little room for me to negotiate my expectations of it" (2001:13).

For Australian active midwifery birthing educator Andrea Robertson, antenatal classes have an important role to play in empowering pregnant and birthing women.

Childbirth educators need to have a thorough knowledge of the anatomy and physiology of pregnancy, labour and birth before they begin teaching prenatal classes. Pregnant women are curious about what is happening inside their bodies, and will ask many questions. This is an important part of feeling empowered, as with background knowledge a woman is better equipped to ask questions, discuss alternatives and make decisions. (1994:73)

Wolf sees American antenatal education as less about empowerment than propaganda.

In fact, the whole touchy-feely exercise we experienced felt 'woman-centred' because we mothers-to-be were the centre of everybody's attention, which was a lovely feeling. But the class was in fact an advertorial for the hospital's way of delivering babies. (2001:78)

Antenatal education is a well-established professional sub-discipline. Antenatal educators have websites dedicated to their needs, and a specialist educational material supplier. There are interesting tensions in Australian antenatal education. On the one hand, the antenatal midwife 'runs the hospital line' of risk minimisation, and at the same time actively encourages women to have as non-interventionist a birth as possible. These two things are openly and candidly acknowledged as not necessarily compatible. In the introductory paragraph to the hospital's birth plan form which women are asked to fill in prior to the birth, women are told:

We would like to know of any wishes that you and your partner may have in regard to the birth of your baby. We will endeavour to follow your wishes and make the birth of your child a positive experience. If during your labour we cannot follow your preferences, your midwife or doctor will discuss this with you.

There is a clear message: you may have preferences, and it is within 'the hospital's' power to grant those, but also within the institution's power to refuse them in the instance of perceived risk. According to The Grace's brochure, the right to define what is regarded as risky lies with 'your midwife or doctor'. In practice, the right to define risk lies with doctors, while the responsibility to communicate doctors’

21 One session, dealing predominantly with pain relief.
decisions often falls onto midwives.

According to Wolf, her birth plan was "not worth the paper it is written on" (2001:72).

Hospitals and obstetrical practices that deal with demanding clients such as our educated cohort encourage couples to write such a plan, as it gives us a sense of consumer choice. We are not told outright that it is hospital protocols that determine what will happen in the course of the delivery, usually regardless of what the plan might say.

'The nursing staff laugh at birth plans at the nurses station,' various midwives would inform me later. They pass them around for entertainment: "Get this." Or they say "She has a birth plan? Get the operating room ready." The joke is that you would believe that you have any power in the hospital to change the outcome.

Having no such insight at the time, we worked on our brave little birth plan religiously. (2001:72)

On labour ward at The Grace, the midwives made remarkably similar comments to those described by Wolf.

'Better call the anaesthetist now,' said Kelly, reading the birth plan of the woman who had just been admitted to room 4. 'This one says "absolutely, under no circumstances, will I have an epidural."' Jan laughed. 'She's a cert, then. She'll be begging for it.' Jan turned to me and said:

'You can guarantee it, nine times out of ten, it's the ones that are the most adamant about not having an epidural that end up being the most desperate for it. It's like they set themselves up.'

For women birthing at The Grace, in spite of it being clear that their preferences will not be followed if they are regarded as unsuitable by medical staff, a pregnant woman is expected to have birthing preferences. During antenatal education classes, women are taught about the sort of birthing preferences they may want to have. Andrea Roberts' *Empowering Women: Teaching Active Birth* (1994) was used by the antenatal educator at The Grace. The book was described by the following blurb in the annual catalogue of Australia's major antenatal education supplier:22

How can we empower women to get the best birth outcome? This book describes ways to empower through prenatal education. It begins with the basics of adult education and ideas for effective teaching and group work. A chapter on the physiology of labour and birth pulls together the vital information not usually found in textbooks. (ACE Graphics 2000:15)

Another title in the catalogue, was Pat Thomas' *Every Woman's Birth Rights*, which, according to the blurb:

Encourages women to act on instinct when making choices about pregnancy and childbirth. Clear, challenging, unsentimental and 'under-awed' by modern obstetrics, the book covers topics such as the rights of the patient, the real benefits and risks of obstetric tests, drugs and technology, and how to be assertive with your practitioner. (ACE Graphics 2000:5)

Pregnant women are expected to learn to be assertive, empowered, and to act on instinct. Information on the 'physiology of labour and birth' is seen as vital, and was taught with great conscientiousness in antenatal classes at The Grace. The aim of imparting this information is to educate a woman about her body. 'Being educated about her body' is used synonymously with 'being in touch with her body'. If a birthing woman is 'in touch with her own body' then she can 'follow her natural instincts' and 'let nature take its course'.

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22 ACE graphics catalogue, January 2000. ACE stands for Associates in Childbirth Education. ACE catalogues are also available on line at www.acegraphics.com.au
In antenatal education classes, women are taught to be in touch with their own bodies through the use of visual teaching aids, including charts and models. The Grace's vibrant antenatal education midwife would grab her skeletal pelvis model, place it in front of her own pelvis, and show the angle of the pelvis opening as she maneuvered herself into a variety of birthing positions. Women are told to 'do what feels right', and 'do what comes naturally', while being asked to remain aware of the exact angle of their pelvis at any given moment during their labour.

'The pelvis' is not the only visual aid available to antenatal educators. Also listed in the ACE catalogue, the fetal doll has:

... a soft body and vinyl head, hands and feet and will fold neatly to fit through most commonly used pelvis models. ... It has a realistically patterned and shaped placenta and cord with a snap fastener attachment to the doll. (ACE Graphics 2000:24)

The fetal doll, like the newborn doll comes in pink and dark brown, while the breast model comes in pink or dark tan. The breast model is described as follows:

This cleverly designed model allows you to demonstrate the structure and function of the breast, engorged nipples, engorged breasts and even lumps! A fold back section reveals ducts, alveoli, and lobes and an elastic strap anchors the model to your hand while demonstrating. Can be used on its own or with the Lactesa doll. (ACE Graphics 2000:24)

The breast model comes with extensive and detailed instructions, including how, using the marble sewn into the nipple, the midwife-educator can use the model to demonstrate "Hoffman's nipple rolling technique" for inverted nipples.

Not only is knowledge about bones and breasts (things that we can be aware of through sight or touch) imparted by dismembering them from the context of the body, knowledge about internal parts of the body not usually available to be seen or felt is also imparted in this way. A "cervical dilatation model" demonstrates what a cervix in various stages of dilation looks and feels like (2000:24). Very few, if any, women see or feel their own cervix in this way during labour. The most extreme example of dismembered knowing is probably the item described as the "Pink Knitted Uterus", which comes with a snap-detachable "vaginal extension".

A wonderful, visual way to demonstrate effacement and dilation of the cervix during labour, anterior lip, crowning. The fetal doll will fit inside and the vaginal extension is attached by snap fasteners. Knitted in a ribbed design for ease of use in two tone pink wool, this is the preferred design for this effective teaching aid. (ACE Graphics 2000:25)

Medical dismemberment is a way of understanding the body by breaking it down into disjointed pieces. It is simplification or reductionism aimed at gaining greater understanding of the whole. The ultimate in individuation, medical dismemberment separates the maternal and fetal body from each other, and then severs each of these into decontextualised constituent parts. The stated aim of medical dismemberment in antenatal education is to connect a woman to her body so that she can have a better birthing experience.

I would suggest that this seeming contradiction is worth further exploration. It may well be that this is not necessarily contradictory, and that a dismembered understanding is a useful place to start developing a holistic view of the body. It may, however, also be that the method is counterproductive to the desired outcome. I would suggest it would be worthwhile exploring whether this way of knowing the
pregnant and birthing body is actually suitable for facilitating the type of birthing experience that antenatal education aims for.

Medical dismemberment was present in my fieldsite in three quite specific ways. As discussed above, it was used as a technique to educate pregnant women about their own bodies, with the explicit aim of empowering them to be able to give birth vaginally and thereby have access to an optimal birth experience. In addition, as will be explored in the following section in this chapter, medical dismemberment was crucial to monitoring of the fetus and mother during pregnancy and delivery, the aim of which was to reduce risk of maternal mortality and neo-natal death. Medical dismemberment was also used to investigate the possibility of and reduce the likelihood of the live birth of a fetus which was regarded as having unacceptable abnormalities. This will be further explored in Chapter 7.

'Medical dismemberment', in its variety of forms, was contested by health care workers who felt that a more holistic approach offered a higher quality of care. Some midwives were vocal about the need to integrate the whole of a woman's being and experience into pregnancy and birthing care. This view, if expressed too often or too loudly, would be labeled 'radical' by many of their colleagues, and 'dangerous' by most obstetricians. Similar to the quote from Wolf's obstetrician, cited in Chapter 2, where a "fulfilling experience" was equated with a brain damaged baby, and incense and candles with "your baby could die" (2001:240), attempts to discuss more holistic ways of knowing and experiencing birth were frequently met with predictions of maternal or neonatal death. "It must be nice to know you're in touch with yourself as you're bleeding to death" was the sarcastic comment from one of The Grace's obstetricians.

Although often fiercely uncontested, medical dismemberment was the hegemonic norm, the privileged way of coming to know the maternal body in the obstetric environment of the Princess Grace. Grounded firmly in an epistemologically solid worldview, for many experienced health care workers it was and is an integral component of providing optimal care.

**monitoring: seeing is believing**

Just as solidity is a privileged state in western biomedical understandings of the world, so is sight the privileged sense through which biomedical data is received.

With the emergence of ever more sophisticated imaging technology such as ultrascans and magnetic resonance imaging, the patient's body has not only become removed from the person - this was Foucault's point - but from the diagnostic process. Viewing the body through imaging, the physician or technician can further abstract or subtract the physical, corporeal body itself. Bodies become reconfigured into landscapes, graphs, maps and colour resonates. ... As the body parts are depicted on a flat computer screen, they can be enhanced, replicated, enlarged, reduced, recorded and recreated. ... imaging technology fragments the human body into cell-lines, graphs and colour codes. The patient is rendered as universal datum, disconnected from both any tangible, corporeal body, and the sentient human being, becoming an image that can be moved through computer networks anywhere around the world. Understanding such a patient does not require human touch. (Samson 1999:16-17)

Pregnant and birthing bodies located in an Australian obstetric environment are constantly monitored.
During a 'normal', complication-free pregnancy, a woman will average ten to twelve antenatal visits. These visits will either be all with the hospital's antenatal clinic, or in 'shared-care' between the hospital and her private GP, midwife or obstetrician. Should the pregnancy start with or develop complications, that number can easily double. At the time of my fieldwork, a 'normal' pregnancy involved a minimum of three lots of blood tests, two urine tests and one ultrasound scan. Very few, if any, of the women whose pregnancies I followed, including the 'normal' pregnancies and deliveries, had as few tests as these.

Antenatal and birth monitoring falls into three categories: feeling; 'solidifying' and measuring body fluids; and visualising. These fit a continuum of logics of fluidity and solidity. Monitoring by 'feeling' is a 'fluid' way of gathering knowledge about a pregnant or birthing woman. It is interactive, non-exact, contextual and partial. Monitoring via body fluids and by visualisation are both 'solid' ways of gathering information and turning it into knowledge. Fluids, being substances that can travel through bodily boundaries and bring information from the interior to the exterior, are gathered, 'solidified' in a reagent strip or under a microscope, and 'read' for information. With monitoring via visualisation, body boundaries are breached, and that which is inside the body is brought into view. Clinical visualisation involves a medically dismembering clinical gaze which, intolerant of contradictions, aims at completeness and absoluteness.

... in prior times, individual fetuses made their presence public only slowly, over a period of months, and that presences was attached to signs - whether miraculous, mundane or scientific - that passed through the woman's codification. A woman's physical and emotional state might reveal internal signs of pregnancy in hormonally induced swollen breasts, skin changes, energy loss, dizziness, or nausea, all of which were experienced kinesthetically and holistically. Later a midwife or physician might pick up a fetal heartbeat through a wooden trumpet, a stethoscope, or, more recently, a Doppler machine. But the passage from internal to external signs was slow, and almost all the cues depended on the pregnant woman's reportage.

Now, however, sonography bypasses women's multifaceted embodiment and consciousness, ... reduces the range of relevant clues for whose interpretation women act as gatekeepers. A technology of exclusively visual signs that renders "a collection of echoes" into a representation of a baby substitutes for prior, embodied states. This reduction also sharpens the focus from a diffuse knowledge of women's embodied experiences to a finely tuned image of the fetus as a separate entity or "patient". This visual representation can then be described by radiologists, obstetricians, and technologists in terms that grant it physical, moral, and subjective personhood. (Rapp 1997:39)

The aim of visualisation is to provide answers. As I will discuss below, ultrasound presents us with one of the most profound ironies of technologised maternal care. The most intensely disconnected form of monitoring, ultrasound visualisation, is the one that creates the most intense feelings of connection ('bonding') between the mother/parents and unborn child, while at the same time providing a compelling separation and individuation between the maternal and fetal bodies and beings. I suggest that it is because ultrasound gives us access to a synthesised way of knowing, in that it is simultaneously both 'solid' and 'fluid', that it is so powerful.

In terms of monitoring by 'feeling': the pregnant or birthing woman is asked how she is feeling to elicit diagnostically significant information. For example, during pregnancy, headaches and seeing spots in front of her eyes can indicate the onset of pre-eclampsia; during labour, feeling the urge to push or the
urge to 'make a bowel movement' ("do you feel like you need to shit?") can indicate the beginning of
the so-called third stage of labour which immediately precedes the delivery. The other type of
monitoring by feeling involves the health care worker monitoring by touch, such as when the
obstetrician or midwife puts their hands on a pregnant woman's abdomen to ascertain the position of
her baby. Information gathered by 'feeling', if diagnostically significant, is nearly always confirmed by
some sort of quantitative measurement: i.e. monitoring by body fluids in the case of pre-eclampsia, or
using a tape measure to confirm fundus height.

Monitoring via body fluids provides the vast majority of diagnostic meanings and messages during
pregnancy and birth. As such, fluids are a major source of both reassurance and anxiety. The wellbeing
of mother and baby are determined throughout the pregnancy with an on-going barrage of blood tests
and urine tests. Blood can create concern all the way through pregnancy. Blood, coming as menstrual
periods, indicates both lack of conception and the potential for fertility. Vaginal bleeding during
pregnancy indicates risk for the mother and unborn baby. A woman's blood pressure is checked every
visit, the baby's heart beat is listened to, to ensure it is pumping blood around the fetus' body. For those
who so chose, there were chorionic villi sampling (placental tissue), maternal blood sampling, and
amniocentesis.

When the delivery is imminent, signs involve either pain or fluid. Apart from contractions, signs that
the baby is on its way include a 'show' of mucus, and the breaking of the waters. Clear fluid is a good
sign, small traces of blood are acceptable, but large amounts of blood indicate cause for concern. A
large proportion of late night phone calls to the labour ward involve queries about body leakages. CTG
machines are strapped to a woman's belly in a number of situations during pregnancy and labour: these
measure the contractions of the uterus and the baby's heartbeat. If further monitoring is felt to be
required, a fetal scalp monitor might be used to gain a more direct measurement of the amount of
oxygen in the baby's blood.

After delivery, a woman's body continues to leak, and this is seen to require monitoring. Midwives
continually come by and 'do the obs', the observations. This involves checking temperature, blood
pressure and 'the loss' - the amount of vaginal bleeding.

The third form of monitoring encompasses a number of visualisation techniques. The most common
fetal imaging technique is ultrasound. Although Armstrong & Eborall argue that a “well-developed
sociology of medical screening is lacking” (2012:161), there is a relatively large body of anthropological
and sociological research highlighting the complexity and often deep ambiguities surrounding
ultrasound in pregnancy, demonstrating ways in which these complex meanings are coproduced in
discursive, material and embodied interactions between pregnant women; their unborn embryos/fetuses/babies; technology; sonographers, midwives, obstetricians and other health workers;

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23 No longer as commonly used in Australia, due to risk to the baby of “limb budding”, or limbs being incompletely formed.
24 See, for example: Harris et al (2004); Gammeltoft (2007) and Müller-Rockstroh (2013). For a review of anthropological research
into selective reproductive technologies, in which ultrasound plays a central role, see Gammeltoft & Wahlberg (2014).
and partners, families, friends and broader communities.\(^{25}\) Anthropological studies show how these meanings are always embedded in culturally specific contexts,\(^{26}\) and that interpretation of medical imaging technology requires certain types of literacies that may not be available to the same extent to all women birthing in a particular community.\(^{27}\)

All women birthing at The Grace were offered an ultrasound at 19 weeks gestation. Although some women who are offered amniocentesis decline, I know of no one during my fieldwork who refused the 19 week ultrasound.\(^{28}\) The stated aim of this ultrasound is to monitor the health and progress of the baby. It was possible to detect some cases of Down Syndrome and many cases of neural tube defects, for example spina bifida, at the 19 week ultrasound. Couples are often relieved that 'everything is all right', although there is little preparation given to the choices that will be offered and the difficult decisions that will have to be made if it is 'not all right'.

For some, the 19 week ultrasound was not the first of the pregnancy: sometimes scans were done earlier. Dating scans were carried out if a woman was 'unsure of her dates',\(^{29}\) scans were also routinely carried out if there was vaginal bleeding or other signs of threatened miscarriage. Some private obstetricians scan at every antenatal visit, or at least twelve times throughout the pregnancy.

Not everyone is comfortable with ultrasound technology. Rapp argued in the late 1990s that in the USA, ultrasound "is being dramatically overused, given the difficulties of assessing its long-term safety effects (1997:31). Similarly, Oakley argued that in Britain "physicians hailed it [ultrasound] as 'totally safe' long before any studies were actually conducted" (1993:196). Until a generation of babies that have been scanned in utero have started themselves trying to have babies in large enough numbers to show statistical variation, we do not have a full picture of the 'safety' of ultrasound. Obstetricians are, of course, aware of this. However, as Rapp shows in the US (1997:35) and Oakley in the UK (1993:196-7), in Australian hospitals ultrasound is presented to patients and used by clinicians as if it were already guaranteed to be a safe technology with no side effects (Buckley 2009:79). The standard line used in patient information sheets is "There are currently no known dangers to either you or your baby in ultrasound scanning".

'No known dangers' is not the same 'no dangers'. As Rapp pointed out, “consensus studies suggest that the technology is safe in the short run, but only the analysis of much greater longitudinal data will reveal whether or not it has low-level biological effects on fetal auditory or neurological systems” (1997:31). The glossing of ‘no known dangers’ into ‘no dangers’ was striking in my fieldsite: obstetricians presented ultrasound to women and their families as if it were a technology whose safety was scientifically proven, rather than one whose safety is, in fact, assumed rather than proven.

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\(^{25}\) Although not always using the same theoretical frameworks or language, the theme of coproduction of meaning emerges in a variety of studies, including: Mitchell (2004); Williams et al (2005); Pilnick (2008); Roberts (2012); Schwennesen & Koch (2012); Han (2013); Nishizaka (2014); Pilnick & Zayts (2015) and Lou et al (2015).

\(^{26}\) See, for example, Gammeltoft & Nguyen (2007), Ivy (2009); Gammeltoft (2013); Muller-Rockstroh (2013) and Niner (2014).

\(^{27}\) See, for example, Liampittong & Watson (2002) and Han (2013).

\(^{28}\) For research on fathers’ experiences of ultrasound, see Draper (2002) and Walsh et al (2014). For a discussion on Australian women declining prenatal screening, see Liampittong et al (2003).

\(^{29}\) Not certain of the date of her last menstrual period. My shorthand for this situation in my fieldnotes was ‘date slut’, because of the judgemental attitude of some of the obstetricians and midwives towards women who weren’t certain of the exact date of their last period. I fell pregnant towards the end of my fieldwork, and was myself a ‘date slut’.

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The most recent Cochrane Collaboration\(^{30}\) review on studies undertaken on the routine use of ultrasound in pregnancy increases confidence in safety of pregnancy ultrasound to some extent, indicating that “long term follow up of children exposed to scans in utero does not indicate that scans have a detrimental effect on children’s physical or cognitive development” (Whitworth et al 2010:12). However, children exposed to ultrasound in utero in significant numbers are currently in their teens/early 20s, and it will be a number of years yet before data can be collected on whether ultrasound in utero impacts reproductive health. Ultrasound was shown to be useful in earlier detection of multiple births, however there was little clinical application for this knowledge (Whitworth et al 2010:3). Earlier detection of nonviable pregnancies did “have implications for clinical management of these pregnancies” (2010:3), and increased accuracy of gestational age of the fetus “may increase the efficiency of maternal serum screening and some late pregnancy fetal assessment tests” (2010:3). While the value of ultrasound has been demonstrated in the case of high risk pregnancy (Alfirevic 2013:2&17), in the case of non-high-risk pregnancies, studies “do not show that routine scans reduce adverse outcomes for babies or lead to less health service use by mothers and babies” (Whitworth 2010:2). Contrary to what was presented as a taken for granted position in my fieldwork, there is no clear evidence for benefits to mothers or babies of routine ultrasound screening during pregnancy (Whitworth et al 2010:2; Nabhan & Faris 2010:2; Bricker et al 2009:9).

Discussing her own four “unscanned pregnancies”, Australian family physician and childbirth author Sarah Buckley writes that:

> Although a prenatal scan may sometimes be useful when specific problems are suspected, my conclusion that it is at best ineffective, and at worst dangerous, when used as a screening tool for every pregnant woman and her baby. (2009:78)

Buckley cites UK consumer activist Beverley Beech, labeling routine ultrasound in pregnancy “the biggest uncontrolled experiment in history” (2009:79). Bricker et al suggest that not only is there no benefit in routine ultrasound scans in late pregnancy, there are indications of “risk of iatrogenic morbidity” (ie: increased adverse events caused by medical treatment) because of the correlation of routine late-pregnancy ultrasound with higher rates of caesarean sections (2009:9). During the period of my fieldwork it was routine for every woman to have an ultrasound at 19 weeks. Currently 12 week and 19 week ultrasound are routine for women birthing in public hospitals in Australia, with many women also having one or more ultrasounds close to their due date. The rate of ultrasounds for women labeled as high risk is almost inevitably much higher.\(^{31}\)

Apart from medical issues, there are a plethora of sociopolitical implications of the speed with which ultrasound technology has been adopted as standard procedure into maternity care. Ultrasound produces “both a newly independent fetus and a medically reinscribed mother under the powerful sign of normative maternal-child health” (Rapp 1997:32). With the introduction of each new maternity technology, women are asked to experience their body and their pregnancy differently. This has

\(^{30}\) Cochrane Reviews are meta-studies comparing all known published, peer-reviewed research on selected topics.

\(^{31}\) Comments on current (2014/2015) rates of ultrasound from personal communications with health care workers (midwives and GPs) working in three different Australian state health systems.
particularly been the case with ultrasound, producing as it does the "blurry baby pictures" (1997:32) with which parents can emotionally connect with their unborn child, and at the same time hastening the experience of "the separation of the fetus as an independent entity" (1997:32). Interestingly, there has been little change in the last two decades to basic ultrasound technology, however there have been rapid changes in the precision of images being produced.

Wolf comments on having an ultrasound during her pregnancy: "She began to move the sensor over my abdomen like a computer mouse. It felt odd to be the information field" (2001:22). Donna Haraway expresses her concern:

Among the many transformations of reproductive situations is the medical one, where women's bodies have boundaries newly permeable to both 'visualization' and 'intervention'. Of course, who controls the interpretation of bodily boundaries in medical hermeneutics is a major feminist issue. (1991:169)

Margit Shildrick (1997:201) describes fetal imaging as a "paradigm case of insecure boundaries". She cites Rosie Braidotti, who states that fetal imaging offers: "everything for display or show, representing the unrepresentable (like the origins of life), ... producing images that displace the boundaries of space (inside/outside the mothers body) and of time (before/after birth)” (Shildrick 1991:366).

Is this an overreaction to a simple ultrasound picture? If so, it is an emotive reaction echoed, but not reproduced in the same way, within medical discourses. The following is the preface to a standard reference medical textbook on amniocentesis, from 1981, used at the teaching university connected to The Grace.

Medically speaking, the human fetus in utero has always been relatively inaccessible; any information about its well-being was inevitably indirect and exiguous and the methods by which it was obtained crude and limited. The situation has recently changed dramatically. Once again, it is the old story of a technical advance leading to a sudden surge in new knowledge. Over the past few years, safe amniocentesis has become a reality, a development which was made possible by the development of accurate ultrasound monitoring procedures. Amniotic fluid samples can now be obtained for direct analysis, and have yielded a rich harvest of diagnostically helpful information; some of the first fruits are gathered in this volume. A whole new discipline, prenatal diagnosis, has suddenly been born, and a vigorous infant it is, as readers can judge for themselves. Inevitably, there are teething troubles, not the least of which are some difficult ethical problems concerned, for example, with whether and when to advise abortion, whether to disclose to the parents the sex of the fetus, etc. But the wealth of new data presented here attests to the ferment of activity that characterises this exciting new area of research. The field has become a meeting ground for clinicians, cytologists and cytogeneticists, biochemists, and pharmacologists. The scope and variety of this new expertise is reflected within the covers of this volume, where some of the world's foremost experts report, from their own particular viewpoint, the state of a rapidly advancing art. From being one of the last strongholds of medical ignorance, the "black box" of the pregnant uterus and its contents has now emerged into the light of recent scientific advance. And already, the clinical spin-off is immense.

(Sandler 1981:vi)

Ultrasound visualisation techniques, combined with diagnostic access to amniotic fluid, allows obstetricians and medical researchers to shine their light into previously darkened corners of the maternal body and fetal body. Ultrasound allows for visualisation of the previously unseeable, and precise measurement of the previously unmeasurable (Rapp 1997:37).

Stoller claims that sight is privileged in western culture, and that 'seeing' is equated to knowing (1989). This applies in the case of the reproductive medical technologies: seeing makes things real in ways 'just' 'feeling' doesn't. One of Britain's foremost IVF specialists, Robert Winston, highlighted the link between this particular medical technology and the effect for parents in his documentary The
Human Body. The real world in the womb is dynamic and bustling. And in the last twenty years, the tool that’s done the most to show us that is ultrasound. Developed to help doctors screen for potential problems, it allows parents-to-be to see what their baby’s up to. (Winston 1998)

Ultrasound allows parents, in tantalising, alien-like images, to ‘see’ their baby for the first time.

... surely pregnant women and their supporters are not thinking about the embedded, reductive, and normalizing aspects of imaging technology as they "meet" their baby on a television monitor for the first time. Such uterine "baby pictures" are resources for intense parental speculation and pleasure, for they make the pregnancy "real" from the inside, weeks before kicks and bulges protrude into the outside world. The real-time fetus is a social fetus, available for public viewing and commentary at a much earlier stage than the moment of quickening, which used to stand for its entry into the world beyond the mother’s belly. (Rapp 1997:38)

During my fieldwork I undertook extensive observations of antenatal education classes, and got to know the midwife who conducted the classes, Karla, quite well. Much to my personal and professional delight, she fell pregnant herself for the first time. She told me early in the pregnancy and commented on the ways in which ligaments in her abdomen and pelvis were making themselves felt.

“I used to laugh at women this early commenting on the abdo pain, but you feel it, you feel it all the time. It’s so strange. It doesn’t really hurt, but you’re always aware of it. I used to tell women to just ignore it, it didn’t mean anything, but just because it doesn’t mean anything doesn’t mean you can ignore it. It’s happening to you.”

Karla and I had previously had discussions about ultrasound, and how it gave people - pregnant women and/or their partners - a feeling of reality about their pregnancy. Karla’s views echoed those of another midwife, Lucy, who had expressed her concern with ultrasound.

“It’s weird how ultrasounds change women’s perceptions, I mean, they say after their first scan that now they know their baby’s really there. It’s as if they can’t trust their own bodies, they have to see things with a machine to accept that what’s happening inside of them is really happening.”

Alongside a sense of amazement at being able to see a baby in utero, which even the most experienced midwives would say could still send a shiver down their spine, many midwives, Karla included, also expressed this sort of disquiet. This heightened the irony of Karla’s comments the day she had her first scan, at 12 weeks. She was so excited she was jiggling and bouncing up and down as she told me:

“For the first time I can start believing it. It’s so amazing, seeing it made it so real. It made it feel so real.” [I laughed, and she joined in]. “It’s crazy, isn’t it? I’ve seen it in others so many times, and here I am, just like any other new mum. The scan made it real. Today was the first time I’ve thought to myself ‘I’m a mother now’. And I am, I’m a mum.”

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32 Winston achieved celebrity status, having made a series of medical science documentaries. His BBC series The Human Body was set on the curriculum in high schools in the state I undertook my research the year it was released in Australia, and continues to be used in schools in Australia.
This moment of parents ‘first seeing’ ultrasound images of their baby was recorded in Winston’s documentary *The Human Body*. Jeff Watson, who accompanies his wife Phillipa to her 19 week ultrasound, comments excitedly to Phillipa:

This is really the first time its really brought home to me that you’re actually pregnant. It’s ... amazing that suddenly I’ve got to realize there IS actually something in there. ... It’s going to be incredible to show this to my mum, I can’t wait to show her. The technology's incredible. She never had the opportunity to see this sort of thing. But now we've got pictures of our future child. (Winston 1998)

Phillipa comments that she is "reassured that everything’s all right" (Winston 1998). As will be discussed in Chapter 7, although these technologies do not guarantee that "everything is all right", they are none-the-less constantly offered as forms of reassurance to parents. Biomedical monitoring techniques, utilising data obtained predominantly through the reading of body fluids like solids and through visualisation, effectively separates and distances the pregnant woman from her own experience of pregnancy. It allows the health of her growing baby to be measured, and she is reassured, not by her own sense of connection with her growing child, but by ‘objective’ 'experts' who are qualified to read and interpret the 'signs'.

According to Beck, inaccessibility of risk and risk perception to the senses is characteristic of late modern risk society (1995:2-3).

... perceptions of risk are intimately tied to understandings of what constitutes dangers, threats or hazards and for whom. Today, however, a significant number of technologically-induced hazards ... are characterized by an inaccessibility to the senses. They operate outside the capacity of (unaided) human perception. ... The im/materiality and in/visibility of the threats that suffice the 'risk society' mean that all knowledge about it is mediated and as such dependent on interpretation. (Adam & van Loon 2000:3)

Technological mediation in understanding and knowing the maternal body has become as integral to obstetric management of the maternal body as technological birthing intervention. Disembodied knowledge, 'objective' knowledge, is privileged in an obstetric model. Experiential, embodied knowledge is given some (contested) space in a midwifery model. Knowledge of the maternal body is heavily externalised. "We look, we listen further, but the normality of our sensual perception deceives. In the face of this danger, our senses fail us." (Beck 1995:65).

Intangibility can make risk difficult to engage with. New knowledges, and new ways of creating knowledge, are necessary to interpret everyday life. Medicalised care of the maternal body involves ever increasing inaccessibility to the senses, and ever increasing use of technology.

What people see or do not see is not determined by their visual acuity, nor does it depend on their attentiveness, it is essentially codetermined by what they know or do not know. Knowledge unblocks the view. Someone who knows more and different things also sees more, sees differently, and sees different things. (Beck 1995:13)

It is almost impossible, in Australia, to imagine a woman experiencing her own maternal body herself. Every step of the way, she is monitored, measured, diagnosed as adequate or deficient in a seemingly inexhaustible number of variables. Some women experience this as reassuring, some experience it as invasive, some experience it with a shrug at the normalcy of it. But all Australian women who (give) birth within the hospital system - that is, in excess of 98% of birthing women - experience this technological mediation of their maternal selves.
In this chapter I have shown ways in which connectivity, inscribed as fluid and therefore unsettling, risky and potentially dangerous, is controlled and managed in medicalised maternity by strategies of separation. Ways in which connectivity is discouraged in obstetric management of the maternal body include: utilisation of the medical gaze, in which information flow is hierarchical and unidirectional; muting of experiences deemed to fall outside diagnostic parameters; ‘dismemberment’ as a strategy of corporeal knowledge; and minimising touch and physical contact.

This is seen to increase quality of care, as it is understood to present a safer birthing environment. Non-interventionist midwifery approaches to the maternal body, which value connectivity, include: encouraging women to articulate their own experiences of their bodies; encouraging information exchange and ‘debriefing’ to contextualise maternal experience; and the utilisation of touch and physical interaction between health care worker and mother. This is understood to offer a better pregnancy and birthing experience, which is seen to be beneficial for the long term physical and emotional health of the woman, her baby, and her family.
Chapter 4

Birthing Bodies

a tale of three births

This chapter explores discourses and practices of hospital birthing in Australia, and describes birthing discourses and practices in my fieldsite. It begins with descriptions of three births which range along the major line of contestation in Australian birthing: the continuum which runs between highly medicalised, obstetric-led, “interventionist” birthing and less medicalised, midwife-led “active” birthing. Anton and Zac’s births took place at the Princess Grace, and my role in both was as a researcher. Xavier’s birth took place in a birthing unit run along the same model as the Princess Grace, and my role in that was as support person to Isobel and Rick.

Xavier’s birth

Expressly against her obstetrician’s advice, Isobel chose to deliver her fourth baby in the birthing unit. Her first two births had been highly interventionist, while her third had been in a birthing centre, with midwife care. She had experienced her first two births as "traumatic", while her third had been, for her, liberating and empowering. She talked of experiencing contractions as "power surges". “It’s not that it wasn’t painful, it still hurt like hell. But I felt so strong, like I could do anything in the world.”

Her waters broke at midnight, and Rick and Isobel went into hospital. They met the midwife on duty, who, after taking initial observations, pretty much left them alone, telling them to let her know if they needed anything. Sue, a midwife they knew from antenatal visits, came on duty in the morning.

Isobel and Rick had managed to get a little sleep mid-morning, and by early afternoon, she was bored and wanting some distraction. Her contractions had not yet set in regularly. If the baby didn’t show signs soon of getting a move on, Isobel was told she would need to be induced. She walked down four flights of stairs to the ground, jumping down every one to ‘get the baby’s head down’. She was an amazing sight: a fully pregnant woman jumping down four flights of concrete steps, long hair flying, fists clenched, arms held out like a toddler's to keep her round body balanced. She walked in a park, and went to the coffee shop, and was back in the birthing unit by about four. Her contractions were still sporadic. There was a change of midwife shift, and Sue brought in Sharon to introduce her.

Clary sage, a herb said to be helpful in bringing on labour, had been burning in the aroma therapy burner since midday. Sharon suggested we try massaging some into Isobel’s tummy. Isobel clambered up on to the bed and lifted her dress. Rick and I climbed up, knelt either side of her, and soon four hands
were rubbing oil on the smooth, impossibly large watermelon of Isobel's baby-belly. I felt like we should have been muttering mystical incantations, but the three of us actually spent most of the time giggling at each other. Within less than five minutes of the belly rub, Isobel's contractions started to become more regular. It was a quarter past five. The midwife joked it was the fastest she'd ever seen it work. From there, intense contractions came every five minutes or closer, until eight thirty, when Xavier was born.

As her contractions first started, Isobel wandered around the room, talking in between, stopping mid sentence while the contraction lasted. After about half an hour of intense contractions, she said, in a tone of intense disbelief:

Why am I doing this? I can't believe I'm doing this. It hurts so much. I can't believe I've forgotten how much it hurt. I can't believe I'd do this to myself again. .... This is the last time. .... don't ever let me do this again ...... I'm never ever doing this again.

Isobel roamed the floor in between contractions. Rick and I sat on the couch, jumping up to get her warm cloths and massage her back when the contractions started. Her contractions were still not really regular, and the midwife came in to say she wanted to put a cannula (needle for an IV drip, also called 'gelcos') into place in Isobel's hand, in case she needed syntocin.¹ I argued for a little more time, as gelcos are painful and uncomfortable. The midwife agreed to wait another hour or two. Shortly after that, it became clear that labour had well and truly established and there would be no need for syntocin.

Isobel had stopped pacing in between contractions, and was starting to ‘find spots’. She would find a position that was comfortable, and stay there for half a dozen or so contractions, before getting restless and moving around again. With some contractions she was very specific about where she wanted to be touched and massaged, with others she would push us away, then gesture us back. "I don't know what I want. I don't know, I don't know." Sometimes we just did what her body language seemed to tell us that she needed, and gradually the three of us fell into a rhythm where Rick and I seemed to be able to respond to Isobel's body.

I was vaguely aware of the midwife and a student coming and going. We were regularly checked up on, but as things seemed to be going well, they more or less left us alone most of the time. At one stage Rick's parents rang, and the call was put through to the room. As Rick was speaking to his father, another contraction started. Isobel became quite distressed, as she didn't want Rick's father to hear her "making noise". Not long after, one of Isobel's older children rang, on behalf of the youngest one, who was worried and wanting reassurance that everything was going all right. I took that call, out at the midwives’ desk.

Isobel had told us beforehand that she wanted the labour to be as drug-free as possible, but she wasn't sure how she'd go. As another contraction wracked her, Isobel said "I don't think I can do this." I

¹ Artificial oxytocin, also known as syntocinon, is a drug used to induce, or speed up the onset of, labour. For a description of induction of labour, see note 4 this chapter.
talked her through the contraction, the way I had heard midwives do during my fieldwork. "Let the pain flow into you, don't fight it, let it flow through you, that's it, that's it ....." and as the peak was passing "that's it, let it go now, let it pass through you ...." as the contraction passed, she fell into Rick's arms. She said she "couldn't do anymore". I went out to the midwives, and asked them to come and talk to her about pain relief.

Sharon came in, and went through the range of pain relief options. It wasn't the first time Isobel had heard that, but it seemed to be reassuring for her to hear it again. "The gas won't be strong enough ... " she said. Sharon calmly said that she might be right, but why not give it a go? Isobel nodded. Sharon got the gas set up, showed her how to hold the mask to her face, and talked to her about how to breathe it in as the contraction was starting, then let it go as the contraction passed. Isobel held the mask. She mostly started breathing with the mask with each contraction, and stopped at the end, although occasionally Rick and I had to remind her to start or stop. Sometimes we held the mask for her, or gently disengaged her hand from it as she flopped at the end of a contraction.

Isobel spent about an hour of the labour in the bath, another half hour or so in the shower with Rick, and the rest of the time in a variety of positions on the floor with Rick and I holding warm cloths on her belly and back while she was contracting. The positions she spent the most time in were either on the floor on all fours, and standing or kneeling with her head and arms resting against furniture or Rick. She delivered on her knees, with her head in Rick's lap. She used nitrous oxide gas, but no other anaesthetic. The CD player churned out U2. Rick kept up a constant supply of hugs, words of love and encouragement, and got bitten on the thigh for his trouble.

Isobel was very concerned about not tearing, and very definite about not wanting an episiotomy.\(^2\) She listened intently to Sarah, the student midwife, guiding her through pushing Xavier's head out, and was happy when she ended up with a only very small vaginal tear. Sarah delivered Xavier, with Sharon, the more experienced midwife, looking on. When Xavier's head was delivered, the cord was around his neck. Sharon made sure that Sarah worked quickly to clear it. His head was quite dark, and Sarah again worked quickly to deliver his shoulders. As the second shoulder was delivered, he shot out of Isobel with a swish and a squelch, landing a surprising distance way. We looked in astonishment at the unusually long umbilical cord. The cord was cut immediately, and Xavier was taken to the baby station and given oxygen. It seemed to take forever before he started breathing. We all started breathing again when we heard his first cry.

Isobel lay on the ground with her arms outstretched, whimpering, asking for her baby. Rick went over to see him, staring at him with a look of wonder on his face. Isobel was given a shot of oxytocin to help speed up the delivery of the largest placenta that Sharon, Sarah, Isobel or myself had ever seen. It was Rick's first placenta viewing, so he had to take our word for it.

Within twenty minutes of being born, Xavier was suckling at Isobel's breast. At ten-thirty, Isobel's older children, and Rick's brother, parents and grandmother arrived. Isobel and Rick had showered, and they sat up on the couch while champagne, strawberries and the baby were passed around. Rick's

\(^2\) An episiotomy is a "surgical cut in the perineum to enlarge the vagina." (Kitzinger 1982:341)
mother took endless photos. Rick held up the plastic bag with the placenta in it, showing it to his father. Xavier was the last birth Sarah needed before she qualified as a fully-fledged midwife, and we all congratulated her. She and Sharon joined in for a glass of champagne with the family.

**Anton’s birth**

This was Helena’s first baby, and she was worried about the pain, commenting that she was a “real wuss” and would “probably need lots of drugs”. At ten days past her due date, Helena was admitted to hospital to be induced. She came in to the labour ward at around seven in the evening and prostoglandyn gels were inserted in her vagina. When ‘nothing happened’ in the first hour or so, she was sent down to the postnatal ward to sleep. She started having strong contractions at about five the next morning, and was taken back up to the labour ward.

Her membranes were ruptured at about eight thirty, and she was told to stay upright for a while to give the baby a chance to move down. Helena complained about wanting to sit down, being tired, but needing to stay upright. Her contractions grew in strength. She found the pain difficult to cope with, and was offered, and accepted, an epidural round about midday. Helena didn’t realise that after the epidural was inserted she and the baby would have to be monitored the whole time. Lucy, the midwife, came in to put the belt of the CTG monitor on her. “Do I have to keep this on, now?” after it was on. "Yep", Lucy told her, “it stays on the whole time now”. Helena asked if she'd still be able to walk around. Lucy sort of nodded non-committally. As is usual with epidural births, Helena was bed-bound and catheterised for the rest of her labour. Helena had the epidural in her back, with the cords taped to one shoulder, a saline drip inserted into her hand (in case it was decided to use syntocin later) and a catheter. Tony, from the Jason recliner on the other side of the room, said "Every hole’s plugged now. All they've left clear is your face."

Helena was nauseous after the epidural, and vomited on and off for about ten minutes. Lucy was in and out, being shadowed by a student midwife. Helena mentioned the on-going nausea a few times. Lucy said absent mindingly she’d get her something for it, and kept going with other things. Helena complained a few more times, and Lucy eventually put some Maxalon in the drip. She told Helena the name of the drug, but Helena had no idea what it did. She just wanted it. "I’ll take anything.” Neither she nor Tony asked any questions about side effects for herself or the baby. After Helena had had a sleep, she asked for information about effects and side effects of medications and interventions.

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1 A week later, on the full moon, Isobel and Rick took the placenta out of the freezer, and held a planting ceremony for it in their garden.

2 When labour is induced, prostoglandyn gels are placed in the woman’s vagina. The aim of the gel is to soften the cervix so that an ARM (artificial rupture of membrane) can be performed. An ARM involves tearing the membrane that holds the amniotic fluid in place - it is an artificial ‘breaking of the waters’. It is performed with a metal implement resembling a crochet hook. For some women, rupturing the membrane will be enough to bring on labour. If labour hasn't commenced within a certain period (a number of hours), the woman is hooked up to a drip and given syntocin, a hormonal drug which will start her uterus contracting. Contractions brought on by syntocin are notoriously stronger, more painful and closer together than contractions which initiate spontaneously.

3 A wide elastic belt which holds two discs slightly smaller than saucers against the woman's belly. One ‘saucer’ monitors the baby’s heart beat, and the other monitors the women’s contractions. These are printed out on a narrow strip of paper, similar to an ECG heart monitor printout.

4 A catheter is a tube inserted into the urethra and attached to a bag to collect urine.
Mid afternoon Helena dozed a little. She was woken on and off by midwives coming in to do observations. At one stage while she was sleeping she was hooked up to a syntocin drip. The midwife woke her to tell her they were turning it on, Helena, only half awake, grunted and dozed off again.

Monitoring showed the baby's heart was dipping slightly, and a scalp clip was inserted. A scalp clip is a curl of fine wire which is inserted into the baby's scalp while the baby is in utero. This can only be inserted if the woman's cervix is sufficiently dilated (open). The length of wire encased in waxed string, and is attached to a monitor, to keep track of the baby's heartbeat. Many parents find the idea of a piece of wire going into their babies head distressing, and Helena and Tony were no exceptions.

Tony looked scared, worried and restless. He left, saying he needed to get a few things and was going to get a haircut. Helena gasped in disbelief, the midwives rolled their eyes at each other, and Tony left to get his hair cut. At around three o'clock Lucy finished her shift and handed over to Barbara. She bought Barbara in to introduce her to Helena. There was still concern with the baby's heart rate dipping, and the contractions weren't showing up on the monitor. Barbara put her hand on Helena's tummy and traced the contractions by hand, writing them on the printout as they happened. She showed the student midwife how to do that too, and the student did a couple more. In between all of this happening, Helena was supposed to be resting. The room was only dimly lit and the curtains were drawn. Helena did doze on and off.

Liz, an obstetrician in training, came in and looked at the printouts from the CTG monitor. She introduced herself to Helena, and talked to her, saying they should look at doing a scalp Ph. She explained that that's where they take a small sample of blood from the baby's scalp. Helena became a bit teary and asked if it will hurt the baby. Liz assured her emphatically that it wouldn't. Liz explained that there was still a bit of dipping in the baby's heart rate. She said the scalp Ph reading would tell them whether there's enough oxygen getting in to the baby's blood.

Helena realised the ramifications. "And if there's not, does that mean there'll be a caesarean?" Liz says it might not come to that, but that is a possibility if the baby's not doing so well. Helena started crying, saying "I didn't want that. I didn't want that." Liz asked if it was OK to go ahead with the scalp Ph. Helena waves her hand, saying "I guess so. Do whatever you need to do".

Liz left, and came back a short while later with Dr Dickenson in tow. She showed him the trace, told him what she'd done, asked what he thought. He said wait and see what the scalp Ph comes up with. He shrugged, smiled reassuringly at Helena, and left again. Liz showed him out, and came back and said to Helena "That was the boss. He was just passing, and I thought I'd get him to have a look at things".

Helena asked if Tony was back. He wasn't. I rang his mobile, and he said he'd get back. Barbara brought in a sterile trolley with the equipment for the scalp PH. Helena's legs needed to go up in stirrups. She said she didn't think they still used those. Liz and she and Barbara joked a fair bit during this procedure. Barbara attached the metal stirrups to the bed. Four of us lifted Helena's legs into the stirrups, with comments about the lack of dignity. Liz brought the contraption over, and showed it to Helena. It was a gleaming, dark silvery-colour metal cone. Liz told Helena she was just going to put that inside her. She wouldn't feel anything. She waved it around, saying "It's smaller than a penis". Everyone
laughed, including Helena.

Liz looked through the contraption, and told Helena "I can see your baby's head. It's got lots of dark hair. A thick head of dark hair." Helena burst into tears. She said "I pictured it with blond hair". That made us all laugh - she and Tony both had very thick, dark hair. She giggled defensively through her tears, and said it wasn't so silly, Tony had blond hair when he was a baby.

The Ph reading came back OK, and Helena was told she could keep going. Helena seemed very relieved when told it was OK to continue with the labour. The scalp monitor was put back in. Tony arrived back. Helena still had her legs in stirrups. He hovered a bit, without going near Helena. Eventually he went and sat in the chair across the other side of the room. He made another nervous comment about Helena having all her holes plugged up. "Now they really have got you completely plugged up". At this stage it felt to me like there was a cast of thousands in the room.

Midwives gradually took the stirrups away, and helped Helena lie on her side. People finished up their jobs and drifted out. It was like the tide going out in the way the busy-ness just drifted away. Things got quiet again, and it looked like Helena was going to get a bit more rest. Tony finally approached the bed.

I left at about half past four in the afternoon, and arrived back at nine thirty in the evening. Anton had just been delivered. During the birth, Helena had begun to leak traces of meconium, indicating that the baby had had a bowel motion. This is taken as a sign of fetal distress, and they'd used an instrument called a ventouse to hurry the last stage of the delivery. Kara, the obstetrician, said she hardly even pulled, Helena did most of it. When Helena talked to people on the phone she said "they had to get the vaccuum cleaner to get him out".

I arrived just as Kara was stitching Helena up. The pediatrician was in the room. Anton was being taken to the nursery. He'd "swallowed some poo", and the pediatrician wanted to keep an eye on for a little while. The pediatrician and a midwife took Anton down to the nursery, and Tony went with him. They said they'd bring him back in an hour or two to put him on the breast. Helena looked a bit panicky. So soon?

After the others had left, Kara and Helena joked about the stitching. At one stage there were just the three of us. Kara said "I'm making Helena a new woman." I asked if she was embroidering "home sweet home", and she said "no, a welcome mat". We all laughed. Helena said "well, make sure the stitches are neat". It was one of those moments of relaxed intimacy that suddenly appear in between everything else.

Tony had obviously made a few phone calls on the way to the nursery, and soon the phones were running hot. He'd told people not to come, Helena was adamant that they had a right to come. She ended up getting her mother and sister in, but not Tony's parents. He stood firm and said they could wait until tomorrow. Earlier, during the day when I'd been alone with Helena, she'd talked about her mother. She told me that she'd thought about having her mother at the birth. She'd wanted to, but

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7 Fetal bowels are full of a tarry substance called meconium. Although fetus' urinate constantly inside the amniotic sac, usually a first bowel motion doesn't take place until after birth. For the first few days a neonate (newborn baby) evacuates the meconium from their bowel: it is not until the third or fourth day after birth that a baby defecates 'proper' faeces.
thought it was better for just her and Tony. She said she’d probably have her mother with her next time. When I left, at a bit after 11:00pm, Tony was (presumably) down in the nursery with Anton, and Helena’s mother and sister were sitting on her bed, listening to Helena’s animated account of Anton’s birth.

Zac’s birth
Marilyn has a bicornal uterus. All five of her children have been delivered by caesarean section. Zac was Marilyn’s fifth, and Pete’s first child. They lived more than half an hour’s drive away from the hospital. Although Marilyn’s mum had come from interstate to look after the other children, I imagined it had been quite a morning getting into hospital. Marilyn and Pete were slightly late, arriving a little after the appointed time of 7:30am.

The caesarean section took place in the operating theatre at the far end of the labour ward corridor. The operating theatre medical team consisted of five midwives and four specialist doctors, in three teams: anaesthetic, surgical and pediatric. The anaesthesics team consisted of Barry Stevens (the anaesthetist), his registrar and Wendy, a midwife; the surgical team consisted of Dr Fox (the obstetrician), and three midwives: Bron, who was assisted by Julie and Ann. Dr Maran (the pediatrician) and a midwife made the third crew.

Barry Stevens, the anaesthetist, had arrived at 7:30, and was put out with both Marilyn and the operating obstetrician, Dr Fox, for ‘making him wait’. He didn’t let Marilyn and Pete know that, although he did politely but firmly make Dr Fox aware of his feelings later in the morning. From what I witnessed of the interaction, Dr Fox appeared fairly unconcerned about Barry Stevens’ irritation.

When she arrived, Marilyn was taken straight to the “recovery room”, the room next to the operating theatre normally used for patients to be observed immediately post surgery, where she was “prepped”. Bron, a senior midwife, was responsible for getting the paperwork done prior to surgery. Her main concern appeared to be a lost consent form. “I’m sure you’ve signed it? Did you sign it? .... where is it? .... You signed it when you saw me, didn’t you?” Her tone was anxious and frustrated, and increasingly hectoring. Marilyn, very pregnant, up early, tired, and about to go into surgery, looked vague when asked about “the form” and said she couldn’t remember. Bron looked at her crossly. I’m not sure whether Marilyn noticed the look, but Pete did.

Marilyn was taken into theatre and laid on her side on the operating table. Pete awkwardly held her hand and looked anxious. He said a couple of times he wasn’t sure what to do. The doctors and midwives in the room pretty much ignored him. Marilyn was calm and vague, taking everything in her stride, but not really “there”.

Everyone was waiting for Dr Fox to arrive. Waiting, waiting, waiting. Barry Stevens spent time looking for the anaesthetic consent form, and eventually found it and put it in a folder with other papers. He and Wendy, the midwife assisting him, discussed a new system that the hospital were
looking at introducing, where the forms had to go the “other way round” (ie: in the opposite order, back to front to the current system).

   Barry Stevens: That would be pretty stupid and confusing.
   Wendy: but typical
   Barry Stevens: grunts agreement

A bit after 8:30, Ann took a phone call in theatre, and announced that Dr Fox was on his way. The room swung into action. Marilyn is asked to sit up. She does, with help, her legs swinging over the side of the operating table. Peter is facing her, standing in between her legs, holding her, head to head, looking very shaky. Wendy paints betadine onto a large area of Marilyn’s back: from about 10cm\(^8\) below her shoulders, to just above her buttocks, for most of the breadth of her back. She moves Marilyn’s blonde hair out of the way just a tad too late, so that she ended up with a few rust-coloured tips in the end of her hair. Moving the back of her scrubs-blue theatre robe aside, Brian Stevens places a green surgical cloth on Marilyn’s back, with an oblong hole in it, about 30cm\(^8\) long and about 10cm wide. Barry wipes a tiny spot on Marilyn’s spine free of betadine. “Here comes the sting” he says, and pushes a fine needle into her back, in the line of her spine. He holds it, then pushes a little more, and a fine line of blood forms. It looks like it’s a fine cut, rather than an injection, and way the blood sits. Barry rotates the needle about 120 degrees to the right, from bottom going up to ending up angled down at the side. Watching from a distance, I wince. Marilyn winces. Peter winces and bangs Marilyn on the head. I hold my breath, hoping that the jolt doesn’t create a problem. Apparently it doesn’t.

   Barry removes the needle, reinserts it slightly lower down. He takes off the shaft, leaving the head of the needle in Marilyn’s back. He attaches another tube to it, injects it, and removes the needle. Where the needle has gone in, there are two lumps, like mosquito bites. He puts a bandaid over the injection sites, a little sloppily, so that the right hand side of the adhesive is crinkly rather than smooth.

   Barry says to Marilyn: “There’s just a bandaid there now, you can take it off later in the afternoon.” Then to Wendy, the midwife assisting him, he says “Let’s get her down quickly.” Barry and Wendy lower Marilyn gently back on to the operating table. They ask her if she’s ok, and take a lot of care with getting her positioned comfortably. A horizontal screen is put up, running across the upper part of her body, to shield Marilyn’s gaze from the surgery that is about to happen.

   As soon as the anaesthetic is done, Julie is ready to go. She has talked Marilyn through what will happen during the caesarean. Julie and Ann are gloved but not scrubbed. They place Marilyn’s legs apart, and place tubes in between her legs on the operating table in preparation for catheterisation. As Julie is about to catheterise Marilyn, Dr Fox walks in, still in his street clothes, looking (to my eyes) incongruous in his tweed jacket. He nods to Marilyn, and leans down to part Marilyn’s labia to allow Julie to insert the catheter into Marilyn’s urethra.

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\(^8\) approx. 4 inches
\(^9\) approx. 12 inches
It was an odd moment as an observer. Although I’m not clinically trained, I am very familiar with hospital spaces, routines, and certain procedures. In addition to my research work, at that stage I had worked for over a year as a tutor in a program teaching medical students and midwives how to give women-friendly vaginal examinations and pap smears. I have seen numerous hands on pudendae, and innumerable partings of labia. I had never seen, and have not since seen, a labia parting with an ungloved hand. In the middle of an operating theatre, colour-schemed in chrome, scrubs blue, surgical green and betadine ochre, the sight of Dr Fox’s very hairy hand, with its bush of black hair on olive skin, against Marilyn’s translucent pale skin, parting her pale pubic hair and labia, is still one of the most striking and unusual sights I have seen in many years of hospital observations.

As Julie finishes catheterizing Marilyn, Dr Fox goes through to scrub. In a remarkably short space of time he has returned in his green surgical gown, scrubbed and double-gloved. Bron is also scrubbed and double-gloved.

At 8:53, Dr Fox makes the initial incision. As he is doing that, Julie is on the phone – the wall phone in the operating theatre - to Dr Maran, the pediatrician. “She’s been cut” is all she says before she hangs up. There is a popping sound, and a loud gush of fluid as Marilyn’s amniotic sac is broken. Sue swiftly suctions up the fluid. This was the first surgery I had observed from the clinicians’ perspective. I later write in my fieldnotes: “I finally know what they use retractors for. Gruesome.”

The baby is lying breech. He comes out legs first: his legs are out at 9:00. Dr Fox pulls on the legs, and the baby’s body emerges, followed by his face and nose. Then the back of his head gets stuck. While Dr Fox is still trying to get the rest of his head out, the baby’s mouth is being suctioned. The suction hose is pushed away, and Dr Fox puts a finger in the baby’s mouth, and puts the other hand behind his head, inside Marilyn’s abdomen. He tugs. The baby, head still stuck, wriggles his fingers. With his finger still in the baby’s mouth Dr Fox reaches for a scalpel. Ann is slow in getting it to him, so Bron steps in. Either Bron or Dr Fox make a further incision, and eventually the baby’s head is out. It seemed like a long time, but it is 9:01 when his head is fully out, and that is the time at which Zac’s birth is recorded.

Zac’s cord is cut and clamped quickly, with no ceremony, by Bron and Dr Fox. Dr Fox holds Zac up above the screen into Marilyn’s line of sight and sort of waggles him at her. “Have you seen your baby?” he asks. She mumbles something incoherent, and in the blink of an eye Zac is whisked away to Dr Maran, the pediatrician, at a trolley I labelled “the baby station”.

“Baby Stations” are stainless steel trolleys that are wheeled in to theatre and labour ward. They are where the baby is weighed, has their APGAR recorded, is examined, then wrapped and either handed to the mother, or handed over to the father, who is then guided to take the baby to the mother.

While Zac is being “processed” on the baby station, Marilyn/Zac’s placenta is removed. Julie takes the placenta to one side and examines it, stretching out a membrane. I ask if she is making sure it’s all there, and she yes, and shows me how she examines it, and what to look for. There was a fair amount of

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10 APGAR: an assessment taken at birth and at five minutes after birth to determine a baby’s alertness and responsiveness.
calcification.\textsuperscript{11} I have only seen that amount before on a very overdue placenta. Marilyn is only 38 weeks, and yet her placenta looks as perished as a very overdue delivery. I say softly to Julie “is that an unusual amount of calcification?” Julie nods, and says softly “’d say she’d be a smoker”. I nod that she is.

Bron and Ann do the ‘the count’: making sure all instruments and swabs are accounted for, to avoid something being left inside Marilyn. Marilyn is sutured. She’s groggy, Pete is confusedly looking from her to Zac. Dr Maran calls him over, and gently hands him Zac, saying softly: “say hello to your baby”. Half an hour later, in recovery, Marilyn is happily chatting about her sister’s forthcoming wedding, and Pete is holding Zac, staring into his face, enraptured. Once Marilyn is out of recovery, she rings her mother, and speaks to each of her kids, telling them they have a new brother. She finishes the call with her mother, giving her details of the caesarean. She calmly puts Zac on the breast while she’s on the phone, he attaches like a pro. Pete doesn’t take his eyes off Zac. He’s 21, and it looks like it may be the first time he’s been in love.

**optimal outcomes**

In each birth, a healthy child was born into an intricate web of established kinship and friendship relationships, including loving parents. In each case, the mother was recounting the story of the birth to her family within hours of the baby’s arrival. The births are profoundly different, however, in the ways in which they were experienced by the mothers, fathers, support people and health care workers involved. Each of the three births illustrate a ‘type’ of birthing commonly experienced by Australian women: Xavier’s birth, midwife assisted, is illustrative of what is referred to in Australian hospitals as non-interventionist birthing, and referred to by midwifery advocates as active birthing. Anton’s highly technologised birth, obstetrician led, is illustrative of what is referred to as interventionist birthing. As vaginal deliveries, both of these differ from Zac’s caesarean section birth. The most usual type of birth in my fieldsite, a non-induced labour ward delivery, lay somewhere between Xavier’s and Anton’s birth in terms of intervention.

A major difference between the births was the type of contact made with the body of the birthing woman. Marilyn’s body was anaesthetized from the waist down, she was separated from the health care workers delivering her baby by a screen. A team of nine health care workers helped deliver her baby. They communicated very specific things to her at specific, scripted moments. Apart from that they had little or no eye contact with her: their professional attention was focused on the safe birth of her baby. She was the centre of committed, professional, surgical attention.

Helena’s body was also hooked up to and monitored by highly elaborate and expensive machines, maintained by a large cohort of health care workers. Machines monitored Helena, and midwives

\textsuperscript{11} A ‘normal’ placenta is a smooth, dark red, similar to the colour of liver. An ‘aged’ placenta, a placenta that has begun to deteriorate, is less uniform in colour, and forms small hard white ‘stones’ of calcium deposits. Even with the amount of exposure I had had to birthing, I was shocked at how much of an effect smoking had on the placenta.
monitored the machines. At least seventeen different health workers treated or observed Helena, including six midwives, three obstetricians, a pediatrician, an anesthetist and an array of students. Like Marilyn, she was the centre of committed, professional, high-tech attention.

Isobel, too, was the centre of committed attention, however of a different type. Far fewer machines were involved in Isobel’s birth. She was connected to people, in that she was almost always touched. Her support people monitored her, and the midwives monitored the support people. Isobel laboured in the company of her husband and a close friend, and in the entirety of her labour was attended by four midwives and a pediatrician. She laboured in an environment that was, as Isobel put it, "like checking into a luxury hotel". Helena laboured in a large, sparkling, hygenically clean room. Marilyn did not go into labour, and birthed within a surgically sterile operating theatre. All birthed within hospitals, however some spaces was more hospital-like than the others.

Isobel felt she had the best of attention: she had met two of her four midwives during her antenatal care, she was active and in control during her birth, she was surrounded by people she knew and trusted. That is what made her feel safe.

Helena also felt she had the best of attention. She was surrounded by the latest equipment, in a sterile, clean environment, surrounded by a large team of health care workers using technology she trusted. That is what made her feel safe.

Marilyn, in turn, also felt she had the best of attention. Having a condition that made a caesarean section a necessity for her to birth safely, she expressed confidence in her surgical team, and gratitude for the birthing care they gave her.

Although there are many similarities in knowledge accessed and beliefs held, these styles of birthing take place within quite separate paradigms, within which vastly differing views are held about risk, trust, nature, science, maternal and fetal bodies, families, medicine, obstetrics and midwifery, and mothers and babies. There is at times fierce contestation between the paradigms, with non-interventionist birthing emphasising connectivity, dynamism, flexibility and trust (of body), and interventionist birthing emphasising autonomy, rationality, stability, and control (of body).

**birthing: the interventionist continuum**

Some women who have experienced highly monitored, interventionist births such as Helena’s are happy with the experience, and repeat it for subsequent births. Others actively seek out and request much less interventionist options in subsequent births. Many women who experience a birth such as Isobel’s seek to repeat that mode of birthing for subsequent births, although some women do choose a more technologised birth for subsequent births. Among my research population, women or couples who were ‘informed’ about birthing frequently preferred less interventionist birthing.\(^2\) Ways of becoming

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\(^2\) I would be hesitant to generalise this more broadly: there were certain skews in the people to whom I had access which may account for this. However, it was such a marked pattern that I suggest it warrants further research.
'informed' included reading, talking to friends and relatives and having had previous birth experiences. The two vaginal birth stories follow this pattern: Helena and Tony did not attend antenatal classes, and although Helena 'read a few books' before the birth, Tony didn't. Anton was their first child. They both appeared to feel it was appropriate to leave a lot of decisions during the birth to medical staff, whereas Isobel and Rick were vocal about their desire to be active in decision making. Isobel and Rick attended antenatal classes, read, and talked extensively about Isobel's three other births in preparation for the birth.  

The major line of contestation in Australian birthing revolves around levels of intervention. Non-interventionist or active birthing modes of care are justified on the basis that birth is a natural occurrence, and if you leave a woman to get on with it, supporting her with the environment she needs, her body will usually do the right thing. Interventionist, high technology, medicalised modes of care are justified on the basis of minimising risk: predominantly risk to the health of the mother or baby, but also risk to the health care worker of litigation.

Since the late twentieth century, the dominant cultural paradigm for doing birth across the industrialised world has been risk-averse, surveillant and technocratic (Downe 2004; Cheyne 2011:520; Davis-Floyd & Sargent 1997; Zadoroznyj 2006; MacKenzie Bryers & van Teijlingen 2010). This approach to birth has been characterised by decreasing rates of maternal and infant mortality, and increasing rates of caesarean section, instrumental delivery, the use of a variety forms of anaesthesia and intrapartum interventions (Downe 2004; Frith et al 2014, Monk et al 2013). Childbirth has moved from the private arena into the public domain, ostensibly for the (physical) safety of mother and infant (Murphy-Lawless 1998; Buckley 2009; Leap & Anderson 2004). Even in countries where conscious efforts have been made to 'humanise' birth by 'demedicalising' it, evidence indicates that the technocratic model remains strongly entrenched (Davis-Floyd 2003:xiii; Reiger 2006; Walsh 2006; McCourt 2006; Jomeen 2012:62; Buckley 2009). This is despite the fact that high rates of maternal and infant mortality no longer apply in most western countries (El-Nemer et al 2005:1; Buckley 2009).  

Naomi Wolf comments that "hospitals are good at providing high-tech care to high-risk patients. But they are also good at seeing every woman as a 'high-risk' patient, and proceeding accordingly” (2001:131). Wolf describes women’s choices as being framed as an ‘either/or’ choice: "When women start on the journey towards childbirth, most can see only two totally distinct doors available to them: the 'conventional' door and the 'natural' door" (2001:127). This 'either/or' perception that Wolf is describing in the USA has been commented on around the globe: in Germany (Beck-Gernshein 2000), New Zealand (Papps & Olssen 1997), Egypt (El-Nemer et al 2005), Britain (Kitzinger 1982; Walsh 2006), Italy (Mazzoni 2002), Turkey (Delaney 1991) and Australia (Robertson 1994, Buckley 2009). It was the way women in my fieldsite generally experienced their birthing options.

Obstetricians and midwives operating within an interventionist paradigm would argue that Isobel’s less-interventionist delivery was too risky. Midwives working within a non-interventionist paradigm

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13 Xavier was Isobel’s fourth child, and Rick’s first.
would argue that a birth such as Helena’s is too risky. Strong emotive language is used by both camps.\(^\text{14}\)

Active birth advocates regularly and repeatedly tell "horror stories about the medical profession" (Wolf 2001:17). Similarly, horror stories are regularly and repeatedly told of “irresponsible, unsafe” home birth midwives by advocates of interventionist birthing.

If you want to have someone get you through your birth without the standard array of interventions, this is the wrong practice. You can go labor on the floor at home with incense and have candles and whatnot - and you might have a fulfilling experience. But you are taking a terrible risk. I have had patients who wanted to avoid the usual interventions, and I told them I could not help them. They left this practice and their baby was born brain damaged. I tell you, if you take issues with these standards of care, you might think you are doing something wonderful for your birth, but your baby could die. (obstetrician cited in Wolf 2001:240)

Proponents of continuity of care programs, frequently linked with non-interventionist birthing, argue that the opportunity to develop on-going relationships with clients/patients enhances quality of care.\(^\text{15}\) Although these midwives are quick to point out that the birth experience should be tailored to the woman’s wants and needs,\(^\text{16}\) included in this particular concept of quality of care is the idea that as long as ‘there are no problems’, birth should be as ‘natural’ (ie: non-medically-interventionist) as possible.\(^\text{17}\)

Although I talk about contestations of intervention/non-intervention in a fairly schematic, dichotomous way, these are, of course, two ends of a highly complex continuum. This echoes the tension between discussions and practice in the maternity unit itself: arguments made for and against particular modes of care were discussed in fairly schematised, dichotomous terms, however decision making in actual cases was understood to be, and treated as if it was, highly complex.

The majority of health care workers in the Princess Grace maternity unit could be described as being slightly more of one persuasion than the other, although no matter where they were placed in relation to others on the continuum, most would probably describe their own position as a ‘middle’ or ‘balanced’ position. Decisions about intervention: when to do something and when to sit back and let ‘nature take its course’, are something health care workers in a maternity hospital face every day, particularly when working on labour ward. Few were so arrogant as to believe they got it exactly right all the time. Discussions about intervention or non-intervention decisions, and the outcomes of those decisions were commonplace among staff. Colleagues often consulted each other when making decisions. There was a high level of reflexivity among most health care workers, and midwives and obstetricians often discussed and dissected situations with colleagues (fellow midwives or fellow obstetricians) in retrospect. There was also a high level of professional respect from most midwives towards obstetricians, and from most obstetricians towards midwives.


\(^{15}\)See eg: McCourt (2006:1307); Walsh (2006); Walsh & Evans (2012) and Buckley (2009).

\(^{16}\)See also: McCourt (2006:1317) and Cheyney (2011:522).

\(^{17}\)See also: Cheyney (2011:531) and Walsh (2006:1330).
Chapter 4: Birthing Bodies

The midwife/obstetrician relationship can be a tense one (Reiger 2008). I have spoken (anecdotally and often ‘off the record’) to midwives, obstetricians, trainee midwives, trainee obstetricians and GPs who have worked in more than a dozen different Australian hospitals, and The Grace appears to be have been unusual in the lack of acrimony that can occur between birthing unit midwives and the more interventionist obstetricians. The head of the department, Dr Dickenson, and the head of the midwifery continuity of care program, Seren, were highly respected. They were, as far as I could tell, almost universally regarded by their colleagues in the maternity unit as exceptional in terms of their skills and knowledge. Sitting at opposite ends of the interventionist continuum, they had enormous respect for each other’s skills. They held very similar positions on the role of intervention in birthing. Both of them felt that it is healthiest for both women and babies for the majority of women to birth with as little medical intervention as possible, with midwives, in a program that offered continuity of care. The role of obstetricians was to take over in the proportion of births – somewhere between ten and twenty percent, probably, in an ideal world - in which there were complications that required medical intervention. They were both frustrated that funding constraints meant that the continuity of care midwifery program was not available for more women.

When Seren was first explaining the way the continuity of care program worked, she talked about the situations in which she had to ‘sign women over’ to the obstetricians: the sets of indicators that ruled a woman out of the midwife-only program. I asked about the lines of authority: she explained that they were strict, and that she didn’t have the authority to overrule them. Some of them, especially the age restriction, she didn’t agree with. She had advocated over the years for some of the parameters to be adjusted, and some of them had been relaxed as the program developed.

As I got to know Seren, I could talk more openly about some of the intricacies of this relationship. We were talking after a clinic visit where indicators had arisen that had required her to sign a woman out of the program. Seren had a particularly close relationship to the woman, and was disappointed she or Rennai wouldn’t be delivering her baby. “Do you resent not being able to continue with her?” I asked. Seren looked a bit bewildered by my question. “Of course not,” she said. “It’s not about me. She probably could deliver safely with us, but this does tip her risks over, and you don’t mess around with that.”

Both Seren and Dr Dickenson had strong views on breech births. A number of obstetricians at The Grace felt that breech births should automatically be caesarean sections. Dr Dickenson and Seren disagreed vehemently with this, and supported women who wished to deliver breech babies vaginally. The Grace’s protocols stated that breech births had to be attended by an obstetrician, which meant that women could not deliver in the birthing unit if they were carrying a breech baby.

A number of people told me about the one breech birth that had happened in the birthing unit, prior to the time of my fieldwork. This was the woman’s third or fourth child. When she was close to

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18 The most common delivery position for the baby is head first. Breech position is the other way around, where a baby’s bottom is delivered first.

19 This is an ongoing contentious issue in obstetrics. According to Buckely, “medical opinion is swinging back toward the option of vaginal birth in certain circumstance”: that is, for full term babies, barring other complications (2009:201).
term and the baby was still breech she had argued strongly with Dr Dickenson to allow Seren to deliver her in the birthing unit even if the baby didn’t turn. An unusual compromise had been reached. 

Normally, the birthing unit was an obstetrician-free zone. In this case, Dr Dickenson joined Seren in the birthing unit, pulled up the Jason recliner chair in the corner, and read a newspaper throughout the birth. Technically, he supervised the delivery. In practice, he showed his faith in Seren’s ability by making himself available only if she asked for him. This level of obstetric humility was held in high regard by many of the midwives. When I asked him about it, Dr Dickenson stopped short of openly critiquing his colleagues, however he did say that he felt it was important to “make the point” and “show people” that “good, experienced midwives have the skills” to deliver breech babies safely.

I observed one breech delivery during my time on labour ward. There was a large crowd there: Dr Dickenson organised as many of the baby-doctors (obstetricians-in-training) to be there as he could. At least two – probably more – of Dr Dickenson’s senior colleagues felt that it was irresponsible to be encouraging vaginal breech births. For them it was a safety issue: it was just too risky. For Dr Dickenson, it was also a safety issue: as long as there were no other complications, breech births were perfectly ‘natural’. What could potentially make them risky, and what was making vaginal breech birthing increasingly risky, in Dr Dickenson’s opinion, was skill loss. As more women were choosing, or being encouraged to choose, caesarean sections for breech births, obstetricians and midwives were losing the skills to deliver vaginal breech births safely. “We will lose the expertise. It’s only safe if we’re keeping our skills up.” He was worried that he was fighting a losing battle, that it might come to the point that he would have to start recommending c-sections for all breech births “not because vaginal deliveries are necessarily unsafe, but because we will no longer have the skills to deliver them safely”.

The maternity unit at The Grace was seen by its staff as reasonably non-interventionist compared to other Australian hospitals, and they would often compare rates of caesarean section to illustrate this. At the time of my fieldwork, Australia had a higher rate of caesarean section births than ‘even the USA’, with a section rate of over 20%. The fact that rates of c-sections were increasing was frequently commented upon, with midwives regarding it as a negative indicator, whereas a number of obstetricians saw increasing rates of surgical birthing as safer, more controlled, and the way of the future. During my fieldwork period, The Grace had a section rate of around 15%, the lowest in the state and one of the lowest in Australia.

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20 There were very strong lines of demarcation: if an obstetrician was (seen to be) required, then the woman was formally transferred on to labour ward. She was moved the short distance along the corridor, from a cosily furnished birthing unit room to a starkly lit, clinical room on the labour ward. Once a woman was transferred from the birthing unit to labour ward, she could not be transferred back.

21 Ronnie, the mother, felt strongly about the value of vaginal birthing, and welcomed the opportunity to have her birth provide a teaching moment. She laughed as she told me later that she’d “actually felt proud” that Dr Dickenson had asked her if she was comfortable with him inviting the junior doctors in, and that she’d been able to offer the students something that might help them in the future.

22 The USA was referred to by midwives, obstetricians and home birth advocates alike as the benchmark country for high intervention levels.

23 Since my fieldwork, caesarean section rates in Australia and most of the western world have continued to rise. Australian caesarean section rates were 21.9% in 1999, and 23.3% in 2000 (AIHW National Perinatal Statistics Unit, http://www.npsu.unsw.edu.au). In 2005 Laws & Sullivan reported the “increase in caesarean sections continued with 28.5% of mothers have caesarean section deliveries in 2003 compared with 19.4% in 1994" (2005:ix). In the early 2000s Australia’s rates were the highest in the world, overtaking the US for a couple of years. The most recent figures currently available show that in 2010, 31.6% of Australian births were by caesarean section (Li et al 2012). The USA was slightly higher in 2010, at 32.8% (Hamilton
cultural birthing: discourses of intervention

Australian paediatrician Christopher Green’s book *Babies! A Parent’s Guide to Surviving (and Enjoying!)*, *Baby's First Year*, reprinted sixteen times since its initial release in 1988,\(^{24}\) opens with the following:

> As the forty-week wait grinds to an end, this is where our story really begins. By now the memory of a slim figure and a walk without a waddle will be but a distant memory. Hospitalisation is close and all thoughts now start to focus on that one major event - giving birth. There will, of course, be a few nagging worries. How will I know when it’s time to go to the hospital? Will the birth be painful? Will I be sore afterwards? Will I cope with the baby? Who will look after the other children? Will my husband starve to death? What will my home look like when I get back? Will someone have remembered to take the garbage out? Will the cat be weak with malnutrition? What overgrowth of fungus will be in the fridge? All these questions and more will begin to niggle at you. The secret is to think ahead, plan ahead and (as they say in the boy scouts) be prepared! (Green 1996:1)

The cartoon accompanying this text shows a woman in bed with two women either side of the bed (Green 1996:1). It is unclear whether they are cleaners or nurses. They are making the bed around her, and one is vacuuming the sheets while the other has a duster tucked into the waistband of her apron. The woman in the bed has a question mark above her head.

*Figure 5: cartoon of woman about to give birth (from Green 1996:1)*

Green presents birth as inevitably taking place in a hospital. It is assumed that there is a husband, that husbands are incapable of self-sufficiency, and that the state of the health of husband, cat, other children and fridge are the responsibility of a woman about to give birth. If a woman about to give birth

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\(^{24}\)The most recent reprint is from 2010. I cite the 1996 edition, which was current at the time of my fieldwork. There have been minor changes in the current edition, involving pregnancy/birth technology and additional advice about identity and self image. The focus on the primacy of the obstetric role in birth expertise remains unchanged.
can plan ahead and be well-enough prepared, she can take all this on. There is no mention of mothers, sisters, female friends or support networks. Cleanliness is of utmost importance, and this is reiterated three pages later when he stresses the importance of having a shower before the woman leaves home for hospital (1996:4). Pain is assumed to be the main concern of a woman about to give birth, with no mention of possible concerns about the health of the baby (1996:1-5).

When describing the birth, Green assumes that the person making the decisions will be an obstetrician, and that the obstetrician will be male. In the chapter, entitled The Birth - How to Survive Hospital and the ‘Helping Professions’, midwives barely rate a mention.

Although Green's bestselling book is aimed at a 'mainstream' reading audience, it represents what is seen among birthing professionals as an extremely conservative view of birthing. Green encourages the use of pain relief, is pro-episiotomy (1996:5), and in discussing birthing positions he suggests that the reader "may prefer the usual, which is flat on your back with your knees bent" (1996:5).

Birthing "flat on your back with your knees bent", or "on the bed" is a metaphor for an extremely interventionist level of birthing care. Midwife Andrea Robertson, Australia's most widely recognised antenatal education specialist, opposes what she calls the "politics of supine birth" (1994:44). She argues that birthing on the bed is inevitably undertaken for the convenience of the childbirth attendant, and is detrimental to the birthing woman and her baby (1994:8). This opinion is unanimously echoed by all 'natural birthing' or 'active birthing' advocates, who argue that women should be encouraged to move around in labour, and deliver in whatever position is most comfortable for them. In one of the two books most commonly read by pregnant women in my fieldsite, Pregnancy and Childbirth, Sheila Kitzinger writes:

Going to bed early in the first stages of labour and becoming more or less immobile can slow down labour or interfere with it starting effectively because, if you are lying in bed, the presenting part may not be pressed down against your cervix. When you are upright, especially if you are moving around, you have gravity to help you; everything is being pressed down. (1982:204)

The other most commonly read book by pregnant women in my fieldsite was What to Expect When You’re Expecting by Arlene Eisenburg, Heidi E. Murkoff, and Sandee E. Hathaway (1992). 25 Although supportive of birthing women's rights to choice, Eisenburg et al take a significantly more interventionist position than Kitzinger, discussing birthing positions as depending upon "hospital policy, your practitioner's predilection, the bed or chair you are in, and most, important, what is most comfortable and effective for you" (1992:276). Eisenberg at al assume an obedient demeanor towards obstetricians from birthing women. Rather than "being strapped to the delivery table", which "[f]ortunately, though it

25 Kitzinger (1982) is a British text, and Eisenburg et al (1992) is American. Both books are published in Australian editions. Kitzinger also publishes as an academic midwifery advocate (see eg: Kitzinger 2005; 2012). Since 2005 (until 2015) the best selling pregnancy advice book in Australia has been cartoonist and author Kaz Cooke's Up the Duff: the Real Guide to Pregnancy (2009). The 4th edition of What to Expect When You’re Expecting, now authored by Heidi Murkoff “with Sharon Mazel” was the next highest seller. Cooke (2009) contains cartoons and comedic passages as well as information as recommended by government health websites and resources. She takes a pro-choice position in terms of obstetrics/midwifery, presenting information that would be regarded as in line with both obstetric and midwifery discourses. Murkoff & Mazel present the obstetric framework as the norm that “most women” choose (2009:21), and midwifery and homebirthing options as alternatives. Very few women accessed pregnancy information online during my fieldwork: that has changed dramatically. In the last few years, smart phone apps have been added as sources of information available to and accessed by pregnant and birthing women in Australia (Lupton & Thomas 2015).
was once routine procedure, ... is virtually unheard of today", Eisenberg et al reassure birthing women that:

Most birthing attendants will simply ask the woman to keep her hands above her waist, away from the area that should remain sterile during the delivery; if she should forget in the middle of a particularly consuming contraction, her coach/partner and the nurse are there to remind her. Whether or not the woman’s feet are up in stirrups during delivery (there’s no need for this during labour), and whether her legs are strapped to the stirrups, depends on hospital policy, practitioner preference, and, most of all, the patient's wishes. The use of stirrups evolved for several reasons. One, they kept the woman’s legs elevated and out of the way so that the doctor had adequate work space. Two, they kept her from involuntarily kicking during a powerful contraction (possibly interfering with the delivery). Finally, they kept her feet out of the area that should remain as sterile as possible.

One reason that stirrups are now used less often in many hospitals - and hardly at all in birthing rooms, where special delivery beds have taken the place of delivery tables - is that a variety of birthing positions have replaced the standard woman-on-her-back-legs-up-and-spread attitude. Another is strong opposition from women who want to retain as much dignity and control as possible during their deliveries. In addition, because women are now generally better prepared for childbirth, they aren’t as likely to thrash around in pain and fear of the unknown. Still many physicians continue to ask their patients to use the stirrups during delivery as they believe this allows room for manoeuvring and therefore for a safer delivery. (1992:262)

Active birth proponents regard the type of approach cited above as unnecessarily and even dangerously obsequious to obstetric preferences, arguing that medicalisation of birth outside of high risk births or emergencies is detrimental to both mother and baby. In her book *Misconceptions: Truth, Lies and the Unexpected on the Journey to Motherhood*, American commentator Naomi Wolf takes Eisenberg, Murkoff and Hathaway to task over their approach.

Today’s American pregnancy bible ... *What to Expect When You’re Expecting* ... - a book that in my opinion is the intellectual equivalent of an epidural - notes disapprovingly that women who have gone through the birth experience tell other women horror stories. To my mind, what is most distressing is not the prospect of a woman hearing about some of the tougher aspects of labour and delivery honestly told, but, rather, the psychic cost to mothers-to-be of literature that is determined to focus on happy talk and sentimentality. (Wolf 2001:3)

Robertson discusses the negative impact of "medicalisation of the birth process itself" as commented on by early 20th century physician Grantly Dick-Read, who noted that due to obstetric attention "women were labouring longer and having more and more difficult births" (1994:5). Robertson argues that "the plethora of technological interventions with their inherent jargon" (1994:8) can be experienced as bewildering (1994:8), threatening (1994:95;116) and traumatic (2004:32) by birthing mothers.

Among active birth proponents, pain is valorised, being seen as a necessary and positive aspect of birthing. In a section headed "Pain with a Purpose", Kitzinger writes that labour ... 

... may be painful, but it is pain with a purpose and different from the pain of injury. ... The idea of a pain that is qualitatively different from other kinds of pain is difficult to accept for anyone who has not experienced it. Yet sheer physical effort, like that involved in running a race or climbing a mountain, produces just that kind of "functional" pain, the ache of muscles that are working very hard. If the athlete thought only of pain instead of about winning the race, she would give up. If the mountaineer thought that her aching muscles were a sign of some dreadful physical injury instead of the natural result of working them so hard, she would forget all about her goal and lose the feeling of triumph when she reached the summit.

Pain in labour is the by-product of the body’s creative activity. Contractions are not pains. They are tightenings which may be painful, especially when they are being most effective. There is an art in approaching each new contraction, thinking "Splendid! here’s another one!” and later, as you approach the end of the first stage, when they are at their biggest, "Oh, this is a really good one!” (Kitzinger 1982:239)
Robertson also argues the functionality of women experiencing childbirth in an active, non-anaesthetised state:

It may be very important to allow women to have the experience of conquering an overwhelming personal crisis, to promote confidence and self-esteem in the new mother. Allowing expression of her negative thoughts (which she may not remember afterwards anyway) may be necessary to allow her to face the fear and deal with it. Reassurance or distraction may not, perhaps, be desirable or beneficial in the long run. (Robertson 1994:97)

She advocates against emphasising the possible need for pain relief during labour:

A woman who has been told through her pregnancy that she doesn't have to bear the pain of labour (as though she is incapable of managing her labour effectively) is much more vulnerable to accepting an epidural as soon as labour begins, thereby fulfilling the predictor's prophesy that 'she was a wimp'. (Robertson 1994:57)

Rather than viewing birthing as a woman's rite of passage, and valorising labour and pain during labour as a valuable part of that experience, Green sees labour as a chore to be made easier, and rejects the advice given to mothers by active birthing lobbyists:

Labour can be a long, tedious affair ... As things progress, relief from pain is freely available either from injected drugs, a self-administered gas mixture or an epidural anaesthetic which numbs all feeling in the lower half of your body. In recent years various groups have campaigned vigorously for less medical interference and more natural childbirth. When all's said and done it's your body, not theirs. You don't have to suffer stoically like a modern day Joan of Arc. If you want some relief, just ask. (Green 1996:5)

Robertson argues that "women are born with the innate ability to give birth, and the best course of action is to strenuously avoid any disturbance of this normal bodily function" (1994:6). Exploring the history of the active birthing movement, she writes that:

In the early 1980's a new philosophy for childbirth education emerged, based largely on observations of women giving birth in the familiar and protective atmosphere of their own homes. It was noticed that these women used a variety of means to manage their labour and that pain killing drugs were rarely used. The innate behaviours, born of instinct and hormonal physiology, seemed sufficient in themselves for pain management during birth, and the results were often spectacular and exciting, especially for caregivers used to witnessing the aftermath of birth in hospital settings. These mothers and babies were contented and physically well, and the women were elated and exalted in their achievement. Altogether, this was the ideal emotional climate in which to begin the nurturing of the new baby. (1994:6-7)

Active birthing proponents argue that women need to be empowered to claim birthing space away from obstetric interference.

A basic belief in women's ability to give birth, unassisted, is at the centre of the empowerment process. Caregivers need to use every possible opportunity presented by their clients to learn about the endless possibilities of normal birth and to reinforce their trust in, and reliance on the natural process as fundamentally correct, unless there are clear, unequivocal signs that the mother or baby need help. (1994:101)

Active birthing discourses construct medicalised birth as risky for the mother and child, arguing that unnecessary physical and emotional trauma result from (risk avoidance oriented) obstetric practice. Medicalised birthing, it is argued, reduces women to a set of averages rather than an individual person.

The need to develop systems for the delivery of health care to a whole population has meant that individual needs are sacrificed in the name of expediency. Women are classified, treated, and managed according to a set of averages instead of being recognised and accepted as individuals with special needs according to each mother and baby pair. (1994:8)

Active birthing advocates see unnecessary obstetric intervention as needing to be challenged, arguing that a primarily risk-averse approach within obstetrics and midwifery create additional anxieties in
pregnancy and additional complications during birth, often triggering an intervention “cascade”, where
one intervention invariably leads to others. Robertson argues that this needs to be understood more
clearly:

The ‘cascade of intervention’ has been well documented in the professional literature, yet it still persists. Perhaps if women understood the likely ramifications of interventions they would be better equipped to challenge the necessity of many of the proposed treatments. (1994:116-117)

An active birthing approach sees birth as closely linked to death, and accepts some maternal and
neonatal mortality as an inevitable part of birthing. Not all babies arrive healthy: an interventionist
approach to birthing is structured to try to revive and save every child born, almost no matter how ill.
Robertson argues that:

It must also be understood that some babies are not meant to live. In the natural world, the weakest do
not survive - an essential mechanism to ensure strong breeding stock and the health of the population as
a whole. The modern desire of medicine to save all babies and to cure all ills is creating unrealistic
expectations, and leaving parents with sometimes insurmountable problems. It is to be expected that
some babies will die, and whilst this is regrettable, and tragic for those concerned, it must be accepted as

Discourses within birthing texts discussed above were echoed among health care practitioners in my
fieldsite, and are present in Australian birthing practices. In my fieldsite, there were three major
discursive modes, which I will call: home birthing; midwifery; and obstetric. Central to these discourses
are ideas about nature, time, the body, touch, women and families, and about what is ‘good’ for women
and families. The theme of ‘empowerment’ runs through home birthing and midwifery discourses, in
which obstetric discourses are constructed and contested as hegemonic.

the myth of the natural birth

Like Brubaker & Dillaway, I suggest that within the social science literature on birthing “the dichotomy
of ‘natural’ verus ‘medical’, has not been sufficiently problematized” (2009:31). At the time of my
fieldwork (late 1999-early 2000), midwifery discourses constructed birth as a natural process, a woman’s
body as powerful, and nature as trustworthy (Robertson 1994). Midwives are literally ‘with-women’: a
midwife’s role is to be with a birthing woman, and to assist her to birth her baby. A decade and a half
later, the language has changed slightly, often with ‘normal’ replacing ‘natural’, however, as Scamell
notes, the content of the discourse has been remarkably stable:

... discursive pressures to redefine birth as a spontaneous and adequate physiological process apparently
sit side-by-side with a birth-management style that characterizes childbirth as a pathological event
demanding hospitalisation, medical surveillance and medical intervention (2014:919)

Home birthing discourses also constructed birth as a natural process (Gaskin 1977). Within home
birthing discourses, a woman’s home is seen as the most appropriate place for her baby to be born.

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26 See Table 4 in Chapter 2 for characterisations of these discourses.
28 In these discourses the language has also now shifted to include: ‘normal’ (Gaskin 2003, 2011; Scamell 2014) ‘holistic’ or
‘ecological’ (Davis-Floyd et al 2009) and the “adequacy of spontaneous physiology” (Scamell 2014:923).
Birthing at home is said to have the advantage in that a birthing woman can be more relaxed, and can have around her the people she chooses. Birthing is seen to be empowering, with a woman more likely to be assertive and take ownership of the birthing process if she is in her own environment. There is less rush. As long as there are no signs that the health of the mother or baby are in danger, labour is likely to be allowed to progress at its own pace, without interventions aimed at speeding up the delivery process.

Obstetric discourses construct birthing as a risky process. The language of risk has not changed. The primary aim of obstetric birthing is to reduce the possibility of death or damage to the birthing woman and her baby. There is a fundamental distrust of women’s bodies to do the job. Wolf writes of her own pregnancy:

> With each of the pregnancy books I’d started to read, the cultural subtext grew clearer and clearer, and it did not make me comfortable. I could see it blinking ... in my mind’s eye ...YOUR BABY NEEDS TO BE PROTECTED FROM YOU. (2001:20)

Within obstetric discourse, the role of the health care worker is seen as necessary to speed up the birthing process, or at least make sure it is ‘moving along’. Nature is constructed as something to be controlled, something to be improved upon. Within active birthing/normal birthing discourse, nature is understood as not to be hurried, the birthing woman was and still is seen as competent, and the health care worker’s role is understood as facilitative, rather than determining.

Midwives working on their own terms do not try to guide births along a path determined by medical interventions. Rather, they wait, encourage, and prepare the way, aiming to keep medical intervention to a minimum (Walsh 2006, 2009c; Winter 2009). The most predominant concept associated with natural in obstetrics, midwifery and homebirthing discourses was the idea of natural birth. I suggest that ‘natural birth’ was and is as much a social construct as is medically interventionist birth. A woman always births within one or more sets of cultural knowledges and practices (Jordan 1978:3; 1993:xx; Lupton 2013). This does not mean that ‘natural’ birth has no meaning. There is a rich and complex set of symbols, beliefs and practices built up around the notion of naturalness in birth. Like all good myths, with the Myth of the Natural Birth there a number of versions of the story, built up around key elements which remain constant.

To call something ‘natural’ is to invest it with an enormous amount of power (Yanagisako & Delaney 1995:2). There are two major cosmological worldviews accessible in mainstream Australia: the Christian, and the Secular Scientific. Examples can be seen in the media, in government policies, and in institutional standards applied to schools and hospitals. Australia observes Christian public holidays, such as Easter and Christmas, teaches evolutionary theory in schools, and funds a school system in

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29 Like Scamell (2014), I suggest that in spite of risk being central to the childbirth experience, the social science literature on risk and birthing is underdeveloped. I discuss this further in chapter 5.

30 Capitalisation in original.

31 Based on ongoing conversations over the last decade with medical students who have undertaken rotations in maternity units, this has not changed in Australia. For a critical history of obstetric time management in birth, see Downe & Dykes (2009).

32 For a critical analysis of birthing time frames in different birthing modalities, see McCourt (2009).

33 Examples of birthing within more than one set of cultural beliefs and practices are immigrant women birthing in Australia, and traditionally-raised indigenous women birthing in the Australian hospital system.
which public schools (government funded) are secular,\textsuperscript{34} and private schools (highly government subsidised) are often religious, predominantly Christian, although there are also a small number of Jewish and Muslim schools. Hospitals have chapels and chaplains as well as social workers. In public hospitals, social workers are frequently included as part of interdisciplinary health care teams and have offices on the wards or in hospital administration areas, whereas, in my experience of research in a number of public hospitals in Australia, chaplains are frequently completely invisible to clinical staff, and hospital chapels are spatially isolated from both ward and administrative spaces.

Nature is crucial to both ways of thinking about the world. In a Christian view of the world, God made nature and bodies and biology, and therefore if something is natural it is right, the way it should be, and morally superior to something which is ‘unnatural’. In a Scientific view of the world, which relies heavily on theories of evolution, the body is a ‘natural’ result of evolutionary progress, and therefore functional and correct and, again, the way it should be.

At the same time, in western religious and scientific thought, nature has a long history of being seen as being the opposite of culture. When seen as the 'opposite' of culture, nature becomes something which may be, and in fact should be, improved upon.

Based upon Cartesian dualistic thought which understands humans to be made up of mind and body, the body is inscribed as the physical (natural) thing which a rational, cultured, superior being must transcend with 'his' mind to become truly civilised. The mind and thought are seen as what makes us human, what separates us from 'the animals', whereas the body, our physicality, is what links us with animals. It is the animal part of us which needs to be overcome to become fully human. Control of bodily functions is crucial in 'transcending' the animal physicality of our bodies. As was discussed in Chapter 2, women, with bodies which leak and seep and overflow all over the place, are seen as less able to transcend, less able to escape, our physicality and therefore our animality. Although this way of thinking about ourselves as human beings is constantly being challenged, it is also a very entrenched view of being human. This view of the female body underlies obstetric discourses, and is actively challenged by home birthing discourses.

The tension, between nature being seen as 'right', and nature being seen as something needing to be controlled, was echoed in negotiations and contestations around natural or non-interventionist, or more medicalised, more interventionist, birthing practices.

The first way in which natural birth was understood is as the opposite to interventionist birth. Intervention is 'doing something', as opposed to 'doing nothing' or letting nature 'take it's course'. When people talk about non-interventionist birth, they are referring to medical and technological non-intervention. Machines, monitors and cocktails of anaesthetising drugs are used in interventionist birthing, however 'natural' birth also involves 'intervention'. Non-interventionist midwives don't 'do nothing'. Touching, feeling, massaging, contact and physical and emotional support of the labouring woman are seen as important to help her cope with and/or enjoy her experience of labour in a so-called

\textsuperscript{34}In 2013 the then recently elected Australian government, led by Tony Abbott, attempted to introduce a scheme aimed at replacing secular-trained school counselors with religiously trained Christian chaplains in public schools. They were hit with a backlash of outrage: the debate continues at the time of writing.
'non-interventionist' approach to birthing.\textsuperscript{35} Midwives watching, observing, and ensuring that a woman's labour is progressing smoothly, utilising extensive experience and technical expertise keeps women safe in active birthing.

Both 'natural' and 'interventionist' approaches to childbirth share a commitment to the concept of optimal outcome.\textsuperscript{36} Optimal outcome, however, isn't a clear cut term: there are discrepancies when you ask the question: 'Optimal for whom?'. Complexities may arise when maternal and fetal interests are seen to clash. For example, in the case of pregnancy termination, or when a woman engages in behaviours which may be seen to be damaging to her child, such as smoking or playing sport. During my fieldwork there was media coverage of a netballer who contested the national netball association's ban on women playing competitive netball when pregnant.\textsuperscript{37} The interests of the family or community may clash with those of the mother and/or baby, for example if the mother is seen to be engaging in behaviours or living in an environment which social workers, courts or health care workers regard as damaging for her children. Examples that arose in my fieldwork were a woman who made her living running an escort agency from home; a woman whose partner was a convicted paedophile; and women with current drug addictions or known substance abuse backgrounds.\textsuperscript{38}

The definition of optimal is far from straightforward: some health care workers regard measures of optimal outcomes in statistical terms, such as 'APGAR scores' which measure a baby's liveliness at the moment of birth and five minutes after birth. Others put more weight on subjective, experiential attributes, such as 'empowerment' or 'bonding'.

A 'home birth' is the most radically 'natural' birth an Australian woman can be conceived as having. There was a delicious irony in the linking of 'natural' birthing with home birthing: among anthropologists home is perceived as the seat of enculturation and culture. Electric aroma therapy burners and portable CD players gently churning out whale sounds set to electronic music backgrounds are, for some women and their partners, essential accoutrements to a 'natural' birth. 'Natural' birthing units in Australian public hospitals were and are still expressly designed to reproduce a 'home-like' environment, complete with certain types of furnishings, music and plumbing arrangements. From an anthropological gaze, there was a lot of culture in natural birthing.

\textsuperscript{35} What I refer to here as 'interventionist' and 'non-interventionist' birthing is analogous to what is referred to in recent midwifery literature as 'the medical model of care' and the 'social model of care'. See eg Miah & Adamson (2015:498).

\textsuperscript{36} Miah & Adamson (2015) refer to the concept of “safe normality”.

\textsuperscript{37} These discourses of maternal responsibility and blame have also remained stable. On January 26, 2016, Channel 10's high rating evening news/chat show The Project ran a story on a woman who was refused coffee by a barista because she was 28 weeks pregnant and caffeine might harm her baby. See also Possemai Inesedy (2006).

\textsuperscript{38} Recent manifestations of this involve Zoe’s Law in the state of NSW in Australia (Robertson 2014), and the emergence last year of "fetus lawyers" in the US state of Alabama (Bushak 2015).

Fetus Lawyers: In Alabama, laws were introduced in 2014 that allow courts to appoint unborn babies a lawyer when an underage girl applies for a court order to have an abortion in the face of not being able to gain her parents’ consent (Bushak 2105).

Zoe’s Law: In 2013 a bill was passed in the lower house of the NSW parliament which declared unborn children “legal persons”. In 2009 a woman lost her unborn child in an accident in which the driver was drug-affected. The judge in the case was “unable to fully account for the death of her child in sentencing the driver, who was given a nine-month prison term ... The law sought to grant legal status to the unborn, to allow greater punishment for those who harmed them” (Robertson 2014). The bill was overturned in the upper house, with opposition from lawyers, medical professionals and women’s groups, concerned at the introduction of “foetal personhood” into law (Robertson 2014). NSW Member of Parliament Mehreen Faruqi is quoted as saying it was “a matter of time before another foetal personhood bill or another such bill that would seek to control women’s bodies is debated in Parliament” (Robertson 2014).
The way space is differentiated between birthing units and labour wards reproduces another broader set of ideas about space.39 'Doctors’ handle deliveries in labour wards and surgical theatres, whereas birthing units are ‘doctor free zones’, they are strictly midwife only territory. This echoes the dichotomy of private or domestic space as opposed to public domains. Doctors perform their deliveries in the public domain, midwives deliver at home, or in a hospital space set up to echo domestic space. Like housewives, nurses and teachers, caring, nurturing, ‘relationship’ work isn’t always seen as real work, and is paid accordingly lower wages in comparison to other work which is seen to be more ‘real’, and which is carried out in non-domestically coded spaces.

Another conflation of natural in obstetrics is that of the natural and the biological, which is in turn conflated with both physical and primitive. Among health care workers and in conversations with pregnant or birthing women, ‘natural’ was constantly associated with four things: ‘animals’, ‘in the wild’, ‘Africa’ and ‘Aboriginals’. These four classifications came up in a number of contexts almost completely interchangeably. They are associated with ease of giving birth, primitive medical conditions, and with squatting to give birth.40

The predominance of ‘squatting’ as the idealised/stereotyped natural birthing position illustrates the extent to which the ‘natural’ birth concept had been constructed. As opposed to ‘on the bed’, squatting was said to be the best position for a woman to give birth in. The reason inevitably given was that gravity is then working with her, rather than the woman having to work against gravity. Karla, the antenatal education midwife, talked about squatting in that way. Holding the skeletal pelvic model in front of her own pelvis, she would tell women in childbirth classes that the more upright they could stay during labour, the more help they would get from gravity, and that squatting to give birth meant “you won’t be battling gravity”.

Squatting is frequently used disparagingly by proponents of interventionist birthing as a derogatory metaphor for natural birthing. More than one person told me the (possibly apocryphal) story of the head of an obstetrics unit (not at The Grace), in a meeting when active birthing was being discussed, saying “well, if women want they can go back to the old days where they squat behind trees and die”.

Although squatting might be idealised as the iconic ‘natural birthing’ or an iconic ‘normal birth’ position,41 very few Australian women actually squat to give birth. According to midwives, and from my own observations and from interviews, the most common position that women birthing with little intervention actually have their baby in, is on all fours.

With my first one, they kept me on the bed. I went to the birthing unit for the next two, and had both of them on all fours. It’s just where I felt I should be, naturally. (Sally, mother)

39 See Davis Hart et al (2014) for recent work in this area.
40 The unconsciousness with which these images were used was noteworthy. Even midwives who knew me well would sometimes speak in quite disparaging terms, using Aboriginality and Africaness as clear metaphors for primitiveness and dirtiness. This is in spite of the fact that many of them knew that I worked in a support program for Aboriginal students, and that many of them had seen me around with my then husband, a dark-skinned West African, and our child. These metaphors were so deeply embedded, they were reproduced almost without thought for what they actually implied, often by people who were not especially racially or ethnically insensitive in other situations. Based on later fieldwork with clinicians in the early to mid 2000s, and on communications with medical students undertaking placements, this is common in many hospital environments in Australia, and has not changed significantly in the last decade and a half.
41 Even researchers who are active proponents of home birth, and have extensive experience of observations of home births, refer to this: see Davis-Floyd’s reference to an idealised practice of giving birth “in upright sitting or squatting positions” (2001:519).
It's funny, women have this idea about natural birth, that they'll be squatting to push the baby out. Maybe that's just nicer to think about that where most of them end up, which is on all fours. Maybe that's just too animal for most people think about. (Rennai, midwife)

'Squatting' may 'work' as a 'natural' birthing position in other cultures. For example, in my fieldsite in Turkey, squatting, flatfooted, either with or without an oturak (a very low stool) was a common position for washing clothes, some cooking tasks (especially kneading dough during breadmaking), planting and weeding, and often just sitting around talking. You have to build your muscles up to this slowly; it is an extremely uncomfortable position if you are unused to it (as I initially was). It took me months to be able to sustain the position for more than about half an hour. Having been sitting like that all their lives, the women in my host community could squat unassisted for many hours. Delaney describes birthing in her host community in Turkey as taking place with a woman sitting on an oturak, which is placed inside a large low washing tub. She uses the sides of the tub for support, and has a support person, usually her mother-in-law, supporting her from behind, rubbing her back (1991:63). Squatting may be a 'natural' birthing position for Turkish women, however it is only 'natural' because of the 'culture' of their day to day lives.

Squatting requires assistance, and strength in particular muscles. Very few, if any, Australian women squat for extended periods of time in their day to day lives. I'd suggest the idea of the 'naturalness' of squatting as a birth position has more to do with a 'logic' suggested by our theories about gravity than with actual (enculturated) biology.

Mauss discussed enculturated "techniques of the body" (1979:104), arguing the relationship between physiology and learned behaviour: "A certain form of tendons and even of the bones is simply the result of certain forms of posture and repose" (1979:107). He noted that cross-culturally "forms of obstetrics are very variable" (1979:110), stating that "things we find natural have a historical origin" (1979:116).

Try squatting. You will realize the torture that a Moroccan meal, for example, eating according to all the rituals, would cause you. The way of sitting down is fundamental. You can distinguish squatting mankind from sitting mankind. (1979: 113-4)

There is a primitivist implication in this which resonates with ways in which interventionist-mode obstetricians discussed squatting. It is difficult to put into ethnographic language the disdain which a besuited medical specialist can invest in the word 'squatting': squatting is, for at least some of the obstetricians in my fieldsite, not something civilised people do. 'Natural', in this world view, is linked with both 'animal' and 'primitive'.

Key to both interventionist and non-interventionist paradigms is the underlying and unquestioning belief in 'natural' as a concept, and the acceptance that there is such a thing as a 'natural' birth. Interventionist thinking is suspicious of natural birthing, regarding it as high-risk. Non-interventionist thinking is more trusting, regarding natural birth as 'right', and the way things should be. This may sound a little obvious, but an important characteristic of the concept of nature is that people believe in it.
Nobody debates that there is such as thing as 'natural'. WHAT is natural or unnatural might be subject to debate, but that there IS such a thing as natural is rarely contested. Natural is conflated with biological: let the woman get on with it and her body will do the job (well or badly, depending on which side of the intervention line you sit).

In obstetric discourse, the naturalised/normalised maternal body is constructed as risky to the child, and interventions are aimed at getting the fetus out into safe (medicalised) environment as swiftly as possible. In homebirthing and midwifery discourses, the naturalised maternal body is constructed as a safe environment for the child. Birthing support is aimed at working within the labouring woman's timeframe, and avoiding a risky (medicalised) environment.

Many contestations between advocates of interventionist and non-interventionist birthing involve strategising around epistemological fluidity and solidity: should attempts be made to 'solidify' nature, or should energy go into attempting to accept and articulate the 'fluidity' of 'natural' processes. Discussions around episiotomy, induction and ECG monitoring during labour all revolve around this. They involve advocates arguing that greater control equals less risk (surgical cut; timed labour; keeping track of fetal heart rate) as opposed to those who advocate a greater trust in letting things take their course (a small tear along the natural line, rather than a cut through muscle, will heal more quickly; let the baby come in its own time, when it’s ready; fetal heart rates fluctuate anyway, it is irresponsible to create unnecessary anxiety by constantly monitoring them).

**professional touch**

There is another demarcation between obstetric and midwifery birthing, which is what El-Nemer and her co-authors refer to as technical touch as opposed to tactile touch, or helping from the heart (El-Nemer et al 2005). In Anton's birth, Helena was the subject of technical touch: her body was hooked up to machines, and her birthing carers interacted with the machines. Apart from the occasional hand on the arm, she was not human-touched. In Xavier's birth, Isobel was the subject of tactile touch: she was constantly rubbed, massaged, held. She was almost never not human-touched. Commenting on lack of touch during hospitalised birthing in Egypt, Nemer et al note:

Tactile contact was limited to the necessary procedures for enacting a technical process, or for ensuring adequate progress. 'Progress' was defined by the system, rather than by the physiology of the individual woman. ... data ... suggest a way of seeing and of knowing about childbirth that is objective, formalised, linear, and mechanical. In contrast to this, women’s accounts of previous births present a very different ontological and epistemological perspective. ... Terms such a 'slow', 'easy', patient'; 'kind' and 'warm' recur in these accounts. The sense is of a calm, caring approach which responded reflexively to an unpredictable unfolding process, rather than of an organised, controlling approach underpinned by a belief that birth is predictable, and standardised. ... Women gave accounts of being mothered during their home births, both by their mothers, and by the dayas. This encompassed a sense of being loved, and of being emotionally safe. (2005:5;7-8)

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42 For an articulation of this in other contexts, see Strathern (1992).
In research undertaken amongst laboratory workers, Deborah Heath (1997) "described how bench workers and principal investigators enact the hierarchical cultural boundary separating mind from body" (Downey & Dumit 1997:15). Significance is accorded to:

... an intuitive, corporeal knowledge that, while imbedded in practice, is nonetheless conscious and socially transmissible. Terms like "body-knowledge," "art," "magic," and "good hands" are frequently used to describe this alternative way of knowing. (Heath 1997:71)

Similarly, midwives are often described as having "good hands". Critiques from midwives of bed-birthing favoured by obstetricians is often phrased as obstetricians' inability and unwillingness to get into the range of positions required to "catch the baby" of a woman labouring on all fours. Comments like "can you imagine so and so getting down and the floor and getting his nice suit all dirty", usually accompanied by a guffaw or a cackle, are common in midwife derogation of obstetricians' professional inflexibility. I found trying to get an obstetrician to comment on the possibility of getting down on all fours is well-nigh impossible: a shudder and a change of subject was the most common reaction, sometimes with mumbled comments about professionalism. Yet again, midwives and obstetricians use the same term to justify their preferences. However, what is regarded as professional by midwives is regarded as unprofessional by obstetricians, and vice versa. As Heath (1997) found with laboratories, within the hierarchical hospital system, there is hierarchy attached to touch as opposed to high-tech work.

The division of of technoscientific labour is characterised by an apprenticeship system in which individuals are expected to work their way up from the "manual" labour of benchwork ... eventually attaining the credentials necessary to do the "mental" labor of the PI (and to be the "mind" that controls the 'hands' of the others). This privileges the role of rationality, while claiming to limit its distribution. It also relegates the career technician permanently to the status of nonmind. (Heath 1997:72)

Midwives do not have the opportunity to 'work their way up' to obstetrician within their career structure. Within the hospital system, no matter how senior they become, they are 'career technicians', permanently relegated to the status of hand maiden and nonmind in comparison to the obstetrician.

The level of perceived speciality of obstetricians (and the lack of recognition of speciality skills of midwives) impacts in other ways as well. Guloboff et al, expressing concerns about the number of Canadian family practitioners or GPs deciding not to offer maternity support, see the increasing medicalisation and perceived specialisation as undermining to professional confidence and ultimately detrimental to quality of maternity care.

Family physicians are turning away from maternity care for practical reasons, such as effects on lifestyle, poor and unfair remuneration, and rising malpractice fees. But another important factor is that they are losing their sense of autonomy as maternity care providers.

Family physicians' perceptions that modern maternity care is complex and technical and "best left to the experts" leads to feelings of powerlessness and being undervalued. ... The settings in which medical students and family medicine residents learn the skills and attitudes required for effective maternity care present a special challenge. Because of the crucial influence of role models, these trainees should experience family medicine obstetrics where positive and collegial structures exist. The unintended message to trainees who see family physicians functioning in dependent roles is that obstetric practice is beyond their abilities. Choosing not to incorporate maternity and newborn care into future practice is an unacceptable consequence. (Guloboff et al 2000:1716)
In my research, midwives frequently reported experiencing interactions with obstetricians as undermining to their professional autonomy and confidence. Many obstetricians in my fieldsite chose to remain unaware of the debates raging in midwifery and active birth circles, seeing these discussions as separate to themselves, and not relevant to their own professional practice.

**solidity and fluidity in birthing discourses**

The logic of interventionist birthing discourses is a logic based on a solid understanding of the world. Nature is treated with suspicion and fear, and as something essentially risky and dangerous, from which pregnant and birthing women need protection. Obstetric discourse posits the doctor as the final arbiter, responsible for and in control of the birthing process. Obstetricians are accountable, in that they are the individuals who are at risk of litigation. Birth is understood as a cosmologically mechanical process, in that it is knowable, understandable and controllable. When things do not proceed according to an obstetric understanding of what should be happening, this deviation is inscribed as maternal or fetal failure: failure to progress, failure to thrive. Logics of solidity privilege hierarchy (with the obstetrician at the top of the decision making ladder, and the midwife as obedient handmaiden) and conformity (with scientifically tested and statistically verified norms). There is a comfort with stability, and a fixedness in time and space. Women birth on beds, supine, within an acceptable range of timeframes. Obstetric discourse supplies norms for each stage of the birthing process, and keeps birthing women safe by intervening to keep each stage of the birth proceeding along a predetermined 'optimal' pathway.

The logic of active birthing, homebirthing and non-interventionist birthing discourses is a logic based on a fluid understanding of the world. Nature is treated with trust, and women's bodies are seen as reliable, and able to perform the job well. Time and space are not fixed: women are free to move around and fill the birthing space in whatever way they see fit, and women are facilitated to birth in their own time, not according to predetermined time schedules. There is comfort with flexibility, diversity, complexity and messiness: one of the mantras of active birthing is that 'every birth is unique'. The role of the midwife is to respond to the individual circumstance and context of the birthing women, rather than to expect birthing women to conform to a rigid set of protocols. Birthing women are kept safe by allowing them to birth in the way their body knows how: in their own rhythm and at their own pace.

These two very different ways of understanding the birthing process coexist in Australian hospitals. In the following chapter, I will explore how knowledge and rationality are constructed and applied within these logics, and examine the consequences of that for decision making in the context of biomedically supported maternity.

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41 Reiger's research also reports this (2008).
44 See also Cheyn (2011: 534).
Chapter 5

Pain, Fear, Risk & ‘Rational’ Decision Making

implications of knowing: obstetric ‘control’, consumer ‘choice’

There is an overwhelming amount of clinical research showing potential and actual iatrogenic consequences of risk-averse, interventionist birthing. This has not necessarily been met with a similar level of engagement in risk discourse from social science researchers. Scamell (2014) suggests that although birth has been given some attention in the social science literature on risk, “scholarly activity in childbirth performance as part of risk society is relatively underdeveloped when compared to other areas of health” (2014:917), and that this should be addressed in order to make “sense of how women choose to give birth in the late modern social context” (2014:917). Given the centrality of risk-aversion to decision making processes in birthing, I suggest that it is also imperative to explore risk discourses in the full context of birthing cultures, from perspectives that include, but are not limited to, birthing women’s perspectives.

Critics of western obstetrics argue that it is too controlling, that obstetricians ‘play God’, and that this control is disempowering for women and their families. The following section discusses control, and in places offers similar arguments. However, although I do believe it is important to dissect (sic) medical dominance (Willis 1983; Long et al 2006 & 2008b) and obstetric control, ethnographic engagement with the site of contestation has left me uncomfortable with undifferentiated ‘doctor bashing’ as a discursive strategy. In my fieldsite, the archetypal misogynistic (older) (male) obstetrician was present, but there was only one of them (from a team of over a dozen obstetricians, of which around a third were women). He was not the head of the unit, was regarded by other clinicians as a dinosaur, and was not held in high regard, even by the peers most closely demographically allied to him (ie: other older, male obstetricians).

Although there is much criticism of the ‘obstetrician as God’ position, there is also much support for it. Many women and their families expect God-like qualities of their obstetricians. Some critics of obstetrician-deification place the blame squarely on (male) obstetrician shoulders, while others see

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1 See, for example: Leap and Anderson (2004); Davis-Floyd et al (2003); Walsh (2007); Keating & Fleming (2009); Buckley (2009); Monk et al (2013) and Sandall et al (2013).
3 In saying this, she appears to echo Mary Douglas and Aaron Wildavski’s’ pre-Beck (1992) call for social science attention to risk (Douglas & Wildavski 1983, Douglas 1985:2). Douglas & Wildavski (1983) argued that risk is so central to the ordering principles of western societies it had been taken for granted and underexplored by western researchers. Similarly, Scamell (2014) argues that risk is so central to technological birthing that, in spite of the Risk Society discourse (Beck 1992) it remains underexplored and under-theorised in birthing contexts.
complicity from women in this deification, and urge change from the community. Obstetricians are actors performing according to social scripts which are constructed within their culture. It is not only obstetricians who find the death of a mother in childbirth or her baby unacceptable, it is also the community within which obstetricians are embedded. Obstetric discourses are discourses of responsibility and risk management. There is a social context in which obstetricians ‘do’ maternal risk management, and are trained to ‘do’ maternal risk management (Davis-Floyd 2003:252).

The entrenched medical model of care firmly places the onus of responsibility on the caregiver rather than on the parents. The fear of litigation has ensured that risk assessments, management plans, protocols, procedures and practical care have all developed with the caregiver's needs as the foremost considerations, even though they are ostensibly in place to protect the mother and baby. (Robertson 1994:8)

In Birth as an American Rite of Passage, anthropologist Robbie Davis-Floyd, a home-birth advocate (2003:xviii), includes a chapter on “Obstetric Training as a Rite of Passage” (2003:252-280), acknowledging the importance of understanding the enculturation of obstetricians in western birthing cultures.

Pregnancy and birth is a time of intense emotion; along with hope and joy, many women and their families are fearful (Ross 2015). Fears revolve around how the baby will be, how life will be after the baby arrives, what will happen in relationships and many other aspects of life with a new baby. In my fieldsite, the response to fear was to try and eliminate the cause. If something was perceived as a risk, it was seen as something to try to avoid or minimalise. Risk minimalisation is complex, and obstetric and midwifery discourses handled risk quite differently. There is overlap between the discourses in many areas about levels of acceptable risk, however, there are also differences of opinion as to what constitutes 'acceptable' risk.

Homebirth discourses are highly critical of birth being handled within a risk-management framework. The majority of midwives working in Australia, and all of the midwives working at The Grace, were trained nurses who went on to do postgraduate midwifery training. At the time of my fieldwork, discussions were underway in various areas in Australia, proposing the introduction of direct-entry midwifery training, that is, a course in midwifery that does not require previous training as a nurse (James & Willis 2001). Nurses’ unions actively and vigorously opposed the establishment of direct-entry midwifery courses. 5 Louise, active in homebirth support networks, was critical of how negative many nurse-trained midwives were about direct entry midwifery. She said that in her state:

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5 For example, see Gower (2005), and the NSWNA (New South Wales Nurses’ Association) policy on nurse education, “re-endorsed by Annual Conference 2003”. Point 13.6 states that “Direct entry pre-registration courses for specific areas of nursing practice [eg midwifery...] are not supported”. Accessed at: http://www.nswnurses.asn.au/documents/3865/extract/index-Policy-14.html. Despite the opposition of both medical and nursing professional bodies, direct entry midwifery training began in Australia in 2002, and has been producing graduates now for a decade. The current Australian midwifery workforce comprises a combination of nurses who have gone on to specialise in midwifery, and direct entry trained midwives. For background to the establishment of direct entry midwife education, see Leap (1999) and Reiger (2001b). For research into early outcomes of Australian direct entry midwifery training, see Seibold (2005); Yates et al (2011); Carolan & Kruger (2011); Davis et al (2012) and Gray et al (2013).
The average age of midwives is forty-seven. [They trained as nurses] so their training was on a risk-management basis. Things CAN go wrong, and you need to be prepared for that, but you shouldn’t be starting from that point.

At the time of my fieldwork, most midwives were to at least some extent critical of inappropriate medicalisation of childbirth, although only midwives seen as more ‘radical’ argued that active birthing not only offered a more satisfying birth experience for most women, but that it was also both safer. Since then, there has been significant amount of research highlighting the higher costs and the potentially iatrogenic effects of unnecessary birth interventions (Sandall et al 2013), showing clearly that high tech birthing is not only not always that safest option, and that in cases of low-risk pregnancies it is actually a less cost-effective and less safe strategy. In spite of this, rates of birthing intervention in most western countries continue to rise (Scamell 2014).

Working from a risk-management framework has implications for the concept of choice. In western medicalised management of maternity, a risk-management framework is accepted as the norm (Katz Rothman 1982:16; Davis-Floyd 2003:xiv; Buckley 2009; Scamell 2014), and the obstetrician takes on the responsibility for final decisions.

At the Princess Grace, women wanting to birth in the birthing unit required permission of an obstetrician. At their 36 week visit, women were required to consult with an obstetrician, who had to be satisfied there were no complications which could be a problem for a birthing unit birth. The obstetrician signed a form allowing the birth to go ahead in the birthing unit. If that form was not in a woman’s file when she came in to birth, she was not allowed to birth in the birthing unit. Although there is a constant discourse of ‘choice’; choice can swiftly become non-choice at an obstetrician’s discretion, or through an administrative error.

Choice is often ‘led’. In a study comparing communication and interaction between pregnant women and midwives working in “conventional” (hospital) and “caseload” (community care), McCourt found that midwives working within a “conventional” model presented a number of choices available to women as non-choices (2006:1307). She writes that two linguistic strategies were employed: Routine as Choice, in which procedures and tests are presented as being routine and therefore normal, implying that it is the right choice for a pregnant woman to make, with phrases such as: “you will have”; “and then you have”; “we do”; “we offer” being used, and Choice as Routine, in which certain choices are presented as the ones that “most people are likely to make”, using language such as “what we offer here”; “you can have” or “it’s your choice” (2006:1315). Her findings echo my observations of midwives and obstetricians at The Grace who operated within the more interventionist models of care.

One example (of many) involved a conversation I had while sitting at the front desk of the antenatal

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4 A meta-study of 13 randomised trials covering 5 countries (Sandall 2013:8) concluded that midwife-led continuity of care models provided the safest birthing care for women with low risk pregnancies. (2013:2). For Australia, see the Report on the Maternity Services Review (Commonwealth of Australia 2009); for the UK see Milah & Adamson (2015). For a health economic analysis, which found that in the UK the cost of birthing care increases along the intervention continuum, see Schroeder et al (2012).

5 McCourt’s “conventional” care model is analogous to what I am calling “interventionist”, and midwives working within her “caseload” model used language which I associated with midwives operating in a more “non-interventionist” mode (see McCourt 2006:1307-8).
clinic with two midwives who were 'prepping the notes' for the next morning's clinic. I asked what was involved in prepping the notes. The senior midwife told me that they marked the files of the women coming in for their 36 week visit for a "weigh and wee": check their weight and collect a urine sample. Files of women who would be between 24 and 28 weeks were marked for a breastfeeding talk and to “give them - sorry - offer them, glucose screening tests”.

Although both the breastfeeding talk and the glucose screening test were offered as choices that women could either accept or refuse, they were presented in such a way that women felt they were a ‘compulsory’ part of the antenatal care program. The vast majority of first-time pregnant women whose pregnancy was managed by obstetricians simply did the glucose screening test, most of them thinking that they 'had' to do it. They were told the visit prior that they would be offered the test, and that they needed to drink a glucose drink, and have their blood taken one hour later. Most women just did as they were told. When they did ask questions, they were told the test was for gestational diabetes, and if it came back positive they would do a follow up test. Gestational diabetes, they were told, usually disappeared at the end of the pregnancy, and could usually be relatively easily controlled through diet. If it was not controlled, it could result in a very large baby. There was nothing in the standard explanation about the discomfort of the follow up test, or about the fact that there was no indication that having a large baby as a result of gestational diabetes was necessarily a problem.  

Women who had had the test in a previous pregnancy were sometimes less than enthusiastic about having it again, especially if they had a young child. If the initial test does come back positive, the follow up test involves fasting from the time you wake up (which can be very uncomfortable when pregnant), going to the hospital, drinking a nauseatingly sweet glucose drink (which can be excruciating for women still suffering from morning sickness, which applies to a significant number of women), waiting for an hour and having your blood tested, then waiting in the waiting room another two hours (still not able to eat or drink anything, and with a toddler in tow, possibly feeling the whole time like you have to throw up) and having another sample of blood taken.

Women cared for in the midwives program had the test presented to them differently to "give them - sorry - offer them" the test.

As I arrived Rennai was going over the glucose testing. It sounded like Stacey had decided not to have it.

Rennai: Quite a few women choose not to have the glucose screening test.

Stacey: I don't think it’s going to be an issue with me, and I can't afford to be ill for a day.

Rennai: Yes, when there's no family history of it. Your last baby was average to big, but not huge, so there's no indication ...

Stacey: Yes, my father-in-law won't usually nurse a baby until it's a couple of months old, because he thinks they're too small and he'll break them, but with Carl he held him immediately.

Rennai: If you'd have had a 9 pound, 4 kilo baby, [it would be different] but there's no risk

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1 For a critique of routine screening for gestational diabetes, see Buckley (2009:45-54).
factors. Your haemoglobin is usually tested at the same time, but yours was brilliant, 12.6, so we can wait until you're 36 weeks for that.

Many active birth advocates argue that this type of negotiation is the only way you can ensure that a pregnant or birthing woman is fully informed, and therefore fully and adequately giving consent. Obstetric management is often critiqued for being paternalistic, and there is a profound tension surrounding the access of information (Buckley 2009:37). How much is enough to ensure adequately informed consent, and how much is too much information? Some women in my fieldsite expressed being overloaded with unwanted information, while others expressed frustration in their attempts to get their obstetricians to discuss their concerns.

The plethora of technological interventions with their inherent jargon is difficult to understand, and at times there seems to be a conspiracy to withhold vital information from women, especially about the scientific validity of many tests and procedures. (Robertson 1994:8)

In the following lengthy quote, which I have included because it resonates with many stories women told me of their own experience, and resonates with some of my own obstetric encounters, Naomi Wolf describes her experience of trying to get information from her obstetrician in the US health system:

The obstetricians rotated their duties and I wondered at the reason for this - did it help them keep a professional distance? Was that good? ...

My obstetrician that day was a glamorous woman with perfectly coiffed suburban hair, a tennis-toned figure and an office full of gleaming French country-style furniture. ... she gazed at me as if she were the president of a one-woman bank and I was a high-risk applicant.

She said curtly that I could go ahead and ask my questions.

'Can you tell me what the caesarean section rate for our hospital is?'

'I think it's about thirty percent, but that figure is misleading. A number of those caesarean-sections are high risk. Since the hospital gets the difficult cases, you can't judge from the number with any accuracy. ... all of the caesarean-sections we perform are done for a good reason, rest assured.'

'Is there any way for us to find the figures? ...'

'Believe me,' she replied, like a politician on message, 'an OB-GYN in this practice is only going to recommend a caesarean-section if it is the medically called for solution to a problem.'

'What is the rate of epidurals?' I asked.

At this she laughed. A note of casual contempt for my naiveté seemed to filter through her otherwise well-bred, well-modulated voice. 'Everyone wants an epidural. You may think you can do without an epidural, but, my dear, one good contraction and you will be begging for the injection like virtually everyone else.' ...

'So epidurals are routine in this practice? ...' ...

"I didn't say they were routine," she snapped. 'I said everyone wants one, and we are not about to go against that preference.'

'What about the episiotomy rate?' I pressed on, feeling increasingly uncomfortable.

'Again, I don't have numbers, but it is part of the standard of care at this practice to give episiotomies just about every time.'

'I read that in Europe, the episiotomy rate can be as low as six percent' ... [I had read that] practitioners in certain parts of Europe have avoided the need for episiotomies by using a gentle massage of the perineal area; some use olive oil.

... It was hard for me to imagine the woman in front of me massaging anyone's perineum, let alone with a condiment.

'That can't be right. I've never heard of that.'

I was slowly getting angry, as well as feeling humiliated and diminished. Not only was she dismissing my questions without addressing them, she seemed to be dismissing my right to ask. She was acting as if it was irrational for me to request hard empirical information. She clearly saw my questions as an attack. But this doctor held my baby's well-being in her hands. Infantilized by this new relationship of dependency, I said nothing. Why should her professional status suddenly strip me of my lifelong
assumption that a woman has a right to know? I wondered. And yet I felt intimidated.

'Ve do episiotomies on everyone,' she continued. 'Especially for first births. We do them because it is easier to mend a straight, sterile cut than' - and here she fixed me with her eyes - 'a ragged bloody-edged tear'. She paused. 'Some tears extend all the way from the vagina into ... the anus.'

And that did, indeed, shut me up. (2001:14-16)

From an active birth advocacy perspective, Robertson argues that "Providing information about how to seek second opinions and change doctors is essential later in the pregnancy, if we are to be supportive of consumerism and choice in childbirth" (1994:65). In reality, exercising a 'right' to choice is mostly extremely fraught. Very few of the women in my fieldsite pushed their right to choose in an obstetric encounter as far as Wolf did in the above quote.

Not having full access to information compromises the concept of informed choice. In a study in the UK, Stapleton et al found that "competing demands within the clinical environment undermined" the effective use of brochures aimed at offering pregnant women "informed choice" about tests and procedures. They describe the resulting behaviours as "informed compliance" (2002:1), a term that accurately describes many of the encounters I observed at The Grace.

Time pressures limited discussion, and choice was often not available in practice. A widespread belief that technological intervention would be viewed positively in the event of litigation reinforced notions of "right" and "wrong" choices rather than "informed" choices. Hierarchical power structures resulted in obstetricians defining the norms of clinical practice and hence which choices were possible. Women’s trust in health professionals ensured their compliance with professionally defined choices ... (Stapleton et al 2002:1)

The extent to which choice becomes non-choice, or informed compliance, is illustrated in the following case, which deals with the decision-making process for Kerry's induction. Kerry was nearly 39 weeks pregnant. Prior to her pregnancy she had slightly high blood pressure, and it had been monitored closely throughout the pregnancy. In the last month, it had begun to creep up. During her clinic visit the week before, Dr Fox had said that they may have to think about inducing the baby. Kerry had asked Barry to take time off work to come to the hospital with her for this appointment, in case a decision needed to be made. I sat with Kerry and Barry in the waiting room prior to Kerry's clinic appointment.

Kerry: [nervously] I wonder what's going to happen today.
Debbi: How are you feeling about it all?
Kerry: [voice quavering] OK, but I don't want to be induced.
Barry: [also nervously, reaching over to hold Kerry's hand] We've decided not to have the induction. Unless it's really necessary. Like if the baby is in danger if it doesn't happen.
Kerry: I don't see there's any reason for them to do it. I don't understand why they're talking about it.
Barry: We'll only do it if there's a very good reason to.

Dr Fox had been called to labour ward for a delivery. Kerry and Barry saw Liz, a doctor who was in her first year of specialist training in obstetrics, and Carol, the assisting midwife.

Liz read the file, and said that Dr Fox had said that Kerry was to have an internal [ie: a vaginal examination], and if the cervix was ripe she would be induced. Kerry nodded meekly. ... Liz took Kerry's blood pressure, and then again a few minutes later. 160/95. "I think we should induce
you. You have high blood pressure, pre-eclampsia could develop”.

Liz walked to the shelf, looked at Kerry's file, and started writing. She was very straightforward about the way she said "we should induce you", not looking at Kerry and Barry, nor responding to their reactions. They were like deer caught in headlights. ...

"We should organise to induce you unless you're averse to it. We'll get you to come in in a few days time and do blood tests, take your blood pressure and monitor you. Is there a day that's a better day for you? You'd come in in the evening, stay overnight, sometimes we'd need a second lot of gel around midday."

Everyone looked expectantly at the expectant couple. Kerry asked if they could talk about it together. Liz said sure, then turned to write up notes. Over her shoulder she said "you don't mind if I write up notes as you do." It was weird. Kerry and Barry went into a private huddle, I wrote on my notepad feeling very inappropriate, Liz wrote, Carol did the midwife equivalent of whistling to the ceiling.

Kerry and Barry mutely nodded their assent. Liz briskly started to organise the time.

Liz was not looking at Kerry and Barry as she said "We should organise to induce you unless you're adverse to it." She didn't check for their reaction, but, with her back still to them, continued on as if it had been agreed that the induction would go ahead. "We'll get you to come in in a few days time and do blood tests ..."

Decision made. Barry's off work until next Sunday, so ASAP. Carol went out to check with labour ward whether they could come in tonight. I gave Kerry a hug, and asked her if she was OK. Yes, she gulped, looking very much not OK.

The appearance of choice can become non-choice at a clinician's discretion. Discussing the decision later, Barry said "Well, it must be the right thing to do if two doctors thought so". In fact, it was not a case of the two doctors both agreeing, after a full consultation, that induction was appropriate: Liz was following Dr Fox's notes, and was significantly junior to him. Essentially Dr Fox had made the decision prior to seeing Kerry: Liz's obedience and Kerry and Barry's compliance meant that other factors weighed less than Dr Fox's opinion. The decision was made, in effect, by an absent obstetrician who had not used any recent data, in that he had not examined Kerry that day.

In this instance, the hospital, represented by Liz and Dr Fox, was making an independent, ‘rational’ decision, with the woman and her family as the dependent other. Decisions made within an active birth framework, where a different type of rationality reigns, look very different to Kerry and Barry's 'choice' to have an induction.

**Knowing choices: fear and pain**

Rennai, one of the birthing centre midwives, said that pain was the biggest fear that women had, and
that women often talked about being frightened in the time just approaching the birth. One of the six antenatal sessions is entitled 'pain relief during labour'. It was always the class that generated the strongest emotional response from heavily pregnant women, with comments, facial expressions and body language that often demonstrated fear bordering on terror. Asking women how they felt after the 'pain relief during labour' session, elicited comments such as "petrified"; "sick"; "I'm going to be such a wuss, I know it".

New Idea, a popular Australian women's magazine, ran a feature listed in the contents as "Beat pain during childbirth. How hypnosis can replace drugs." Bernadette, a "31-year-old Tasmanian psychologist" is quoted:

*I began (hypnosis) during the second trimester, when I started to feel fearful of birth. When you're pregnant, people inadvertently scare you with horror stories about what could happen, which left me feeling terrified. Then, at my first antenatal class, the word 'pain' was used so many times I began to dread the big day.* (Marquardt 2002:32)

Andrea Roberton argues that fearfully anticipating pain makes women much more likely to ask for pain relief, and to ask for it much earlier in labour than women who are less fearful.

*A woman who has been told through her pregnancy that she doesn't have to bear the pain of labour (as though she is incapable of managing her labour effectively) is much more vulnerable to accepting an epidural as soon as labour begins, thereby fulfilling the predictor's prophesy that 'she was a wimp'.* (1994:57)

It is impossible, as an anthropologist, to comment on how pain is felt and experienced; it is possible, however, to comment on cultural complexity and variation in the way pain is articulated, represented and symbolized (Good et al 1994). I suggest that, culturally, Australian reaction to pain is almost entirely negative. The following section contains personal reflections of my reaction to the differences in cultural scripts around pain in two other cultures I have lived in: The Netherlands and Turkey, which informed my observations of pain discourses during my fieldwork.

In my late twenties I was trying to become pregnant. I was living in The Netherlands at the time, and would shudder as Dutch friends related, with relish, their childbirth stories. In my own head I labeled it Macho Motherhood: there always seemed to be a competitive edge as to how much pain a woman endured. One friend proudly had us all sign the plaster on her forearms that she had to wear for her baby's first month to combat the RSI brought on by straining on all fours during childbirth. My blythe comments about "wanting the most natural childbirth that drugs can offer" were met with disdain, and Australians were probably henceforth characterised, by Dutch people who knew me, as being "as bad as Americans" about birth.

In my early thirties I lived in a small rural village in Turkey, where I carried out fieldwork for my masters degree. I was introduced to my host community by a Turkish GP who lived in a nearby town. An inexhaustible activist, she would happily have had me spend my entire fieldwork period photographing and documenting her activities. There was a tight group of professional women in town who joined forces on all sorts of activities, from tree-planting to fund raising for the local library to campaigning for women's issues to anti-fundamentalist political activism. One of the women was a dentist. One of the most memorable meetings of this group for me was held in the dentist's surgery, around the chair, while
she was working on a patient, carrying out root canal work without anaesthetic. Eight women chatted around the dentist's chair as she worked, making plans for combining the selling of raffle tickets with political lobbying. None of the others found it unusual. Even my GP friend, with whom I had many enlightening 'cross-cultural' conversations, couldn't understand why I was surprised by the lack of anaesthetic (or the lack of privacy for the patient). It was only a dentist's visit, what did they need anaesthetic for?

A lot of things surprised me in Turkey about pain. One of the women in the compound I was living in needed four teeth removed, and they were all done at one time without anaesthetic. Although all adults were demonstrative and affectionate towards children, cuddling and snuggling children of all ages, when young children hurt themselves, they were not comforted. When the four year old boy in my compound, with whom I had grown very close and affectionate, fell over and cut his knee, I ran over to him to pick him up. He shook me off with a look of disgust and limped to his mother, who washed and bandaged the knee without giving him any sign of affection. I was quite shaken by the incident, noting at the time that this was how they grew up to be able to cope with root canal work without anaesthetic.

During my fieldwork at The Grace, a researcher gave a paper on decision making processes for caesarean sections. There was a vibrant discussion afterwards. An obstetrician working in the unit was Dutch, and he made comments about the high rates of caesarean sections in Australia (over 20% at the time) compared to that of The Netherlands (around 8% at the time). Someone asked what factors he thought contributed to the difference. He said that birth was treated as normal until complications developed, and that midwives handled normal births, with obstetricians only getting to meet a woman if she developed complications. I commented that fewer Dutch women used drugs for pain relief, there being a difference in the way the two cultures handled pain. He nodded emphatically. Someone asked how they were different, and I voiced a rowdy send-up of two Dutch women competing over how much pain they bore in childbirth. He smiled and nodded, saying, "oh, it's not that bad". I grinned and said "What happens if a woman wants an epidural?" He smiled again, nodding, and said: "We send her for counseling for postnatal depression: they think that if a woman can't go through the pain for her child, then she will have trouble bonding with the child." There were audible gasps from the (Australian) midwives, obstetricians and medical students in the room.

A few days after this talk, I was approached by Josie Ramannathan, an Indian obstetrician working at The Grace, who said that the cultural aspect of pain was very important, and often overlooked. She talked about working in India, in a very large maternity hospital, which handled a far greater number of births than The Grace. She said that when she was working there, a few years ago, an anaesthetist had only recently been employed on the delivery ward. He was, however, not very busy, and complained about not having enough to do. Women didn't want to use him. This is very different to the Australian context, where it is 'natural' to think of anaesthetics and delivery as 'having' to go together.

We discussed the concept of Australia as "an anaesthetised society". I suggested that many Australian women were less scared of surgery than they were of childbirth, hence our high c-section rate. She agreed. I talked of Australian women not being very good with pain, and she smiled and
noded. She said that anaesthetic was a good thing - she could "still remember the pain from the birth of her daughter two years ago", and what a relief it had been "when the epidural kicked in". She had "seen the smiles of relief on the faces of women after they've had an epidural - they really ENJOYED giving birth." She talked about wanting to "go home" to introduce it there.

Josie suggested that Indian women were more fearful of intervention and anaesthetic than they were of pain. I would argue that the opposite is true in Australia: women are often extremely scared of pain, but NOT particularly scared of surgery. In Australia, cosmetic surgery is 'normalised' to an increasing degree. A popular television show, called Good Medicine, ran in the prime time 8:30-9:30pm slot on Wednesday nights during my fieldwork period. In the two series presented during my fieldwork, nearly every episode had a story on cosmetic surgery. The presentation of this was consumer oriented: questions of whether or not the cosmetic surgery in question was necessary were rarely if ever raised. Rather, comparisons were made between procedures, and information offered as to which procedures offer the best results and best value for money. In addition to cosmetic surgery being presented this way on television and in women's magazines, keyhole surgery received prominent media coverage during my fieldwork period, and was inevitably presented as 'easy' and 'safe'. Many common surgical procedures were (and still are) presented in Australia as minor, and ordinary, even when requiring more than local anaesthesia.

I suggest that this is decreasing the perceived risk associated with a caesarean section. It seems bizarre to many midwives, who are experienced with birth, that women would 'choose' a surgical procedure over a 'natural' one, but when pain is inscribed as 'unnatural' at the same time as surgery is becoming 'normalised' via media coverage of cosmetic surgery and keyhole surgery, then a 'preference' for c-sections amongst a certain percentage of the population may seem logical. The ever increasing rates of caesarean section in Australia would seem to support the idea that in some way surgical birthing has a strong underlying cultural logic.9

When pain or discomfort was discussed by women and their families, the tone was either fearful of pain, negative about pain, or slightly martyred ("oh, it wasn't really that bad ...".) Women and their partners may reject any positive valuation of pain, however many midwives had a different attitude. There was a version of 'macho' at The Grace, although unlike the Dutch context it was not mothers but midwives who expressed it. Active birth midwifery advocate Andrea Robertson writes:

The psychological advantages of experiencing pain in labour have often been mentioned by women. Accepting the powerful sensations created by the labouring uterus and riding with strong and sometimes painful contractions to produce the miracle of a baby, offers women unique opportunities for self discovery and growth through mastery of this potential life threatening situation. Submission to the all-consuming and overwhelming nature of birth and the weathering of the inherent pain of labour is an empowering process for a woman, and one which she should not be denied unless critical for her own well-being or that of her baby. (1994:88)

Although a number of midwives agreed with this position, and it is articulated in academic midwifery

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9 Bryant et al mount an argument compatible to this, suggesting the cause of rapidly increasing numbers of caesarean births in Australia lies in the "neo-liberal obligation to manage risk and pursue success for both mothers and babies ... structuring of discourses in this way shows how caesareans can be positioned as a preferential means of birth" (2007:1192).
discourse (eg: Leap & Anderson 2004), few of the women the midwives cared for expressed this view of 
pain. Christopher Green advises expectant mothers that: "as things progress, relief from pain is freely 
available" (1996:5) He is highly critical of "groups who have campaigned for less medical interference. In 
the end, it's your body, not theirs." (1996:5)

When obstetricians discussed or were asked to discuss pain, the range of reactions were: incredibly 
sympathetic; neutral (that's not my department), or, from a very few, unsympathetic to the point of 
scathing. Scathing lack of obstetric sympathy was based on the idea that women had no right to 
complain about pain. If it was a problem, have an epidural and get rid of it. Suffering for suffering's sake 
was seen, in the words of at least two of The Grace's senior male obstetricians, as "stupid" and 
"ignorant".

Midwife machismo was the only reaction in which dealing with pain stoically was valued. Latin 
American women who "[breast]feed with their nipples all cracked and bleeding and everything" were 
spoken about in tones of awe and admiration.

Shelley: Women here are so weak, they give up at the first little bit of pain, whereas Spanish\textsuperscript{10} 
women, they'll endure anything to breastfeed.

Natalie: It's interesting the number of women who say that their baby doesn't want to 
breastfeed.

Shelley: I used that excuse at 6 months. I'd do it so differently if I did it again now.

In this view, the fewer drugs a woman used when birthing, and the less she screamed in an out-of-
control way, the "better" the labour. This was expressed as women "doing well".

She did really well, just the gas.

She laboured so well, she didn't even touch the gas.

She was doing really well, but after the second VE [vaginal examination to gauge how far the 
cervix is dilated] she was only 4 cm and she just lost heart. She ended up with an epidural.

Melodramatic responses to birth were seen as unnecessary. One of my first brushes with midwife 
machismo was the first time I visited the labour ward.

A very stressed looking middle-agish woman in a loud multi-coloured top bustled up the 
hallway. She spoke breathlessly and excitedly to one of the midwives on the desk. Rennai 
looked at me, rolled her eyes, and said in a sardonic aside "and she's just the support person".

Wolf describes an encounter with midwife machismo during the research for her book Misconceptions:

\textsuperscript{10}ie: Spanish speaking women. There were no Spanish women that I know of who birthed at the Grace during my fieldwork. There 
was a small but noticeable Latin American community, predominantly Chilean, Peruvian and Salvadorian.
Chapter 5: Pain, Fear, Risk & ‘Rational’ Decision Making

When I later interviewed midwives at the Elizabeth Seaton Birthing Centre, I walked in on what looked like a party. Three exhausted but satisfied midwives were drinking tea and eating cookies around a table after having been up all night 'catching' a new baby. The mood was congratulatory. The reason? 'An eleven-pound, four-ounce baby girl delivered over an intact perineum!' said the birthing centre director with pride, sounding like a female version of a football stadium announcer calling a new record. (2001:146)

Midwives at The Grace often spoke of women who didn’t "cope" with the birth or weren't "coping" with a newborn in an interesting tone of voice which can best be described as both sympathetic and scathing. The following discussion is about a woman with a two week old baby who was admitted to a postnatal depression clinic. The mother was 32 years old, and the conversation was prefaced with comments about older women having a harder time with a new baby, as they had "more of a fixed lifestyle to give up".

Li: [looking at the file] ... they admitted her yesterday. Is she all right?
Shelly: No, that's why she's there.
Natalie: She's hopeless.
Shelly: She just fell apart.

This active birth midwifery valorisation of pain as a “productive and positive phenomenom” that “plays a major role in transforming a woman into a mother” (Downe 2004:x)11 was not shared by the majority of pregnant and birthing women. The following excerpt follows a session of an antenatal class. The fourth class, in a series of six, on the antenatal program was Pain Relief in Labour. It was, without exception, the class that elicited the most expressions of anxiety from participants. This was an afternoon class, and there were eight pregnant women (Annie, Gail, Olwyn, Col, Julie, Paige, Ling and Lauren), three partners: (including Hugh, partner of Julie, and Steve, partner of Col) and one mother as a support person (Shazza, mother of the young and intimidated Paige).

Karla had written "Pain Relief in Labour" on the whiteboard. Under that were two columns, headed: "self help" and "hospital". Karla commented that she used to put 'home' and 'hospital' but then she realised that the 'home' stuff was stuff that you could also use at hospital. What became clear as the discussion unfolded, was that Karla’s distinction between hospital and 'other' was also a distinction between 'drug' and 'non-drug'.

Karla asked people to name the 'self-help' methods of pain relief.

Gail: Hot water bottle.
Karla: Yes, hot pack - I hope you've all invested in one already.
Julie: Massage.

Karla pointed out the sacrum [indicating her lower back], and said that what was needed was FIRM massage on the sacrum. This was as a firm counter-pressure to the pressure that's coming through on the pelvis from the baby. She demonstrated that very effectively using her own body, and the skeletal pelvis. Baths and showers come up, as did aromatherapy. Karla recommended an electric oil burner, as it was safer, especially once you've had the baby.

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11 See also Robertson (1994:88) and Leap & Anderson (2004).
Chapter 5: Pain, Fear, Risk & 'Rational' Decision Making

Karla: If you use it now you’re likely to keep using it, an electric burner is always a good investment.

Gail: Is it OK to have a bath after your waters break?

Karla: Yep, it's OK, as long as you don't put anything in the bath. Additives can travel up the vagina and cause infection. Don't stay in there any longer than half an hour or forty-five minutes.

Anything else?

Lauren: Go to bed.

Karla: That's right, get plenty of rest. You'd be amazed at the number of people who go for a good long walk. There's no indication that that hurries things up, and it can just tire you out when you really need as much rest as you can get, to prepare you for the marathon ahead.

Julie: Music, relaxation music.

Hugh: I've already packed the Frank Zappa. [laughter]

Karla: Relaxation music is very important. Also think about lighting. What sort of lighting do you want around you? Full bright lights? Make the environment relaxing. Animals don't like giving birth in the light. Dogs and cats will go behind the couch or wherever to give birth. Animals all think the same, and we're animals, remember. If you're not relaxed your adrenaline levels go up, your endorphin levels go down and things don't work as well.

Hugh: Is there anything you shouldn't eat?

Karla: Large meals aren't a great idea, but the worst that can happen is that it can make you sick. It's not going to hurt you, being sick. But small meals are a better idea. Small meals more frequently. And you need to drink a lot, to keep your fluid levels up. Once you're in hospital we really encourage you to keep up your fluids.

Karla added to the board: 'environment; eating/drinking; positions/upright; mediball; beanbags.' Julie and Hugh talked about being able to get a mediball for her pregnancy as part of his workers comp for a back injury. Karla talked about positions to make you less uncomfortable during contractions: pelvic rocking, leaning over the back of the chair, leaning on a support person and rocking. Karla demonstrated, again very effectively.

Karla: Anything that works for you, do it. ... Support people, remember all these things. Support people are really important. If you're comfortable with your support, you'll be comfortable through your labour. You can keep all of these things with you in the hospital. Just because you come into the hospital doesn't mean that you have to use drugs.

Then Karla started on the 'hospital' side of the board. The first one that someone mentioned was gas, Karla wrote it up.

Karla: The gas is nitrous oxide and oxygen. It can be 50/50, the most they'll put it up to is 70%
nitrous oxide, 30% oxygen. It used to be used with a mask, now we have a mouthpiece. Mouthpieces are disposable, you get a new one when you come in. The gas is also called entonox, and that’s what you’ll get in the birthing unit. Entonox is a 50/50 mix, so you can’t crank it up.

The 'nitrous' doesn't take the pain away totally. It gives you something to hang on to, it’s a relaxant, it alters how you experience the pain, but it doesn’t take it all away. When you have a contraction, you have to breathe on the mouthpiece continually, to let it build up in your system.

The 'nitrous' doesn't get into your bloodstream, so it doesn't cross your placenta, so it won't affect your baby. We're not going to encourage you to use the gas in early labour. If you've got 10 hours ahead of you, if you use the gas early on you'll end up being tired and dehydrated.

Steve talked in an aside about 'getting into the gas for a 15 minute stint, at a 9 to 1 ratio'.

It was common for men who had been at a previous birth to mention having used the gas, and to brag about how long they had it and at what level. In this case, it was at the birth of Steve’s child to a previous partner.

Karla: What would we offer you before gas?
Lauren: Pethidine?
Annie: I thought that was after the gas.
Karla: We tend to offer it before. [writes pethidine on the board] Pethidine will make you light headed, and it can make you nauseous. We can give you an injection to stop you feeling sick. If a woman feels nauseous before pethidine, odds are you'll feel more nauseous after it. If you don't feel sick beforehand, you probably won’t feel sick with it. It's an intramuscular injection. It takes about 10 minutes to work, and lasts for about 2-3 hours. It affects people differently, some people say it really affects them, with other people it doesn’t stop anything.

Pethidine does cross into the baby's blood stream. The baby can be sleepy, if it's too sleepy we can give it a shot of narcan in the bellybutton.

Olwyn: It must be a mild dose [of pethidine] that they give you. I've had it with my back, and I was off my face.
Karla: When you’re in labour you metabolise it differently.
Hugh: Is pethidine the only narcotic you give during pregnancy?
Karla: We give morphine to women who are allergic to pethidine, but with morphine it makes it more difficult for the baby to breathe.
Hugh: How many milligrams?
Karla: Someone like Julie [average height and build] 100, someone like Ling [the most petite woman in the group] 50-75, someone like myself [above average height, average
build] 100-150. Depends on your size.

We tend to use gas and pethidine in conjunction. Don't think 'it affects my baby, so I'd better not use it'. In the worst case scenario there's always narcan. But don't worry about it affecting the baby, because it's only a short term thing.

Julie: This is a silly question, but with pethidine, do you get a bung thing in your hand?

Karla: No, an injection in your leg.

All the way through Julie made comments about 'God, another needle', and ended up laughing at herself.

Julie: This is so silly, I'm more scared of having a needle than of giving birth.

At this point, much to Paige's acute embarrassment, her mother, Shazza, attempted to reassure Julie that the pain of birth was a joyous pain, the most magnificent pain a woman could experience, the biggest pain you could imagine, the joyous pain of being a woman. As she waxed lyrical, the others looked at the floor or ceiling, a couple of the partners grinned openly, and Paige blushed redder and redder. Karla jumped in the first time Shazza stopped to take a breath.

Karla: Yes, well, in terms of pain relief, there really isn't an awful lot of choice. The last option is the epidural.

Passing round an anatomy chart showing the spine, she explained the difference between epidural and spinal. It was a very unclear explanation. I culled the following from what she said. Both are injections of anaesthetics into the epidural space, the injection goes through muscle, through your back. A spinal block is a one-off injection of morphine, used for caesars, which wears off after an hour or so. With an epidural you get a constant infusion of 6mls an hour, so "your pain relief is kept at a constant level".

Olwyn: Can I sit up with an epidural?

Karla: You can be propped up, but you can't get up and walk around. Your legs don't work. With an epidural you can't walk around, your baby's monitored, you probably have to be catheterised and you'll need a drip. Once you've had an epidural, it's then constant intervention.

You've got to actually be in labour to get any of this. No internal examination is required for pethidine, but have to have an internal to get an epidural. If there's no dilation, no epidural. You can still push with an epidural. It takes longer, because you don't have the urge to push, and we have to coordinate it for you by monitoring the contractions. You have to push like you're pushing a poo out.

Annie: How many women end up having an epidural?

Karla: In this hospital the epidural rate is only 30%.

Olwyn: Is that all? That's less than I thought.

Karla: The epidural rate is higher in private hospitals. In this hospital 60% of women would have pethidine and nitrous. Some women have nothing at all.
Chapter 5: Pain, Fear, Risk & ‘Rational’ Decision Making

Julie: Is there a last chance to have an epidural?
Karla: No, not really. 
Hugh: How long does the epidural take to work?
Karla: It takes about 15 minutes to get it in, and a few contractions to start working. It usually takes a couple of contractions to actually insert the needle. You have to sit up, curve your spine, then stay still. But you get a local anaesthetic.
Julie: Isn’t that another needle?
Olwyn: Isn’t there a chemical in the brain that helps with pain?
Karla: That’s endorphins. The ones that give you pregnancy amnesia. When labour commences the endorphin levels are massive. You also get a rush of endorphins just after you’ve had the baby.
Olwyn: Will your endorphins stop if you get pethidine?
Karla: Pethidine and nitrous don’t affect your endorphin levels, but an epidural will stop them dead in their tracks.

The class finished up there, with Karla passing on a few reminders about what was happening next week.

I attended five series of the six-week antenatal course, and an additional four ‘refresher course’ sessions on pain relief. This was typical of all the classes on pain relief I attended, both in terms of Karla’s information, the types of questions that participants asked and the kinds of comments women and their partners and support people made.

Participation from women and their support people was limited, with a few dominant people making comments or jokes and asking questions, with the rest being both quiet and passive. Those who did speak were white Anglo Australians; second generation migrant, mostly Greek; or first generation migrants, mainly Latin American. Although a significant number of women birthing at The Grace, or their partners, were of Aboriginal descent, very few appeared to attend antenatal classes. There were none that I knew of in any of the classes I observed. There were small number of African families who birthed at The Grace. Similarly, none appeared in any of the classes I observed. Women and couples from Vietnamese, Malaysian, Indonesian, Indian and Sri Lankan backgrounds attended classes. They rarely, if ever, asked questions or made comments during class, however they would often approach Karla after class or during the coffee break to ask questions.

There were always women in the class who could answer Karla’s questions about ‘self-help’ or ‘non-drug’ methods of pain relief, indicating that at least some of them referred to various birthing books.

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12 That contradicts what I observed on labour ward, where there were some cases when women who asked for an epidural were told it was too late. When I asked the obstetricians later why it was ‘too late’, the reason I was mostly given was: ‘she was so close, it wouldn’t have had time to kick in before the baby came’. Once I was told ‘she was so close we wouldn’t have been able to administer an epidural safely’.
13 Evening classes, held four evenings a week, were open to a maximum of 20 women and a partner/support person. Every evening class that was held during my fieldwork was fully booked. About 30% of women giving birth at The Grace attended antenatal classes.
14 Refresher courses were for women who had had a baby before, and didn’t want to attend the full series of antenatal classes.
There was, however, very little further discussion. Karla would pass on the information she wanted about each method, but she was rarely if ever asked for clarification of technique by people having their first child. The ‘self’ in ‘self-help’ did not apply to the birthing woman alone. It was a pluralised self, encompassing the birthing women and her support team. For example, massage of the sacrum was regarded as a self-help technique: no woman can effectively massage her own sacrum during labour. The ‘self’ of the birthing woman and her partner/support team was placed in a particular relationship of dependence with regard to ‘the hospital’. ‘Self-help’ techniques were ones you did not need to ask permission to obtain. ‘The hospital’ could ‘administer’ drugs if you were dilated enough (no dilation, no epidural), if you signed the appropriate consent forms or agreed in the appropriate way.

Questions were always asked about the drugs. There was almost always a male partner who joked about using the gas, and almost always a comment from someone who had had pethidine for an injury or tooth pain. As in the above example, the majority of questions inevitably concerned epidural. Body language changed during discussions of epidural. People become more alert and sat up a bit in their seats. Outbursts such as Shazza’s happened occasionally, but not often. Discussions of pain as joy, or suffering as noble, were always received with embarrassed shufflings, eye-contact avoidance, and swift changes of subject. Pain being presented in a positive manner was socially taboo. In refresher courses, where all the women had already been through a birth experience, pain was discussed more openly. However, the same taboo applied. Pain as negative was welcomed, sympathised with, allowed to be discussed. To discuss childbirth pain as an empowering or ennobling experience in this setting was to be treated with strange and wary looks.

Karla mentioned the effect of drugs on the baby, but there were few questions or requests for further information or clarification. Virtually no one ever asked about drugs being passed into breastmilk. Occasionally people would ask what narcan was, and Karla would tell them it was the drug that paramedics gave to people who had OD’ed on heroin, to bring them back. Only once did a woman about side effects on the baby. Karla replied, in a quite off hand way: “Oh, it just counteracts the effect of the anaesthetic, and wakes the baby up. It works instantaneously [snapping her fingers]. It’s quite amazing.”

Women who had been through labour before reacted quite differently, and the refresher courses offered far more extensive discussions on techniques of non-drug pain relief. Karla linked birth as being both natural and animal-like in each pain relief class.

Make the environment relaxing. Animals don’t like giving birth in the light. Dogs and cats will go behind the couch or wherever to give birth. Animals all think the same, and we’re animals, remember. If you’re not relaxed your adrenaline levels go up, your endorphin levels go down and things don’t work as well.

The comment was always accompanied with the nodding of heads: the link ‘made sense’ to people. Karla’s teaching material followed Andrea Robertson’s teaching on active birthing.

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15 Caffrey (2014) suggests that this is also the case in anthropological writing on birth.
All animals either prepare or identify a special birth place and make their way there when they sense that birth is imminent. In addition, it is interesting to note that nocturnal animals give birth during the day and diurnal animals at night - a mechanism designed to ensure privacy from other members of the species and reduce the risk of disturbance by natural predators. (1994:88)

Karla presented the hospital environment as not-natural, but suggested the more that people could do to make it 'natural-like' (with dimmed lights, electric aromatic oil burners and relaxing music), the better their animal-like bodies would function. If the woman's animal-body, with its endorphin and adrenaline, failed, then human intervention could step in, turn up the lights and, providing the right consent form was signed, provide an epidural.

Presenting pain in this way is an example of how 'natural' birth, in this case, drug-free birth, is presented as an animal, rather than a human, birth experience. Highly technologised birthing is coded as 'human', with 'active' or 'natural' birthing coded as more 'animal-like'. Birthing women are linked with animals in a way which is often both distressing and negative. In reminding women that they were animals, antenatal education was also reinforcing the idea that to be human is to be something other than animal.

Logics of solidity (with systems of exclusive categorisation) and logics of fluidity (with systems of complementary categorisation), offer very different ways of experiencing the animalness of being human. Within western discourses on the individual and humanness, people, specifically 'man', is separate to and higher than 'animals'. It is the animal in the human that is responsible for lower forms of behaviour, while 'man' 'transcends' 'his' base instincts. In this scheme of logic, to be 'in touch' with your animal self is to deny or be in contestation with your human self.

A logics of fluidity can also situate people as animals. Animal rights activists argue for the connectedness of humans and animals. They allow for difference: for some the difference is that 'man' is cruel and 'inhumane', others argue that it is homo sapiens' dominance of the physical world that means people have greater moral responsibility. However there is also a focus on similarities between humans and animals, and an imperative to read many of these similarities favourably. Haraway, claiming sisterhood with laboratory mice, whose "mutated murine eyes give me my ethnographic point of view" (1997b:211) asks:

The relocated gaze forces me to pay attention to kinship. Who are my kin in this odd world ...? How are natural kinds identified in the realms of late-twentieth-century technoscience? What kinds of crosses and offspring count as legitimate and illegitimate? Who are my familiars, my siblings, and what kind of livable world are we trying to build? (1997b:211)

This way of categorising your world and your relationship in it allows for people to both be like and not-like animals. One does not exclude the other, you can be both, at the same time. You can give birth, in an animal way, following your instincts, and still be human.

I suggest that for some women the overt assurance that being more animal-like does not necessarily make them less human-like may alter the way they perceive and experience birth, and make the relationship between hi-tech birthing and active birthing less either/or, and more open to synthesis.

... at present, there are for most women only two doors that most of us have access to. Each one - the traditional high-tech hospital route and the natural childbirth approach - has great skills to share with the
other. Each needs to be talking to the other in a relationship of equality and respect, collaborating with the other, and creating a birth culture and real choices for women out of the best that each has to offer. Women would be best served if all birthing establishments were shaped by the insights of both camps. (Wolf 2001:172)

There are a number of contradictory discourses running through antenatal education. It is clearly articulated to women and their birth supporters that 'natural is good', and that 'pain is bad'. These messages don't compete: the message of pain as unacceptable easily trumps the message of natural as good. Pain, a physiological accompaniment to birthing, is in this way coded by western biomedical discourse as not natural.16

Another range of contradictions is presented with the information that 'your body will work better if you’re relaxed'. Having been told that, women and their birth supporters are presented with a vast array of alarming information and images. During my fieldwork, an anthropological colleague shared with me an anecdote of herself and her partner clinging to each other, terrified, in the darkened room as they watched a video of a woman giving birth in an antenatal class.17

Pregnant western women today are confronted by a bewildering array of medical technology, are pressured to give birth in a hospital, lack family and community support and live in a culture in which birth is viewed as a risky and difficult process. (Robertson 1994:6)

To have birth managed in a risk-focused framework creates anxiety. Having to negotiate a health care system, and health care workers, whose focus is on risk anticipation does not help a pregnant woman relax about her impending birth. And if she doesn’t relax, she is told, her body won’t do the job. Robertson argues that it is a self-fulfilling prophesy.

A problem arises when caregivers, often practising according to habit rather than on scientific grounds, impose a time limit then stimulate labour artificially. The woman waits for further signs of labour, with a clock ticking away, and as time passes her anxiety increases, especially if she wished to avoid induction. As a result it is likely that her adrenaline level will be high enough to completely negate any oxytocin that might be produced. She is often coerced into accepting an induction through threats of infection and dire consequences for the baby, but the greatest risk may come from the induction itself, with its resulting well-known cascade of intervention. (1994:115)

Buckley discusses the “impact of common interventions” leading to a “cascade of intervention”, “where one intervention leads to another with the final outcome being a high-technology and possibly frightening birth experience for the mother, her partner, and likely the baby as well” (2009:95). Wolf comments on the biotechnological tautology that fear and "pressure can help to stop a woman's contractions, thus causing the very 'condition' that surgery or other interventions are then called upon to 'cure'” (2001:139). Although some women feel safe surrounded by hi-tech equipment and 'machines that go ping', for some women this environment, and the fear generated by risk-averse interventionist birthing discourse, work against a successful labour. 18 Robertson writes that:

... what may be frightening for one woman may be reassuring for another. For example, many women find the use of electronic fetal monitors to be dehumanising during birth and resent the intrusion of technology. Some, however, find the constant beep of the monitor a reassuring sound, signaling that their

16 Midwifery advocates Leap & Anderson compare what they call the intervention-oriented “culture of pain relief” to the non-interventionist approach of “being with women in pain” and ask how “we arrived at this situation where pain relief in hospital became synonymous with notions of choice and women’s rights” (2004:310).

17 For an American example of experiences of childbirth preparation videos, see Gibeau (2008).

18 Regarding the relationship between spatial design and cascades of intervention see Stenglin & Foureur (2013) and Davis Hart et al (2014).
baby is safe and well during labour. (1994:109)

Wolf describes her experience of her body arresting during labour, which eventually led to an emergency caesarean section.

The fetal monitor, which was strapped around my belly, became the centre of activity in the birthing room. My well-meaning midwives were primarily focused on monitoring the continual readout from the machine at my side. The baby and I seemed less real in that room than the machine. At that point the birthing process was so technologized that the notion that 'I' was there to give 'birth' seemed like sort of a virtual aside.

I had imagined a team of birth supporters rooting for me. Instead of such hands-on support, I followed my midwives watching the printout as if I were a commodity on the New York Stock Exchange.

In my delivery, I was an adjunct; I had almost no role. There was nothing I could do to contribute to the birthing process if I wanted to, which I badly did before the epidural essentially neutered my faculties and will. From what we had been told about the monitor's reading my husband and I understood that the baby's life was at stake. No parent would risk the health of his or her child by questioning the procedures the medical establishment had decreed were necessary. I did not dare risk doing anything other than what the doctors and nurses told us I must do. I lay passively on the birthing bed, letting them tie and tether me down, and anaesthetise me. ...

I did not feel safe in the hospital. I did not feel safe. In spite of my best intentions, I could not labour.

(2001:116-117)

Robertson claims that women whose labour arrests due to feeling unsafe in a hospitalised environment are often pathologised, and "diagnosed" with terms such as "failure to progress", "arrested labour" and "dystocia" (1994:98). Rather than the environment being understood as the problem, the woman becomes inscribed as having failed. Robertson argues that situations such as Wolf describes above can better be understood as "a natural response to a threatening situation", "normal rescue behaviours" and "perfect hormonal interplay in the circumstances" (Robertson 1994:98).

fearful choices: control, risk management and informed consent

"Of course, the most cost effective way for obstetrics to work is to forget about vaginal birth altogether and section everyone."

I gasped when I heard Dr Dickenson say that, then saw the twinkle in his eye as he realised he had caught me out. I had not immediately picked up on his irony. On the one hand, it was a joke, in that he did not advocate that. On the other hand, there are obstetricians who seriously, though not publicly, suggest that the most effective way for birth to be organised is to 'plan' everything, and deliver every child by caesarean section. It would certainly 'solve' the problem of gaining signed, informed consent for emergency caesarean sections.

According to Monk et al, one of the results of increasing medicalisation of childbirth in Australia is that “the concept of risk management became a central tenant of maternity care” (2013:213). MacKenzie Bryers & van Teijlingen note that “more and more we believe we can prevent, manage and control risk and risky situations and if not we can seek legal redress” (2010:488). Perceptions of increasing litigiousness within maternity care impacted on the way in which 'informed consent' was obtained at The Grace. Midwives, obstetricians, anaesthetists, birthing women and their families and

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support people have to negotiate an array of contradictions surrounding practices for gaining informed consent in hospitalised maternity and birthing care.

One of the central aims of the GTA tutoring program, where medical students are trained to carry out vaginal examinations and pap smears, is to teach students how to negotiate ‘informed and on-going consent’. It is stated in training that obtaining consent in this way is also important to protect the medical practitioner against litigation, however that is secondary to the main reason for gaining good quality informed consent: the focus in GTA training is on the needs of the woman having the vaginal examination. There are two parts to ‘informed and on-going consent’: firstly, to ensure that the woman has a full understanding of the procedure, and secondly to negotiate the procedure so that if at any time a woman is uncomfortable, she can feel free to say so and know that the person performing the procedure will stop. On-going consent implies that consent can be withdrawn at any time. This way of understanding consent is standard across a number of scientific and biomedical environments, including medical procedures, research and clinical trials, however it was generally not practiced in my observations of interventionist-style birthing.

The ever-present perceived threat of litigation in obstetrics means that focus on gaining consent is not necessarily woman-centered (MacKenzie Bryers & van Teijlingen 2010:488). There was a noticeable difference between older and younger clinicians in the emphasis placed on the formalities of gaining consent. Older obstetricians often negotiated consent in a laid back and almost offhand manner.

Suzanne, seven weeks pregnant, was in for her first antenatal visit. This was her first pregnancy. She had a complex medical background, and the consultation was lengthy. Towards the end of the consultation, Dr Dickenson asked her if she’d had a pap smear recently. Suzanne said no, it had been a long time since she’d had one. Dr Dickson stood up, saying "Let’s do one while we’ve got you captive". Suzanne, following his lead, stood and said OK, and hesitantly followed him into the clinic room.

Dr Dickenson could be equally blasé about obtaining consent on the labour ward. Younger clinicians, however, were rigorous in making sure they gained signed consent.

Marilyn was lying on a trolley, ready to be wheeled in for her caesarean section. Liz rushed in: "The consent form’s not in your file. Have you signed it?". She stood over Marilyn as she asked, in a tone that was bordering on being hassling. "You signed it when you saw me, didn’t you?" [at the 36 week visit, two weeks before] Marilyn looked a bit vague and said she couldn’t remember. Liz walked crossly over to Julie, the midwife, and barked "Where is it?". It eventually turned up in the middle of a pile of papers in Marilyn’s file.19

Midwives commented on more than one occasion of the ridiculousness of trying to get informed consent in some situations.

19 See “Zac’s Birth” in Chapter 4. Marilyn was also questioned (in a hectoring manner) by Bron, one of the midwives caring for her, about the form. It was not Marilyn’s responsibility the form wasn’t in the right place in the file – she had signed it weeks before. It was not a pleasant or relaxing experience to have immediately before the surgical birth of a child.
Chapter 5: Pain, Fear, Risk & ‘Rational’ Decision Making

Leanne: Honestly, how can you get full informed consent with emergency sections? It’s a joke, it really is.

Julie: [nodding] The younger doctors like Liz and Steve seem to do everything with an eye to litigation.

Julie’s tone was both critical and understanding. Leanne nodded her agreement.

There is a conflict inherent in the concept of consent in obstetrics. There is no tolerance of loss or death, and at the same time there is a discourse of consumer choice in birthing. Obstetricians are held up as the experts, the final arbitrators, in decision making, but they have to gain consent from the ‘consumer’ for their decisions. This results in information being presented in particular ways. During antenatal classes, Karla gives women and their support people information about oxytocin, an injection offered to the woman after birth, and a vitamin K injection offered for newborn babies. Both of these injections are presented as if they are the ‘sensible’ thing to do. There were no details offered of side effects, no discussion of pros and cons, and no information about where to get further details if women and their partners/support people wanted to follow it up themselves.

Karla: You don’t have to have oxytocic. It definitely reduces the bleeding rate after birth. Oxytocics have been around for about 35 years, and they have definitely reduced the rate of women bleeding in childbirth. If you have a natural delivery than you shouldn’t need it, and you don’t have to have it. If you have an epidural, forceps, any intervention, then your choice goes out the window and they’ll give it to you. Dr Dickensen, the boss here, said to me ‘I don’t care what you tell them, as long as you tell them that if they don’t have it and they have a bleed, they’ll need a transfusion’. Karla didn’t go into the possible side effects of oxytocic, or possible negative outcomes. She didn’t say, and no one asked, about the drug going into breastmilk, and what possible effect, if any, that may have on the baby.

Karla then talked about Vitamin K which ‘prevents haemorrhagic diseases’. Again, it was presented as fairly straight-forward, with the tone of: ‘it’s a good thing and look at how good we are offering it to you’. At the same time, there was an emphasis on ‘it’s your choice’, with the implication being you’d be foolish not to chose it.

The contradiction of claiming that consumer-patients have choices, insisting that they articulate them, for example in the form of birthing plans, and then withholding full information, or making information difficult or obscure to obtain by labeling it too technical or unnecessary is a characteristic double-bind of interventionist birthing practice (Robertson 1994:8, McCourt 2006:1315). Breaking processes down into sub-processes, and gaining consent step-fashion where some information is disclosed only at the second or third ‘step’, is not uncommon.

The following fieldnote excerpts deal with decision making and gaining of consent for a caesarean

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20 For a discussion of analogous challenges in informed consent in medical research, see Hoefer & Hogle (2014).
section for Kerry, whose experience in the decision making process for induction was discussed earlier in this chapter. Kerry had been admitted the night before, and prostoglandyn gels inserted into her vagina. When “nothing had happened” after a couple of hours, she’d been sent to the postnatal ward to sleep. Her contractions had started at about five the following morning, and she’d been returned to labour ward. It was now around 8:00am. Kim is the midwife, Liz is the obstetrician.

Kim put the monitor on. She couldn’t get a decent reading. Kim explained about ‘the baseline’.

Kim: If the baby’s baseline is low, around 90-100, and it’s going up to 140 or so during contractions, then that’s OK, that’s a normal reaction. If its baseline is around the 140 and it’s going down to 90-100, then that’s a sign that the baby could be starting to show signs of distress. We couldn’t break your waters, so we don’t know if there’s any meconium in there - poo from the baby. It might be that the doctors will want to do a caesarean.

There, I’ve said the word. If they do it will be because they think that it will be difficult for the baby to go through another 10 to 14 hours.

Kerry shuddered at the thought of that. Liz came in, and came and sat on the bed with Kerry. She put her hand on her leg as she talked to her. She was really lovely. She said that she and Dr Dickenson had looked at the monitor readout, and the best that they could read it showed that the baby had quite a high baseline heart rate, and it was going down during the contractions.

Liz: That could mean a lot of things. Maybe the cord is in a difficult position and being squeezed during contractions. If you were nearing the end of your labour, we’d just let you go, but you’ve got a whole labour ahead of you, and we don’t think that the baby would be happy. It’s OK now, there’s enough blood getting through, but we don’t think it’s a good idea to let you go. So we think we should deliver your baby now, by caesarean section.

I do a cut about this big [indicating] down on your pubic line. You probably won’t see it afterwards, as it will be hidden in your pubic hair. I will perform the surgery. There are some risks attached.

Liz then listed the risks, followed by what they did about them. She made it sound very straightforward.

Liz: [...] There is a risk of infection, which is why we give you antibiotics. There is the possibility of a puncture in the bladder, which we sew up. The risk of that is about one in a thousand. Are there any questions?

Kerry: [looking shell-shocked] No

Liz: Are you happy to go ahead with it?

Kerry: Yes.

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21 See Long et al (2007) and for discussions on informal, undocumented clinical communications in which clinical decisions are made.
Liz: OK, I'll get you to sign these forms.
Liz hands her the pre-filled in form, Kerry signs it without reading it. Liz turned to Barry for the first time.
Liz: [briskly, cheerily] Barry, are you happy?
Barry: [uncertainly] Yes, if you think it's the right thing ...
From there things moved really quickly. Barry and Kerry both commented on how quickly things started happening. Steve came in and put the IV cannula in. Kerry grimaced a lot. The anaesthetist came in and had a perfunctory talk to Kerry. He explained the risks, and explained the type of anaesthetic, as if he was talking to someone who knew a lot about epidurals.
anaesthetist: You get hardly any cases of headache from this one, there's a small chance of tearing a lumbar ligament, that sort of thing. Do I have your consent to go ahead?
Kerry nodded in bewilderment. The anaesthetist and Liz couldn't have been more different. Even though Liz went through things quickly, she didn't act rushed, she talked to Kerry in a way that was understandable without being condescending. She didn't give her time to think, and she offered no 'thinking time' after she'd asked if Kerry had 'any questions'. But she'd had a lovely manner, in stark contrast to the anaesthetist, who was very abrupt.

Note that there are two different types of consent sought: firstly, Liz gained consent for the c-section, without explaining any of the risks of the epidural. It was only after that consent form had been signed that the anaesthetist came and explained the risks of the epidural (although the explanation was far from clear), and then gained consent separately.

Although I didn't think of it in this way at the time, going back over my notes I was struck by the two-stage aspect of this, and how strongly it resembles certain sales techniques. Sales people are taught that if they can get agreement in one area, secondary agreement is more likely to follow, and that that is a more successful technique than trying to 'close' the whole deal at once with a tentative customer. Get as much agreement as you can along the way, then people are less likely to feel able to 'back out'. I'm not suggesting that the health care workers involved followed this technique deliberately, but I am suggesting that presenting consent in a particular way results in subtle coercions that health care workers may not be aware of.

Another situation in which consent is obtained is in the middle of a distraction. This was also relatively common. In this situation the health care worker and the woman are concerned about different things, with the woman's attention not on what the health care worker wants to focus on, and vice versa. The following is also an induced birth, and is from one of the birth stories in Chapter 4. Helena's contractions had been strong for around ten hours. A few hours before she had asked for, and had been given, an epidural. She is distressed and uncomfortable. Her partner, Tony, has gone out.

22 In my pre-academic life, I spent 8 years in advertising sales, which included periods working as a sales trainer. Techniques used for gaining 'informed' consent from women in labour were remarkably similar to techniques taught for 'closing' sales. See also McCourt (2006:3314) for a description of gaining consent for screening tests in which certain 'choices' are regarded as more valid than others, and information is presented in such a way to lead women towards the 'right' choice.
23 Anton's birth.
Liz came in, and looked at all the charts before she greeted Helena.

Liz: I think we should look at doing a scalp Ph. That's where we take a small sample of blood from the baby's scalp.

Helena: [crying] Will it hurt the baby?

Liz: Definitely not. There's still a bit of dipping in the baby's heart rate. The scalp Ph reading will tell us whether there's enough oxygen getting in to the baby's blood.

Helena immediately realises the ramifications of this.

Helena: And if there's not, does that mean there'll be a caesarean?

Liz: It might not come to that, but that is a possibility if the baby's not doing so well.

Helena: [crying, tears now streaming down her face] I didn't want that. I didn't want that.

Liz: [hand on Helena's arm] Is it OK to go ahead with the scalp Ph?

Helena: I guess so. [waving her arm dismissively] Do whatever you want.

Health care workers operating in an interventionist mode, within a discourse of birthing women as consumers and an environment of litigation, needing to gain 'informed' consent, have to perform verbal gymnastics to achieve the outcomes they believe will avoid 'wrong', 'bad', 'risky' or 'dangerous' choices. At the same time as avoiding 'risky' choices, birthing women are expected to enact an autonomous, independent rationality in informed consent negotiations, and health care workers are expected to facilitate those negotiations, without appearing to coerce. Haraway expresses discomfort with the term 'choice':

... "choice" is less the metaphor I seek for how to behave in technoscience than "engagement," or even, at the risk of piety in permanently contingent games of mimesis that I want to play, "commitment". (1997a:239)

What is being asked of both health care consumers and health care providers in terms of consent is a form of written contract that is frequently inappropriate to negotiate and often impossible to implement. A solid, bounded, risk-averse, litigation-oriented (therefore hierarchal and contested) logic requires that consent is negotiated and consent forms are signed. A fluid logic which recognises consumer rights, personal choice and the diversity of the birthing population insists that consent be negotiated, documented, fully informed, and on-going. Haraway's "engagement" or "even "commitment" in decision making (1997a:239) requires relationship. In spite of their popularity, maternity services which offer continuity of care, in which relationship can be formed and maintained, and in which engagement become possible, are difficult to sustain in the face of hospitalised biomedical birthing practices.24 Like many of the contradictions inherent in birthing practices in Australia, consumer choice and clinician accountability balance precariously between contesting logics.

Beck identifies characteristics of and contestations within what he calls 'risk society' (1992) as: shifting definitions of nature (2000:213); shifts between linear and circular/spiral logic (2000:213); increasingly dynamic taxonomies (2000:222); increasing inaccessibility of risk and risk perception to the corporeal

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24 Davis-Floyd also makes this point (2003:xiii).
senses (1995:13;65); and increasing destabilisation of the centrality of expert knowledge (2000:211). Each of the characteristics was present in The Grace’s maternity unit.

As this thesis shows, solidification is a strategy of risk aversion: reducing complex, dynamic, multidimensional phenomena into stable, two dimensional, measurable sets of data which can be more easily controlled is understood, in an interventionist birthing paradigm, as enhancing safety and minimising risk. Beck argues for increasing reflexivity (2000: 211). I suggest that increasing awareness of fluid logic is a potential tool in enhancing this desired reflexivity.
Chapter 6

Damning Leaks & Shape Shifting Bodies

There is a tension inherent in the way "the essential fluids of life - blood, milk and semen" (Katz Rothman 1982:35) are understood in western industrialised societies. As Katz Rothman indicates, red and white body fluids are carriers of life, and they are symbolic of life. They provide 'spark', genetic material, and nutrients. They have biological and social generative power. Without blood, milk and semen, life could not exist.1 At the same time as being essential markers of life, blood, milk and semen are threatening, dangerous, carriers of disease. The reproductive body fluids connect people. Connection-through-body-fluids is both life-generating and life-threatening. The body is dynamic, a constantly changing organism, yet in biomedical terms health and well-being are coded as stable (Shildrick 1997:169). A shape-changing maternal body threatens the idea of a healthy, stable body: like material fluidity, corporeal dynamism is both life-generating and life-threatening.

displaced connection

Poststructuralist theorists Kristeva (1982) and Irigaray (1985) suggest that negative inscription of body fluids, corporeal fluidity and corporeal dynamism are central to the philosophical concept of transcendence. As discussed in Chapter 2, in western societies the achievement of fully adult status, coded in terms of rational, independent autonomy, is contingent on the 'rational mind' transcending 'emotional embodiment' (Shildrick 1997:215). Crucial to the concept of transcendence are constructions of individualised personhood. While in western biomedical understandings of biology, coming-into-being is seen to be a result of the physical connection and mixing of fluids generated by intercourse, at the same time personhood is inscribed as ideally individualistic. In western industrialised constructions of the person, connection is both necessary and anathemic.

The fluids that are understood to flow between bodies are milk and semen. In western biomedical understandings of reproduction, people would not come into being without semen and milk. Semen physically passes from one body to another during intercourse, connecting sexual partners and creating the opportunity for life. Milk physically passes from one body to another during breastfeeding, connecting mother and child and creating the opportunity for life. However, when articulating and

1It is significant that blood and semen cannot be synthesized or artificially reproduced, and many argue that infant formula is an inadequate and potentially dangerous substitute for breast milk. See eg: Van Esterick (1995); Mills (2014:255).
symbolising relatedness, blood is the metaphor used (Schneider 1984, Carsten 2011:19). Milk and semen, the physiological connectors, are metonymically displaced by blood, the connector with “a peculiarly extensive symbolic repertoire” (Carsten 2011:19).

In a society that values personhood for traits of individuality and independence, and in a cosmology that sees creation as the precinct of a higher being or beings (God or Science, depending on the belief system) the concept of personhood being contingent on physical interdependence has been metonymically glossed. Blood as symbol for life and connection resolves the tension of physical connection. Even though you may be, and in fact most likely are, a different blood type to at least one of your parents, you can symbolically have their blood flowing through your veins safe in the knowledge that it will not alter your individual self. A person can have the blood of their ancestors passing through them, they can carry the genes of their ancestors, without having their individuality, their personhood, threatened. Blood can be replaced by transfusion without major cultural trauma, because it does not 'normally' flow between bodies. Ethical, moral and symbolic dilemmas are experienced as more complex in the case of milk and semen donation. These are fluids that are understood to flow and affect other bodies: they are boundary-breaching, powerful and potentially dangerous.

dam(m)ning the leaks: infection control

There are a number of statutory bodies and risk minimalisation standards that govern hospitals as sites of disease prevention and infection control in which pregnancy and birthing procedures occur. The National Health and Medical Research Council (NHMRC) is the statutory authority vested with the responsibility of advising “the Australian community ... on standards of individual and public health” (NHMRC 1996:163) The NHMRC’s 1996 publication Infection control in the health care setting: Guidelines for the prevention of transmission of infectious diseases sets out guidelines for disease control, which includes the “recognition of blood borne viruses as a major cause of cross infection.” (NHMRC 1996:1). These guidelines were current at the time of my fieldwork.

The term 'blood borne virus', as used in these guidelines, includes human immunodeficiency virus (HIV), hepatitis b (HBV) and hepatitis C (HCV). It may also include new or emerging viruses which are considered to be transmissible by blood or other body fluids (NHMRC 1996:106).

Hamish, a project officer for a state-funded project described as the “blood borne virus disease program”, described the work of the program as follows:

‘We provide education to health and community workers. We talk about body fluids, in particular blood, semen, menstrual blood and breast milk, in a disease framework.’

In both literature and practice, "blood borne" is used synonymously with "fluid borne". Blood is the metonym for body fluids, in the case of the project mentioned above, semen, menstrual blood and breast milk.
A significant amount of Australian health care resources are spent in attempting to control body fluids. True to Mary Douglas (1966), body fluids out of place are dirty, threatening, risky, polluting and frightening, and there is a perception that they need to be controlled. The NHMRC guidelines for infection control, which are required to be implemented in all Australian hospitals, and which were stringently enforced at the Princess Grace, list five categories of infection transmission, four of which they consider relevant to Australian health care.

Diseases may be transmitted via the airborne (breathing), contact (touching) or alimentary (eating) routes .... Transmission of infection may also occur via common vehicle (contaminated food, water, medications, devices or equipment). ... Vector borne transmission (via mosquitoes, flies, rats and other animals) is not considered to be significant in the Australian health care setting. (NHMRC 1996:10)

Infection through body fluids falls into the ‘contact’ mode of transmission:

Contact may be either direct or indirect, and is usually transmitted by hand or via contact with blood or body substances. (NHMRC 1996:10)

In infection control policy and practice, 'blood borne' disease is given markedly more attention that any other category of disease.

Risk minimisation strategies historically included the adoption of 'Universal Precautions', a concept defined in Australia as work practices which assumed that all blood and body substances were a potential risk of infection, independent of perceived risk. The concept was widely accepted as a 'first-line' approach to infection control. It provided a high level of protection against transmission of infection from carriers of blood borne viruses. (NHMRC 1996:1)

The Practice of "Universal Precautions" was adopted in Australia in 1985, from guidelines developed by the US Centers for Disease Control and Prevention (CDC) "largely due to the HIV/AIDS epidemic and an urgent need for new strategies to protect hospital personnel from blood borne infections" (NHMRC 1996:10). Universal Precautions means treating every patient as if they are infected, rather than assuming some categories of people will be safer or riskier than others. Universal Precautions, ... placed emphasis for the first time on applying Blood and Body Fluid Precautions universally to all persons regardless of their presumed infectious status. Initially, Universal Precautions, as defined by the CDC, applied to blood, body fluids that had been implicated in the transmission of blood borne infections (semen and vaginal secretions), body fluids from which the risk of transmission was unknown (amniotic, cerebrospinal, pericardial, peritoneal, pleural and synovial fluids) and to any other body fluid visibly contaminated with blood. Universal Precautions did not apply to faeces, nasal secretions, sputum, sweat, tears, urine or vomitus unless they contained visible blood. (NHMRC 1996:10)

Australia went further than the USA in its recommendations for the application of Universal Precautions. Australia adopted a broader definition of Universal Precautions. All blood and body substances were considered to be potentially infectious. (NHMRC 1996:11)

The 1996 Australian guidelines recommended moving away from Universal Precautions to a two tiered approach, again following the CDC. The new guidelines were labeled Standard Precautions and Additional Precautions.

The Infection Control Working Party has recommended the adoption of the term 'Standard Precautions' as the basic risk minimisation strategy, with 'Additional Precautions' where standard precautions may be insufficient to prevent transmission of infection, particularly via the air borne route (NHMRC 1996:11).

The definition of Standard Precautions is as follows:

Standard Precautions are work practices required for the basic level of infection control. They include good hygiene practices, particularly washing and drying hands before and after patient contact, the use of protective barriers which may include gloves, gowns, plastic aprons, masks, eye shields or goggles,
appropriate handling and disposal of sharps and other contaminated or infectious waste, and use of aseptic techniques. ... Standard Precautions are recommended for the treatment and care of all patients, regardless of their perceived infectious status, in the handling of:
- blood;
- all other body fluids, secretions and excretions (excluding sweat), regardless of whether they contain visible blood;
- non-intact skin; and
- mucous membranes

Standard Precautions also apply to dried blood and other body substances, including saliva.

(NHMRC 1996:11)

Additional Precautions is described as follows.

Additional Precautions are used for patients known or suspected to be infected or colonised with epidemiologically important or highly transmissible pathogens that can cause infection:
- by air borne transmission (eg: Mycobacterium tuberculosis, measles virus, chickenpox virus); or
- by droplet transmission (eg. mumps, rubella, pertussis, influenza); or
- by direct or indirect contact with dry skin (eg. colonisation with MRSA) or with contaminated surfaces; or
- any combination of these routes.

Additional Precautions are designed to interrupt transmission of infection by these routes and should be used in addition to Standard Precautions when transmission of infection may not be contained by Standard Precautions alone. Additional Precautions may be specific to the situation for which they are required, or may be combined where micro-organisms have multiple routes of transmission.

Additional Precautions implies a two tiered approach to infection control, and assumes that in cases where transmission of infection may not be contained by Standard Precautions alone, Additional Precautions will be applied in addition to Standard Precautions. The two tiered approach to infection control should provide high level of protection to both patients and health care workers in health care settings.

(NHMRC 1996:11)

Whereas the actual work practices required for Standard Precautions, for example, the wearing of gloves and other protective clothing, is clearly outlined, work practices for Additional Precautions are incident specific, but may include things such as isolating the patient "in a separate room with negative pressure air flow and ventilation standards" (NHMRC 1996:43). Depending on the nature of the risk, equipment for health care workers may include such items as "(i)mpermeable gowns or aprons and gloves" and "a well fitting particulate mask or respirator with 95 per cent efficiency in filtering one micron particles and providing face seal leakage of under 10 per cent" (NHMRC 1996:43).

The 1996 NHMRC guidelines quoted above are the guidelines which were current and were required to be followed by health care workers employed at The Grace during my fieldwork in 1999-2000. These guidelines came up in conversation with midwives, obstetricians and students at the Grace. The term "Universal Precautions" was nearly always used, and only rarely did people refer to "Standard Precautions". I did not hear the term "Additional Precautions", or the concept of a two-tiered approach, mentioned in my fieldsite. Universal Precautions were always mentioned in relation to either HIV/AIDS or "the heps" (hepatitis B or C), and always in relation to a particular body fluid, or body fluids in general. Fluids mentioned in the maternity unit were blood, amniotic fluid, breast milk, urine and spinal fluid. Emergency nurses also discussed spit and saliva, and cleaners also discussed vomit.  

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1 These guidelines have since been superseded by the Australian Guidelines for the Prevention and Control of Infection in Health Care (NHMRC 2010).

2 I find it interesting that vomit did not come up in the context of precautions with midwives, as labouring women do often vomit. In fact, one of the ways in which I could 'participate' in my 'participant-observation' on labour ward was to hold the vomit bowl. Like faeces, vomit perhaps was not seen as something to which Universal Precautions needed to be applied. This is possibly
Aside from the potential for litigation, contamination by body fluids was the only risk from patients I heard discussed among health care workers in the maternity unit.\(^4\) Substantial resources were committed to educating and supporting health care workers in infection control guidelines. The hospital employed two specialist infection control nurses, and a significant part of the work carried out by Carol Hughes, the Occupational Health and Safety Nurse, included education of staff and policing safe practice. In-house training provided by Carol included "bodily fluids exposure incident" training courses, which were given to senior nurses working in emergency.

There is a wide variety of ways in which medical staff incur body fluid exposures. Most occur through needlestick or sharps injuries, or through 'splashes', for example fluids splashing into a nurse's eyes while they are flushing out an IV line. Some needlestick injuries occur during patient contact, others occur during disposal of 'sharps' (needles, scalpels etc). During a waste management audit, infection control and occupational health and safety staff listed some of the situations in which they had seen sharps injuries occur during their careers, which included a nurse who had four needles sticking into her stomach because she was trying to undo the lid of a sharps container (which are not meant to be undone once they are sealed) by holding it against her stomach and twisting the top. Cleaners had received needlestick injuries while carrying plastic rubbish bags against their bodies (often banged against themselves as they were carrying a bulky bag through a narrow doorway). Things that did not belong in sharps container were regularly poked into them: we found a number of gloves and other things poked into sharps containers in the audit I observed.

Hospital-wide, The Grace had dealt with over a hundred body fluid exposure incidences in the year prior to my fieldwork.\(^5\) Infection control and occupational health and safety staff I spoke to all felt that sharps injuries were significantly underreported. My fieldwork would support that. I was told of a number of incidences in the maternity wards which would have been classified as 'body fluid exposure' incidences, very few of which had actually been reported.\(^6\)

Although when asked directly about infection, medical staff all took the topic extremely seriously, on other levels health care workers found it difficult to treat their patients' bodies and fluids as potentially dangerous. Carol often had her work cut out for her in her training courses. The following quotes are from role plays in a bodily fluids exposure training course undertaken by senior nursing staff in the emergency unit.\(^7\)

Greg is role-playing a staff member, in this case a theatre nurse, who has a needlestick injury from

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\(^4\) Whereas, for example, emergency and psychiatric nurses spoke of being at risk from violence from patients, especially spitting and biting.

\(^5\) That figure is for the entire hospital. Less than half a dozen of the reported incidences occurred in the maternity section.

\(^6\) Not all of these examples occurred at The Grace: staff also recounted incidences at other hospitals they'd worked at. There seemed to be fairly common behaviours across institutions.

\(^7\) This was in line with a change in hospital policy in the treatment of staff who had had exposure to body fluids. Previously, these incidents had been handled by doctors working in the emergency department. Complaints by staff about waiting times, and an acute national shortage in hospital emergency services led to a change of policy whereby staff body fluid exposure incidents should be handled by senior nursing staff in emergency, rather than doctors. Discussing this change of policy with midwives in the maternity unit, there was an overwhelmingly positive reaction, with emphatic expressions of "the nurses in emerg will do a much better job of it than the doctors".

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Theatre. Theatre nurses had been discussed earlier in the session as being among the rudest of the staff members who came into emergency, with the emergency nurses describing them as always in a hurry and always thinking that their time was more important than anyone else’s. Chelsea and Helen are role-playing the emergency nurses handling the injury.

Greg: I’m from theatre. I stuck … a doctor stuck me with a suture needle [laughter].
Chelsea: Aren’t you in a hurry? [laughter]
Greg: Yes, I’ve been here 10 minutes already, I’ve got to get back to work.
Chelsea: What actions have you taken?
Greg: I’ve washed up my arm, the needle has been disposed of …
Chelsea introduces Helen as a senior nurse.
Greg: [ingratiatingly] I’m so glad I’ve got two beautiful nurses looking after me. [scowls from Chelsea and Helen, raucous laughter from others]

Chelsea negotiated consent to take blood for testing, and moved on to counseling Greg about safe sex.

Chelsea: We have here some literature for you on safe sex, if you are promiscuous, and I’ve heard that you are …. [hoots from onlookers]
Greg: I’m not on holidays now, I’m back at work …… [laughter]
Chelsea talked about not being able to donate blood and other activities to avoid.
Greg: Aren’t you going to tell me not to go to the dentist for 12 months? [laughter]
Chelsea: That’s not a problem, you won’t be needing nice teeth if you’re not having sex. [more raucous laughter and hoots]

In the following role play, Angela was the injured staff member, and Josh was the nurse in emergency treating her. Angela’s role play character had been bitten by a patient who she knew was "Hep B positive".

Josh: Have you washed the wound?
Angela: [emphatically] scrubbed it
Josh: Has the patient been secured? [laughter]
Angela: [totally straight-faced] He’s dead. I killed him. [lots of laughter]

In the following, Matt role plays a staff member with the urine splash exposure, and Ben and Anna role play the emergency nurses. Jules is the ‘observer’, whose role it is to make a checklist of things that Ben and Anna miss.

Ben: All right Mr Urine …
Matt: I was removing a catheter when I got a urine splash. My safety glasses fell off just as it was happening, and I got urine in my eye.
Ben: [muttering to himself] I’ll just get one of these forms for Occ Health and Safety …… [looking up] Did you flush the eye out?
Matt: No I thought I'd better get straight down here.
Ben: Better do that.
Matt mimes flushing out his eye. Anna comes in and is brought up to date.

[...]
Ben: We'll have to organise to have a blood test done.
Matt: I don't want a blood test, I don't like needles.
Ben: Would you prefer death?
Matt: Is it on special?

[...]
Matt: Do I have to be careful of anything with my family? Can we drink from the same cup?
Jules: No sharing of needles with your kids [with a cheeky grin]
Ben: You'll have to practice safe sex. [Carol mimes shaving, to give Ben and Anna a hint.]
Matt: What, I've got to shave with a condom on? [raucous laughter]
Anna: We've got to send the form off to Occ Health and Safety ....
Carol: Let's say he sent that off first thing
Anna: Good boy [laughter]
Ben: [mock cross] Man! [laughter]
Anna: [nodding condescendingly] Man [laughter]
Jules: What about stress management?
Matt: [rolling his eyes] Are you telling me I'm crazy or something ...
Ben: [mock condescendingly] You may be "blanketing feelings" .....  

Body fluid exposure incidents present very real, potentially life threatening and at the very least lifestyle-changing, risks to hospital staff. Douglas argues that sites of humour often flag for us sites of cultural anxiety, operating as a way of confronting ambiguity (1966:37).

universal precautions vs "schoolyard rules"a

Ambiguity also provided scope for a level of discretion amongst practitioners, which was also evident when the ‘Universal Precautions’ were operationalised. As Hamish, a health department community project worker, said of his work on a project on blood borne diseases,

Health care workers will say they follow Universal Precautions, but in their practice you still see they make assumptions about some people being riskier than others. They still selectively glove up. They're less likely to put on gloves for an eighty year old woman than they are for a man in his twenties. There's presumptions of bad blood.

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*a Parts of this section were presented in the paper: Standard Precautions vs Schoolyard Rules: Cultural Barriers to Infection Control Compliance, "Coughs and harbouring colds - what's come through the door" 29th Annual Conference of the Infection Control Association, NSW Coffs Harbour, June 2006*
Among health care workers in maternity, what Hamish called “presumptions of bad blood” were often made towards ‘skin penetrators’ (injecting drug users, people with tattoos or piercings other than ‘normal’ earrings) and people regarded as ill-groomed or dirty, with ‘obvious’ Aboriginality falling into the ‘ill-groomed’ category. Although subtle, these reactions were very real. Handwashing was one indicator: clinicians and midwives in antenatal clinic normally did not wash their hands between seeing women unless they had carried out a vaginal examination. If they only touched a woman’s abdomen they would not normally wash their hands. When they did, it inevitably involved an injecting drug user, a woman with piercings or tattoos, or a woman with a partner with piercings or tattoos. Some clinicians were also more likely to wash their hands after seeing a woman of markedly different ethnicity or class than themselves. With some clinicians, this also applied to women with darker skin.

Under ‘Universal Precautions’ or ‘Standard Precautions’ there should be no “assumptions of bad blood”: everyone should be treated as if they are at risk of passing on infection. Gloves were supposed to be used in all clinical encounters where there may be a risk of body fluid exposure: for example in the antenatal clinic in bloodtaking and vaginal examinations. Sometimes other precautions are also deemed necessary: in labour, as a woman is about to deliver, the midwives and/or obstetricians who actually ‘catch the baby’ are expected to don gloves, goggles and a plastic apron. Health care workers are expected to take an undifferentiating approach to the people they care for: everyone should be treated in the same way.

However, as well as being ‘professionals’, health care workers are also ‘people’, mostly raised in and certainly living in a culture which has a different, and differentiating way, of looking at bodies and fluids. I call this the ‘Schoolyard Rules’. Imagine someone, while talking, accidentally splutters a bit and a little bit of their spittle lands on you. When do you just laughingly wipe it off, and when do you go ‘er yuk’? The ‘OK’ situations, in Australian offices, homes or schoolyards, usually involve: someone you like; someone who is like you; someone you relate to, or are related to; or someone who is familiar, or is family.

People who you do not know are likely to evoke an ‘er yuk’ reaction, particularly people whom you perceive as unlike yourself. Alternately, someone you know well but dislike may also evoke an ‘er yuk’ reaction. An example of ‘schoolyard rules’ came up in a discussion with a pregnant woman.

Debbi: Do you mind touching blood?
Lisa: No.
Debbi: Other people’s?
Lisa: Doesn’t bother me.
Debbi: How do you feel about someone else’s blood being on your skin?
Lisa: It depends. [OK with family, OK with hubby]
     With a stranger’s I’d probably get a bit emotional.

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9 This is another way in which blood operates as a metonym for social distance and/or exclusion (Carsten 2011:20), with social distance or closeness distance being ‘naturalised’ (Yanagisako & Delaney 1995) via metaphors of blood (Carsten 2011:30).
Debbi: What about your colleagues at work? What if there were an accident and one of them was cut?

Lisa: It would depend on how bad the cut was. I’d try and stop the bleeding. If you don’t want to touch it yourself you can ask them to apply pressure to it.

Debbi: Are there some people at work that it would be OK to touch their blood, and some not?

Lisa: [thought a bit] No, not really. I get along OK with nearly everyone at work.

In the maternity unit at The Princess Grace, ‘schoolyard rules’ operated alongside Universal Precautions. In talking about ‘schoolyard rules’ to health care professionals: doctors, midwives, senior consultants; reactions were remarkably similar. They would give an ironic smile, nod their head, and say something along the lines of "Yeah, I do that. You shouldn’t, I suppose, but you do."

‘Schoolyard rules’ emerged in the different kinds of relations in the midwife care program. Within the midwife care program at the hospital, continuity of care was provided by two midwives, who attended to all a pregnant woman’s antenatal visits, the birth, and the domiciliary visits after release from hospital. The midwives in this program develop very close relationships with the women, and usually also with partners. The following quote is from a midwife working in the midwife care program:

It’s like the others wear a plastic apron when they’re delivering. I don’t wear the aprons - I mean it’s a deliberate decision. You look like, and you sound like, a meat worker. And for a vegetarian [like me] that’s pretty bad. You know, at the supermarkets, the people who work behind the meat counters. [exasperated sigh] God, isn’t it enough that we’re wearing gloves? I wear gloves and goggles for the delivery. If I wore glasses like yours I wouldn’t wear goggles. That’s enough for a normal birth. [she inverted comma-ed ‘normal’] .... There was one time .... where I was delivering a woman in the birthing unit. She’d been through the program, we’d been looking after her, so I knew her well. She was pushing, and her waters broke, and I ended up with a splash of amniotic fluid in my mouth. There was the ping when the waters broke, and it splashed right over me. I didn’t go ergh [mimed spitting out] or anything like I might have if I hadn’t have known her. I guess I thought ‘It was Sylvia’. They were a lovely couple, I got on particularly well with them. Educated, middle class, similar interests to me, I’d really got to know her. ...... We talked about it afterwards [herself, ‘Sylvia’ and Sylvia’s partner], after the birth, and had a laugh.

This particular midwife is unusual: very few of the other midwives in this hospital would have been quite so calm about receiving a mouthful of amniotic fluid. But her colleague, working with her in the midwife program which provided continuity of care, was equally blasé when discussing the incident. Both of these midwives developed close emotional ties with the women they cared for. For women birthing in this program, social, emotional and bodily boundaries were often breached. In other modes of clinical care, health care workers kept boundaries constantly and securely in place.

The ambiguity of connectedness resonates through biomedical infection control practices: contact
between health care workers and the people they are caring for is necessary and potentially life-saving, and it is also risky and potentially life-threatening. The wearing of gloves, which is the iconic illustration of Universal Precautions, echoes this ambiguity: the situations in which health care workers do and do not 'glove up', and the motivations for gloving up or not gloving up are complex.

In the gynaecological teaching program, where tutors coach medical and midwifery students in vaginal examinations, including the use of speculums, glove wearing is essential. Tutors will regularly make a student change their gloves if they touch anything outside of their 'clean field' prior to carrying out the vaginal examination. Taps in the basins in clinical rooms have large levers which can be elbow-operated. Students glove up before handling the speculum, and then run the speculum under hot water to warm it up. If a student touches the tap with their hand, rather than use their elbow, the tutor will normally ask them to re-glove. I have been in a number of sessions where students have had to re-glove three or four times, which can be either humorous or frustrating. Medical students in particular often get quite resentful of what they see as the 'pettiness' of the tutor.

For students and tutors, gloving up means quite different things. Medical students see gloving up as a way of protecting themselves from the body fluids of the tutor, or of the women they're examining. Tutors see gloves as a way of protecting their bodies from infection that may be carried by the student, or which may be on surfaces in the hospital.

Li, a midwife, talked with surprise about how different delivering her sister’s child was to other deliveries she’d done.

It’s so automatic, you put gloves on for everything, but you know, I didn’t even think to put gloves on when I caught my sister’s baby. My brother-in-law asked for gloves. I laughed and thought it was really strange at the time, but then afterwards I thought it must have been because he saw Seren [the other midwife at the delivery] with them on, he must have thought that it was protecting his baby.

Karla regularly told fathers in antenatal classes that there was no need for them to glove up during their partner's labour: "it's your baby, what do you need gloves for?". Many fathers regularly ask the midwives during the final stages of birth if they should put gloves on to handle their baby.

The ambiguity inherent in inscribing contact as dangerous in a maternity setting can also be seen in attitudes of health care workers towards breastfeeding. Douglas argues that ambiguity and anomaly are threatening to social order, and need to be ordered and controlled for a particular social setting to feel safe to its participants (1966:36). Breast milk is anomalous in being both food and body fluid (Bynum 1987:30). In a hospital setting, both fluids-which-are-food and fluids-which-are-not-food are transferred regularly into bodies. Meals are individually ordered and served for patients, but there is little checking up of who actually eats and drinks what. Fluids-which-are-foods are not policed. On each of the wards there are tea and coffee making facilities which can be used by staff, patients, and patients’ families and friends. There are vending machines with fruit juices, water and soft drinks, and water coolers scattered
around from which people help themselves and serve drink to others.

On the other hand, incredible care is taken with fluids—which-are-not-food. Nothing may be administered without it being checked and double checked, and at least one doctor or two midwives must be involved. The following is a description from my fieldnotes of two midwives, Aurora and David, preparing to administer a hepatitis B vaccine to a one-day-old baby.

The paperwork took a long time. ... Aurora was working on one desk with one folder, David on the opposite desk with another folder and what he called 'the jabbing equipment'. David talked about the importance of keeping exact records, for example so you can trace it if a 'dodgy batch' of vaccine comes through. ... Both David and Aurora read everything aloud to each other. They then checked the order in the order book, which had been signed by an obstetrician to authorise the dose. Before David put the vaccine into the syringe, he showed Aurora the ampule, she read it out aloud, comparing it with the order book and the baby's ankle bracelet, to confirm it was the right vaccine, and right dose, going into the right baby.

This procedure of cross checking or double checking is followed for all injections, all medications and all blood transfusions administered by nurses and midwives. A conversation with two departmental heads in the laboratories highlights the importance that is attached to health care workers being able to have empathy (connection) and at the same time being able to detach (disconnect) in the process of transferring fluids into bodies. In the excerpt below, Brian and Roland are discussing procedures for the 'front desk', the area where all blood, urine, faeces, biopsy and other samples arrive to be sorted to various sections of the lab.

Brian: Everything arrives at the front desk. They have to handle it all. That's why we need at least some people with lab experience there. They understand what happens with things. You should hear some of the conversations. ... It's not the blood that gets the interesting reactions from people at the desk. A tube of blood is really normal. It's the hystopathology samples that get everyone talking. What do you think that could be? 'Look, it's somebody's finger!'
It's sort of like you disconnect from it a bit - it's not you. ...

Roland: I try to get through to the desk people – 'you've just been handed a group and save, what does that mean to you? It means there's a person in theatre bleeding.' Not everyone attaches the proper importance to it. That's why it's important to have people there with lab experience. If someone comes in wearing full theatre garb, running, with a sample, what does that mean? It means there's someone down there who's lost at least a litre of blood. This is where you have to throw the rules out the window. Normally you have to go through all the numbers, but there's cases where you just get the blood there and worry about the paperwork later.

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20 This conversation took place prior to my observations in the labs. Brian was right - there certainly were some interesting conversations centering around body bits in jars.
Brian: My background in transfusion makes me sensitive to this. When you've just put 117 litres of blood through one person, you feel connected to them. And when they die, it hurts.

Roland: Yeah, you get to know who they are. And when someone survives, it feels good.

Brian: But if you get too worried it's detrimental.

Debbi: In what way?

Roland: If you get too worried about the person, you forget about the numbers. You'd have a hard time working for Brian here. So would I. We see a series 52734 and 52347 and we might confuse them. For Brian, you have to get each one right. Our memory tells us all the numbers were there. That's not good enough. For example, say Debbi Long is in theatre ... No, better still, this one happened. We've got Susan Smith in Theatre 1 at 10:00, and then we've got Susan Smith in Theatre 1 at 11:00. And their bloods went in to the same fridge. ... Two [different] women with exactly the same name, in the same theatre within an hour of each other. What are the chances of that happening? But it happened. And thank God we put the O- blood into the O+ Susan Smith ...

Brian: You've got to look at the numbers. And you've got to have your mind on the job.

Breast milk is handled in the same way as fluids-which-are-not-food. Sue, a midwife who worked in the neonatal nursery, where premature or sick babies were cared for, talked about storing expressed milk.

In the nursery all the milk is carefully labeled. If you gave the wrong milk you'd have an instant report on your hands.

I came to know of two incidences of the wrong breast milk being given to a child in the neonatal nursery. Both led to complicated follow-up protocols being implemented, including comprehensive testing of the woman from whom the milk had come for blood-borne diseases, and counselling of the parents of the baby who had received the milk.

ambiguity of milk

Breast milk and breastfeeding were highly valued at The Grace. At the time of my fieldwork, The Grace was the only hospital in its state to have achieved the World Health Organization sponsored “Baby Friendly Hospital” status, which involved achieving a number of aims, including having 80% of mothers breastfeeding on discharge from the maternity unit. Posters promoting breastfeeding lined the corridors

11a pseudonym.
12The ‘positive’ or ‘negative’ in blood typing refers to what is known as the rhesus factor. People with O negative blood are referred to as ‘universal donors’, as people of any blood type can accept O- blood. People with a negative rhesus blood type cannot safely accept rhesus positive blood. A person with O- blood being transfused with O+ blood, could result in, in a worst case scenario, renal failure or death.
of the postnatal ward and the waiting room of the antenatal clinic. One of the midwife tasks in antenatal clinic was to conduct breastfeeding talks, which took up the time of one midwife each clinic (four times a week for four or more hours), an extremely significant investment of staff resources. The midwife who most usually took on this role had been a Nursing Mothers¹³ counselor, and was a qualified lactation consultant.¹⁴

In spite of this valuation of breast milk, expressed breast milk was stored in urine bottles (ie: the small plastic jars with yellow tops standardly used for urine samples), something which many of the women who expressed milk found either amusing or distasteful. The ambiguity of breast milk being both seen as 'white gold' and being stored in urine bottles is not the only aspect of mixed messages surrounding breast milk. Four sets of contradictions arose in conceptualisations and articulations of the naturalness of breastfeeding and breastmilk. First, breastfeeding was presented as both 'natural' and 'learned'. Second, it was presented as both 'natural' and 'weird'. Third, every women's breastmilk was said to be the same, and yet every women's breastmilk was said to be unique. These three sets of contradictory ideas were present side-by-side, and not necessarily recognised as contradictory, sometimes even being articulated in the same sentence. The fourth contradiction was not presented as a 'side-by-side' set of ideas, but as divergent opinions, and focused on the exclusiveness of the mother/child relationship. For some people, breastfeeding someone else's child was the most 'natural' thing in the world, while for others it was completely 'unnatural'.¹⁵

The following conversation took place in the surgical recovery room within an hour of Zac's birth by caesarean section.¹⁶ Marilyn and Pete are Zac's parents. Julie is the midwife who assisted in theatre and was caring for Marilyn post operatively. Marilyn is breastfeeding Zac, who is suckling contentedly.

Pete: [looking at Zac lovingly] I don't want to think about going home today ... I don't want to go home without him. [to Marilyn] I'll just take him and you can stay here.

Julie: [laughing] He'd miss his milk, there'd be no one at home to feed him.

Marilyn: [also laughing] Oh, no, that'd be fine. My sister's got a ten month old she's breastfeeding, she can feed him.

Julie: [mouth open, scandalised expression on her face] Oh no ... she couldn't .... no ....

Pete: [curious] Why not?

Julie: Oh, no .... it's not the right sort of milk ...

Pete: Because it's not from the right woman?

Julie: [backpedalling] No, no, it's not that, it's that .... that .... that ... it's not the right type of milk. [recovers a professional demeanour] The milk changes as your baby gets older. Marilyn's sister would have more mature milk, with a ten month old. Zac needs the milk that's being made for him for now.

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¹³ At the time of my fieldwork, the organization was still known as Nursing Mothers. Following a vote of members in May 2001, the name of the Nursing Mothers Association was changed to the Australian Breastfeeding Association.

¹⁴ For an analysis of the development of the profession of lactation consultant in Australia, see Carroll & Reiger (2005).

¹⁵ Parts of the section which follows on cross-feeding have been published in Long (2003).

¹⁶ Zac's birth is described in Chapter 4.
Attitudes to co-feeding highlights ambiguities in the mother-child relationship.\textsuperscript{17} What I term cross-feeding or co-feeding is where a woman breastfeeds a child who she has not given birth to, or where women breastfeed each other’s babies. For some women, co-feeding is completely ‘natural’. Milk banking, an institutionalised form of co-feeding, operated in many Australian hospitals prior to the mid-eighties. The discovery of the HIV virus, according to one midwife, "stopped milk banking dead in its tracks almost overnight".\textsuperscript{18} Although milk banking would have been feasible and safe in the mid to late 1990s, with appropriate HIV testing available, it was not reinstated in Australia until 2006, and it is highly contested, with medically approved pasteurised breast milk being made available in a very limited number of NICUs (neonatal intensive care units),\textsuperscript{19} and a much more active trade in informal milk sharing happening via social media sites (Akre et al 2011).

Natalie, a midwife who had provided expressed milk for a colleague’s twins and had suckled her sister-in-law’s child, talked about co-feeding:

It’s the sort of thing you can only do with good friends. It’s the sort of thing you need no boundary points for. …. I just don’t get why we can’t get milk banks going again. We have such a bottle feeding culture. If you build up women who breastfeed you get accused of insulting the bottle feeders. And we support women who can’t breastfeed by promoting formula, rather than proper breastmilk. It’s so stupid not to have milk banks again.

This was a common sentiment among many midwives. Sue, from the neonatal ward, commented:

It’s a shame we don’t have milk banks anymore. In a way it’s good breast milk going to waste.

Like Julie’s discomfort in reaction to Marilyn and Pete joking about Marilyn’s sister feeding Zac, not all midwives were comfortable with the idea of cross-feeding. Midwives’ reactions were reflected in the reactions of women giving birth: some were positive about co-feeding, whereas others found it ‘unnatural’. Ria and Dave attended prenatal yoga classes where co-feeding was discussed.

Other people in the class thought that it was all a bit ‘er yuk’. It was quite funny, wasn’t it, Dave? [he nods, smiling] And I mean, it is special, isn’t it, the mother child bond? It’s not something you should break, I don’t think. It’s too ….. too …. I don’t know the word. It’s supposed to be really special, there’s the idea it should only come from the mother, I guess.

Co-feeding was much more common in my research population than the literature on breastfeeding at the time indicated.\textsuperscript{20} It was unknown to many health care workers, and it was often quite secretive. There were a variety of situations in which women co-fed. Some of the situations of co-feeding that I

\textsuperscript{17} For discussions of other aspects of ambiguity around breastfeeding, see Campo (2010) and Shaw (2010).

\textsuperscript{18} For an anthropological perspective on HIV and breastmilk, see Van Esterick (2010).

\textsuperscript{19} The story of the (very limited) reintroduction of milk banking in Australia can be traced through Lording (2006), Hartmann et al (2007), Simmer & Hartmann (2009), Carroll & Hermann (2012), Hussey (2013) and Carroll (2014). The recent reintroduction of milk banking has been echoed in many if not most other industrialised health systems: for examples in the UK see Modi (2006), Italy (Arslanoglu et al 2010), Canada (Kim & Unger 2010), Spain (Utrera Torres et al 2010); Korea (Song et al 2010), Brazil (da Matta Aprile et al 2010), Sweden (Omarsdottir et al 2008) and the US (Landers & Hartmann 2013).

\textsuperscript{20} Since 2008, there has been an explosion of literature on milk sharing (as separate to milk banking). See, for example: Akre et al (2011); Bartlett & Shaw (2010); Gribble (2014); Landers & Hartmann (2013); Shaw & Bartlett (2010) and Thorley (2008 & 2009)
talked to women about were: providing milk for premature babies when the baby’s own mother’s milk supply was problematic; a mother breastfeeding her daughter's child while she babysat; a colleague providing top up milk for a workmate who had twins; another of a woman with a history of breastfeeding problems, carrying a child with medical problems, who had negotiated with her pregnant sister (due at about the same time as her) to provide breast milk for her baby. There were a number of women with older children who had donated milk to milk banks. I spoke to women involved in three different ‘babysitting clubs’ who include breastfeeding as one of the ways they look after each other’s babies. I also heard about, but did not speak directly to anyone involved in, of a situation of a lesbian couple where one gave birth and the other re-stimulated her lactation to breastfeed the baby, as the birth mother could not breastfeed.\(^{22}\)

Marilyn, who had joked about her sister breastfeeding Zac, had previously talked to me about cross feeding in her family. Marilyn babysat her sister’s daughter, Paige, while her sister, Nola, worked. At the time of this conversation, which was held in the waiting room prior to Marilyn’s antenatal visit, Paige was about seven months old. This was Marilyn’s fifth pregnancy. She had four children from a previous relationship. This pregnancy was her first child with her partner, Pete.

Marilyn: I’ve told Nola she’s got to start bathing Paige herself before she drops her off to me. I was taking her in the shower with me, but she lunges for my boobs all the time, wanting to latch on. Anytime we lay on the bed to have a cuddle, too, she just goes for them.

Debbi: Have you ever fed Paige?

Marilyn: No, I don’t want to do that. Nola says I should just give her a suck, but I don’t know about that. It doesn’t feel right to do it while I’m pregnant. And Nola’s got tons of milk, Paige is getting enough. Nah … my Mum used to try to feed Damon all the time, and I didn’t think that was right.

Marilyn’s mother had children from her second marriage. One of Marilyn’s mother’s children, (Marilyn’s half-sibling) was about the same age as Marilyn’s oldest son, Damon, who was now sixteen. When Damon was a baby, both Marilyn and her mother were lactating.

Marilyn: It ended up with Damon I wouldn’t leave him with mum, because I couldn’t trust her not to try and give him some tit. I kept telling her not to, but she kept doing it. I couldn’t trust her. It was a real pain.

Debbi: Did she actually feed Damon?

Marilyn: Oh yeah. [ruefully nodding her head] I know she did a few times.

Debbi: How do you feel about that?

Marilyn: Oh, I didn’t mind that much, but my ex hit the roof. He was spittin’. He yelled at my mum “what, you want everyone to know that he’s sucked on his granny’s tits?” That

\(^{22}\) Two of which knew about the existence of each other.

\(^{22}\) For an autobiographical account of induced lactation, see Kirkman & Kirkman (2001).
made her stop. I don't think she did it again after that.

Debbi: Does Damon know about it?

[Marilyn shakes her head, definitely but dismissively, and changes the subject]

Natalie described her co-feeding experiences with a fellow midwife, Sherril. Natalie told me this story in the staff room, with three of her colleagues listening in.

Sherril and I worked together, we'd known each other for about 3 years. I think it was she who approached me, when she was 32 weeks and I was 36 weeks pregnant. She was having twins, and was worried that if they came early she might not have enough milk for both of them. She knew I was committed to breastfeeding. We'd talked about milk banking, and how HIV had put a stop to it. For the first month after my baby was born, I expressed and froze extra milk. Sherril had a long labour, followed by a Caesar. One twin was a lot heavier than the other. She didn't get her milk until day five. On day four she phoned me, and I brought in 500 mls. ...

Sherril spoke to Dr Hannon [head of paediatrics] about it. She didn't want to go behind his back, but I don't think it was ever made official. Dr Hannon gave up on us [laughs]. The next day I took in another 500 mls, and then Sherril's milk came in and she was OK. She didn't need any more after that. .... Apparently a few people thought it was strange. Sherril got the reactions, I wasn't here much of the time. [as she was on maternity leave with her own baby] She said people [ie: other midwives] reacted pretty negatively, on the whole. I didn't think it was particularly unusual, and neither did she but apparently people thought that we were weird for doing it. .... Sherril got the idea that people were surprised, and they were surprised that the paediatricians and doctors 'allowed it to happen'. [snorting with derision] "Allowing" it. How could they not?

I was first told about Natalie and Sherril's co-feeding from another midwife, Jane. Jane had told me about the situation without being able to remember who the midwives involved were. After talking to me she'd asked around, and found it was Natalie. Apart from commenting that it was the sort of thing I'd be interested in, and that she found it interesting, Jane was very careful about not expressing an opinion either way to me, but she did tell me that the incident had "raised a few eyebrows" among the midwives. I asked Natalie if she'd received any comments about it, and she said "not directly, but indirectly, there were some things". Natalie, who fed her oldest child until she was four years old, went on to talk about breastfeeding her nephew.

Natalie: My sister-in-law is a Pacific Islander. She said that if she'd have been at home lots of people would have fed him. I feel sorry for her, being here without her family support. .... It was strange feeding a young baby, when I was used to feeding a toddler. It's very different, much gentler. .... I only fed him at home, I never did it in the hospital in case someone caught me.

Debbi: Why would that be a problem?
Natalie: Because people would think it was weird. There's a difference between expressing milk and actually having the baby suckle. It's more intimate. And people are funny about it.

Although Natalie and Sherril may have 'raised a few eyebrows', the story was far from common knowledge. Sue, who worked in neonatal, heard about my interest in co-feeding and quizzed me about it.

Sue: I can't imagine it happening in a hospital. I don't know if it would be allowed. Would the powers that be allow it?

Debbi: Who are the powers that be?

Sue: I guess for this it would have to be Dr Hannon. Because of liability. I bet they'd have to sign something! I've worked here 11 years, and I've never heard of a woman feeding someone else's baby. With the premmie babies they bring the bottle of expressed milk in with the name and date on it, but it could be anybody's. And if the mother wrote her name on it, that would be her giving permission, I guess.

Cath, a midwife who worked in antenatal clinic, was also a trained lactation consultant. Like Natalie, Cath was open and militant in support of breastfeeding. Unlike Natalie, however, she was less comfortable with the concept of cross feeding. Emma, petite, young and fresh faced, is twenty four weeks pregnant, and Cath is going through the breastfeeding talk with her.

Cath: Is this your first [baby]?


Cath: [taken aback] Oh. oh. ...... well, are you planning to breastfeed?

Emma: I'd like to, it's really important this time ...... but I've had real problems before, I don't know how it will go ....

Cath: How did it go with the others?

Emma: My oldest was OK. I fed her til she was eight months old. I mean, I topped her up with a bottle from when she was six weeks, but I kept feeding for eight months, that was good. .... With my second, I only got to six weeks. I just dried up. They gave me something when he was three weeks old to boost my supply ...

Cath: Maxalon?

Emma: Yeah, that was it. It didn't work though. I mean, it did to start with, but I still dried up at six weeks. With the third it was the same ... only lasted six or eight weeks. Got the lactation consultant in on that one and everything. I get so depressed, and I stress out, and that makes it worse, and then I get more depressed when it doesn't work ....

Cath: What do you want to do this time?

Emma: It's even more important this time. The baby's got [a condition that means the baby has to be operated on shortly after birth, and which affects his bowel and digestive
system. They've already told me they'll get the baby out four weeks early, to operate immediately. I won't be able to breastfeed him directly for at least a week. ..... Stress doesn't help, I'll be worried about the baby, and leaving the other kids with my useless husband.

Cath: You can express, which gives you milk for the baby and helps build up your supply.

Emma: Expressing really makes me depressed. I'm just not sure whether I want to go through all that again. I get very depressed, and that's not going to help anyone.

Cath: Breastfeeding's important for all babies, but this one particularly, it will be so much better for the baby's bowel.

Emma: Oh yeah, I'll make sure he gets breast milk. My sister's pregnant too, and she has no problems with her milk, so I've asked her if she'll express for me too, and so that's OK. I mean, I still want to, I'll still try, but if it doesn't work at least she's there as a back up.

Cath: [carefully] and you're happy with that?

Emma: Oh yeah. Toni always has heaps of milk, and her kids blossom. They're all skinny, but they grow well. The first week after the birth everything is going to be really stressful anyway .....

Cath: Yes, but if you want to breastfeed eventually, you should still express. With premmy babies there's an increased risk of NEC, a bowel disorder. Breast milk reduces that risk significantly. It's better for the bowel to be getting the right sort of bacteria which is encouraged by breast milk. If you start expressing early .....

Emma: I know, I'll try, but I just get so depressed .... [calmly, softly] I'm desperate to feed. .... Mum fed me and my older brother till we were 6 weeks, and similar stuff happened, but she fed my sister until she was two and a half and just couldn't get her off. .... With my oldest, it was fine, she didn't fuss. There were some days when she wanted only the bottle, and some days when she only wanted me, but generally she didn't fuss. They say if you give them bottle they'll refuse the breast, but she didn't fuss. I know they say you shouldn't give them formula, and it's not as good, but at least [with part of each] she was still getting the antibodies. She wasn't sick at all until she was 8 months old. She didn't catch anything while I was feeding her. ......

Cath: [dubtfully] And is your husband happy with your sister feeding ....?

Emma: Oh yes [offhandedly]

Cath: Is your sister's husband happy with it?

Emma: yes [looking at Cath strangely]

Cath: [worriedly] I hope the hospital's happy .... [muttering] well, I guess you don't have to tell them ....

Emma: [reassuringly] No, we've spoken to the paediatrician. He was OK with it.

Cath: [surprised] Oh ....
Unlike Natalie’s support of breastfeeding, which was focused on breastmilk being important for a baby regardless of source, Cath’s support of breastfeeding was contingent on it being the birth mother’s milk. She was visibly rattled by Emma’s ease with the solution of her sister providing back-up milk. Discussing cross feeding with Eva Wallis, the senior midwife in the antenatal clinic, she talked about what she called the ‘hiddenness’ of cross feeding.

There’s so much going on in terms of breastfeeding that we never get to hear about, that women keep hidden.

I told her about some of the examples of cross feeding that were coming up in my discussions with people. She commented: ‘See, we never get to hear any of that’. The women who spoke to me were not deliberately secretive about cross feeding. It certainly was not difficult to collect data on, all I had to do was be aware of the possibility and ask the question if it was appropriate. Women were open about talking about it when asked. The ‘hiddenness’ that Eva described is the mutedness that comes of questions not being asked.

Jackie Fisher was a GP who worked a couple of clinic sessions each week in the antenatal clinic. She was brusque when I introduced myself to her to let her know what I was doing in the clinic. I explained about my research into body fluids, and she asked how I came to that topic. I said that my interest in fluids had come about from my research into milk kinship.

**JF:** Well, you won’t find any of that going on here.
**DL:** I’ve found quite a lot of it, actually.
**JF:** Haven’t these people ever heard of AIDS?
**DL:** [playing devil’s advocate] If breast milk is important for passing on immunities, there could actually be health benefits for the baby in being exposed to immunities from more than just their mother, couldn’t there?

She grunted at me. I talked about the custom in my host community in Turkey of everyone in the family, and guests, eating from the same bowl. I commented that colds and flu seemed to get passed around quickly, but that people seemed to recover very quickly, suggesting there might be advantages in terms of immunity.

**JF:** Well, I’m not really fussy about that sort of thing, but then I’m not the sort to get sick. But then there’s the case of the man contracted Hepatitis A from dipping a carrot into a dip at a work Christmas party.

Jackie Fisher’s risk-focused approach to the concept of sharing body fluids was common among the GPs, obstetricians, and some of the midwives.

Attitudes to breastfeeding highlight the intensities and ambiguities of mothering. Nursing Mothers Association literature commonly refers to a breastfeeding mother and child as a ‘breastfeeding couple’.
This ‘coupledom’ may imply a need for fidelity that is threatened by co-feeding, a need for security in maintaining the isolation of a special relationship. Midwives Cath and Julie expressed this in their discomfort when confronted with cross feeding, as did Ria in discussing the ‘yuk’ reaction of people in her yoga class to the idea.

Co-existing with this ‘jealous’ concept of a mother-child relationship, is a more promiscuous one, where a "baby needs to be born securely into a safety net of committed relationships" (Wolf 2001:47); where “it takes a village to raise a child” (Cowen-Fletcher 1994; Rodham Clinton 1996). Natalie and Emma clearly found this style of mothering more 'natural'. It was emphasised after the birth of Emma’s baby, when she moved in with her sister. Emma moved out from her "useless husband", and, according to Emma, Toni’s partner, the father of her three children “fled back into rehab ‘cause he couldn’t cope with having a new baby around the house, the selfish prick.” Emma and Toni, with seven children between them, lived together, with their mother, father and brother just round the corner and actively involved in caring for the children, who ranged in age from two five-year-olds to two new-borns. In many of the situations that were discussed with me, co-feeding was an extension of co-caring and an extended family style of child raising.

**fluid status**

Once a fluid is incorporated into a body, it is absorbed, and something of it stays. Milk and semen, and blood in transfusion, flow into bodies, but they do not flow through bodies. Fluid donors enjoy a higher status in fluid transactions than do receivers: it is better to give than to receive. Blood donors enjoy a high status in our community, whereas to receive blood in a transfusion does not confer status. Similar attitudes exist around sperm donation, as they do around milk. My data on cross feeding consistently illustrated some hesitation in receiving milk, and very little hesitation about donating milk.

Debbi: How would you feel about Lucas having milk from someone else?
Stacey: It would depend on the reason. If I was able to and there was no reason for it, I wouldn't want to, because they say your milk is designed for your baby.
   I don't know why I feel so against it, I mean we used to have wet-nurses. If you couldn't ...... I don't know ...... I don't know. I wouldn't want my child to have formula, but [if it drank someone else's milk] it wouldn't be my child as much any more.
Debbi: [I asked her reaction to a friend and I co-feeding]
Stacey: I thought 'wow' when I heard about it. I thought either it doesn’t mean as much to you, or else you two have a really special and unique relationship. I don’t know that I could share a relationship like that.
   Anton would hit the roof ... there's no way ....
Debbi: Why?
Stacey: Maybe he wouldn't .... maybe I'm putting that on him .....
Debbi: How would you feel about feeding someone else’s baby?

Stacey: It’d be a privilege.

In some Melanesian cultures, those who receive body fluids from another are enhanced, and those who donate are depleted (Herdt 1981, Meigs 1984). This is the opposite to what I have found. And I would suggest that in fluid transactions, the ones who receive fluids are somehow ‘stained’. Once you have had a blood transfusion, you cannot untransfuse. You cannot take that blood out of you. It does not wash away, or flush out of your system over time. Similarly, once a child has drunk breast milk, it cannot be undrank. You cannot unsuckle. It is not eventually ‘flushed out’ of their system. Once a woman has breastfed a child, that act cannot be undone.23

pre-gender possibilities

As a feminist anthropologist, I tend to make the assumption that EVERYTHING is gendered in one way or another. I suggest that, in some important ways, body fluids might not be. Starr (1999) discusses issues of racism in American blood banks, and ‘sensitivities’ of white soldiers in the American armed forces during WW2 not wishing to be ‘contaminated’ with blood from black people. “Everyone knew that black blood was no different to white blood” (1999:98), with a New York Times editorial commenting that the “prejudice against Negro blood for transfusions is all the more difficult to understand because many a Southerner was nursed at the breast of a Negro nanny” (Starr 1999:108). However, armed forces “leaders thought it best for morale not to collect African-American blood” (1999:99). In 1940s America, racial characteristics were seen (by some) to be (possibly) transmissible by blood, whereas gendered characteristics were not. He notes elsewhere almost as an aside that the majority of soldiers were men, and the majority of blood donors were women (1999:118). In analysing data collected at The Grace on body fluid exposure incidents and blood transfusions, a similar pattern appears. Although many fears and concerns were expressed, none had to do with gender. People talking about transfusions will have many queries, and talk about all sorts of things that go through their heads, but not once did I hear anyone express a preference for ‘male’ or ‘female’ blood. Nor have I come across any data that suggests that blood from men or women is different in any way, ie: more or less dangerous, more or less strong, more or less likely to aid in the healing process. Many things: qualities, disease, infirmities, strengths, can be understood to pass through blood, but they are not ascribed male or female characteristics. Femininity and masculinity are not characteristics that are understood to pass through blood.

Similarly, although a number of people commented that they expected me to find a difference between the way women breastfeed girls and boys, or the comments as they are fed, I found no

23 This is consistent with the so-called sexual double standard in heterosexual relationships: men who engage in fluid transactions with a number of partners gain status, whereas women undertaking the same activity generally lose status. It is clearly not, symbolically, the same activity. Men’s bodies are not penetrated, but perhaps just as importantly, their substance is untouched and unaltered. A woman, once she has accepted a man’s semen into her body (willingly or not), cannot be ‘unscrewed’, the semen cannot be washed away from her internal self.
evidence of this. Milk, too, appears to be 'genderless' in terms of where it ends up: I heard no comments about there being differential effects on girls or boys. There were sometimes jokes about individual baby boys liking breasts, but it is clear it was the container rather than the contents that are being referred to.

The same genderlessness applies on at least some levels, to semen. Although on one level milk and semen are obviously 'gendered' in that they are produced by gender-specific bodies, there seem to be few implications for gender in terms of what they produce. Semen helps make, and milk helps nurture, both girl and boy babies. Again, qualities that are said to be passed on by these fluids do not, as far as I can ascertain, have gendered attributes ascribed to them.

**shape changing**

In the above sections I have explored a variety of strategies of body fluid management, beliefs and practices in biomedical and lay frameworks. I have suggested that as fluidity and connectivity are inscribed as risky, body fluids which connect (blood, milk and semen) are inscribed as especially risky, which leads to damning leaks concentrated around social acts such as co-feeding. Fluidity is unstable, and in this section I examine another manifestation of instability: the dynamic, shape-changing maternal body.

Shildrick (1997) discusses implications of physical changes to the body, arguing that in medical terms, normative health is a condition of stability, implying lack of change. Change is associated with broken or breaking down. Being broken is associated with ill health. Discussing inappropriate medical surveillance of disabled people, she argues that the “inescapable and distinctive embodiment of those persons deemed to be in less than normative health becomes a determinate of their being treated as less than full subjects, as less than capable of independent moral agency” (1997:169).

There is a contradiction inherent in the concept of 'independence' in constructions of personhood in western societies, which is reflected in ideas of 'individual identity'. In western scholarship, identity is defined in terms of individuality (the bounded self) or group (the bounded set of selves). However, these are not the only ways in which people experience their being-in-the-world. Although 'Self' can be experienced with varying degrees of boundedness, western understandings of Self privilege the more bounded, and mute understandings and experiences of Self in which boundaries are fuzzier or more fluid.

Discussing George Lukács’s concept of “phantom objectivity”, an “autonomy that seems so strictly rational and all-embracing as to conceal every trace of its fundamental nature: the relation between people” (1971:83), Michael Taussig argues that reification and artificial objectification in medical environments result in relationship being stripped from health interactions (1980:3). Pseudo scientific autonomy is achieved at the cost of what makes us human: relationships. Unsustainable notions of autonomy in “the modern clinical situation engenders a contradictory situation in which the patient
swings like a pendulum between alienated passivity and alienated self-assertion” (1980:10), and the clinical setting “perniciously cannibalizes the potential source of strength for curing which reposes in the inter-subjectivity of patient and healer” (1980:10).

In western societies, according to sociologist Jack Katz, "something invisible in social interaction underlies personal identity" (1999:316). Individual consciousness emerges and is sustained through a process of taking the standpoint of others on oneself. The identities of others, as anticipated or encountered, are from the start intrinsic to the shaping of one's own lines of action and of the self that is inscribed in them.

... ideas of individual identity ... deny the collective basis of individual action. Thus in contemporary Western society we reward the prophetic individuals who can grasp and write down catchy tunes, and we reward entrepreneurs for imagining and developing products that work well, but the rewards flow to such individuals most heavily when the tunes and the products are instantly recognizable and widely marketable. Collective histories create the demand for the individuals' contributions, call out their innovations, and construct their talents by creating gaps they can fill. Cultures that honour individuality create diversions that routinely disguise the collective bases of individual identity. (Katz 1999:316)

Identity is ONLY able to be constructed in relation to others. Selves cannot exist wholly independently: Identity Is Always Relational. People cannot be conceived of (in both senses of the word) in isolation. You might wander off into the desert for forty years, but you're not going to 'exist' in western thought unless you come back again. Katz illustrates the logical impossibility of the concept of 'individual' 'identity'. He argues that the essential interconnectedness of identity is "invisible" and "denied" in western cultures (1999:316-18).²⁴

Western cultures use blood to symbolise biological connectedness. Schneider (1984) argued that relatedness through blood, rather than being based on biological 'fact', is a metaphorical construct. Fluids which are understood to flow between people and which are absorbed into other bodies: semen (during intercourse) and milk (during breastfeeding); are muted in discourses of kinship and connection, and in discourses of biomedicine. Concepts of connectedness are muted by glossing fluids of relatedness and connection as 'blood', when in fact blood is the one 'life' fluid which does not flow between people in reproductive functions. Milk and semen travel from body to body with transformative effects. Blood most usually does not, however it is used metonymically for other body fluids, particularly milk and semen, which do. Interconnectedness through fluids is rendered invisible in both kinship theory and biomedical constructions of corporeality, allowing for constructions of corporeal and social individuality which, as Katz (1999) argues, are not logically consistent.

Individual, autonomous personhood assumes corporeal stability. Shildrick writes that "those things which for women constitute the usual lifelong and continuous capacities of, and changes to, the body - such as puberty, menstruation, reproduction, lactation or menopause - are characteristically posed nevertheless as medical problems" (1997:169). The 'shape-changing' propensity of women, which is coded as unstable, has consequences for ideas of autonomous selfhood.

²⁴In psychoanalytic theory, levels of independence and autonomy are understood to be contingent upon separation from the mother, or, as Chodorow points out, the primary care giver, which in nearly all cultural situations is the mother (1974:43). As the majority of primary care givers are women, boys have to separate more to attain their gender identity than girls do (Chodorow 1978:167-8), thus separation (for boys) and connection (for girls) are crucial to differential gender development (Gilligan 1982:8).
... while women are represented as more wholly embodied than men, that embodiment is never complete nor secure. And nowhere perhaps is female excess more evident and more provocative of male anxiety than in reproduction. The capacity to be simultaneously both self and other in pregnancy, which is the potential of every woman, is the paradigm case of breached boundaries. (Shildrick 1997:35)

Not only do women's bodies go through more shape-changes than men's, but they have the capacity to perform the ultimate shape-changing trick in their production of an entirely new human being from their bodies. For Irigaray (1985), this instability is threatening in a philosophical cosmology which constructs a healthy body as a stable, unchanging one. According to Einstien & Shildrick the result of this is that "contemporary practice of women's health stumbles over ... key modernist assumptions", one of which is "the notion of the autonomous self-owned body" (2009:294).

we must not only challenge the normative assumptions embedded in traditional biomedicine, but also increasingly technologized, which is generating ever-expanding possibilities, leading to unpredictable data sets, and throwing up unfamiliar problems and dilemmas. It is increasingly clear as well that the classically modernist model of the body – as a well-defined machine comprising distinct systems- is being overtaken, even in the most scientific contexts, by the realisation that all corporeality is constantly changing and ultimately uncontainable. Morphology is not an unchanging given, but a process without end. (2009:294) A shape changing, shape shifting body is indeed problematic within a paradigm which values stability. A paradigm predicated on fluidity could resolve that: a shape shifting body within a paradigm which understands the world as dynamic and tolerates contradictions becomes immediately less problematic. In fact, it may even become the norm. “Alternative” health approaches (ie: alternative to biomedical) express corporeal experience in terms of flow, flexibility and dynamism (Baer 2004). However, an acceptable and accepted shape shifting body, a body which shape-shifts as a norm, cannot be granted full autonomous personhood. Full autonomous personhood is not possible within a logics of fluidity; shape changing as a norm is not possible within a logics of solidity.

The concept of shape changing is central to pregnancy and birth. Biomedical devaluation of the dynamic body was rife in my fieldsite, as were contestations to this devaluation. A pregnant body is an intensely dynamic body. This dynamism, the shape changing of pregnant, birthing and postnatal bodies, is a site of deep contestation. Natural childbirth advocates celebrate corporeal dynamism, and are critical of biomedical negativity to women's shape changing. 'Well woman' campaigns argue that a pregnant woman is a well woman, who should be treated as healthy unless otherwise indicated. Medical discourses of pregnancy treat pre and post partum bodies as deviations of the non-pregnant (male) norm.

Maria L. Chanco Turner's article The Skin in Pregnancy, is illustrative of the discourse in medical textbooks which presents pregnancy as a not-normal state. Turner begins by informing her (presumably medical student) reader that "Pregnancy is a unique condition for a woman's body" (1995:530). "One of the earliest signs of pregnancy" is "a purplish discoloration of the vulvar vestibula and vagina" (1995:532). Rather than saying that the colour of a woman's vulva changes with pregnancy, she presents this change in colour as "discolouration". While discussing changes happening in the female body during pregnancy, Turner begins a sentence with "In man ..." (1995:530). In the same volume, an article discussing pre-eclampsia in pregnancy compares 'abnormal' pre-ecamptic readings of pregnant women's blood pressure to 'normal' blood pressure: that of an adult male. This “primacy of the universal white, able-
bodied, masculine subject and the unexamined normative code that underlies it” (Einstein & Shildrick 2009:294) has been extensively critiqued in feminist theory. These critiques have been just as extensively ignored in medical education and biomedical textbooks (Einstein & Shildrick 2009:294).

In inscribing change as abnormal, change becomes coded as a problem. This coding of change as abnormal or problematic is also shared by many pregnant and post partum women. Carol experienced what is known as an ‘undiagnosed pregnancy’, that is, she did not realise she was pregnant until she went into labour. At the time, the postnatal ward buzzed with her story: both midwives and birthing women talked about ‘the woman who didn’t know.’ The following is an excerpt from my fieldnotes, when I spoke to Carol a few months after the birth.

I told Carol that one of the things I was interested in was the way bodies change shape during pregnancy, and the way we experience that. I said I’d like to talk to her as someone who didn’t experience that in the same way. She laughed and said she sure didn’t. She said “I actually seem to be having more problems now than I did earlier, you know, right after the birth.”

I had asked to talk to Carol about ‘change’, which she immediately interpreted as ‘problems’. There is a lot of emphasis on getting the body ‘back to normal’ as quickly as possible. A prominent netballer spoke on a TV sports show about regaining her fitness after having a child, and her desire to regain her place on the national team. She was interviewed with her baby on her lap. “I need to prove to Tom [coach] and the team that having a baby hasn’t affected me.”

The sign most commonly associated with change in pregnancy, and the sign most problematised, is weight. Excess weight is seen as a medicalised problem.

[During an ultrasound on a larger woman, one of the midwives] made a few comments about it being difficult to get a clear picture, “there’s a lot to look through”.

Jane [midwife] let Dr Dickenson know that his next patient was waiting in the consulting room. “She’s a bit on the large side.”

Kim told me about being on her own on the labour ward one New Year’s Eve, ”because of a big woman”. I was rostered on for New Year’s Eve. One woman was in labour right on midnight, so one midwife was in with her, and another woman had to go in for an emergency caesar. She was a big woman, so both anaesthetists went in, and the paed [paediatrician] and a whole lot of others. Everyone went in. The paed and the doctor both told the students to come in, it was important to know what to do with large women. All in all there were eleven people in with her, and I was out here on my own to see the New Year in.

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26 See Chapter 7 for more details of the ‘case of the undiagnosed pregnancy’.

27 Michelle Griffith (Brogan), interviewed on the sports report of the Channel 10 (evening) News, Friday December 5th (1999).
Even pregnant women who were not overweight often monitored their own weight during pregnancy. David, a midwife, explained that they only took a woman's weight at her first visit, unlike "in the past where they had been weighed every visit". Scales become a technology of self-surveillance (Foucault 1977). The scales were in the 'wee and weigh' room, a room with a toilet leading off to one side where women went to provide urine for tests. Women were told that they were welcome to use the scales themselves anytime they visited, but that was up to them. I was looking after Stacey's son while she went to the toilet.

Stacey came out, washed her hands, and walked over to the scales. She weighed herself, saying "I shouldn't really do this to myself". I said I'd look away. She asked for my pen to write it down in her book. She told me she'd put on 5 kilos, from 86.1kg last time to around 91kg now.

Many women experienced the weight gain and increase in appetite which comes with pregnancy as problematic.

I can't believe how much I'm eating - healthy food, but it's unbelievable. I'm eating as much as my husband!

Many women were faced with comments from family indicating weight gain and appetite were problematic.

Stacey asked Seren [midwife] if she thought she was particularly big. Seren said no, just a normal, healthy, pregnant woman. Stacey said that her parents-in-law had been giving her a hard time about how big she was getting, they were having a "bash Stacey session" on the weekend, at a family barbecue. She said it in a sort of resigned way, sounding more amused than sorry for herself.

Some women became upset by these sorts of comments from family and friends, while others became angry or indignant. For Emma, a very attractive twenty-four year old, this was her fourth pregnancy.

I've got swollen ankles at the moment, I've never had swollen ankles before, but I've never been this pregnant in summer before. I came in from outside the other day, and looked at my ankles and thought 'they look swollen', and just then Toni [her sister, also pregnant] looked at me and said 'your ankles look swollen', and I thought 'I knew they were.' It's funny, because I've never had it before, whenever the doctor asks me if I've got swollen ankles I just think 'get out of here, don't be ridiculous.' I was at the hospital with Pete [estranged husband] the other day, and he was looking at all of these really big women who are not as pregnant as me. He said to me 'you're not really so big after all, are you?' I'm not the big fat heifer that he thinks I am.

Both Toni and I expressed outrage at his comment, and Emma said pragmatically:

Yeah, I'm OK about myself, I mean I'm all right with that stuff, he's just sometimes not. [pause] Arsehole.
There is often ambivalence and ambiguity about pregnancy and sexuality.

Kerry said proudly that she’d been tooted at the other day. She said she went home and told Barry "I was tooted at" and he said "But you’re eight months pregnant!" I said to him "I know, it’s brilliant."

Women who are seen as overweight, or see themselves as overweight, before pregnancy, often expect to feel badly about themselves during pregnancy. However, the experience of ‘having a reason to be big’ can be experienced positively. Weight can also be joked about. Two sisters, Suzanne and Nicky, were both pregnant at the same time. Suzanne and her partner Rick were both quite large.

Suzanne: Tom [Nicky's partner] bet Rick a hundred dollars that my belly wouldn’t get bigger than his.

Rick: We had a measure up the other night. He had to pay up. [chuckles] I was beginning to get worried. I mean, she's eight months ... There wasn't much time left to overtake me.

Suzanne: The baby got there ..... finally.

Rick: [patting his substantial beer belly] I'd really like to lose some of this, but it's hard, now that I've [been promoted], cause all I do all day at work is sit ...

Getting rid of weight gained during pregnancy is the major marker of 'getting back to normal'. In the recovery bay, less than an hour after the caesarean delivery of her baby, Marilyn started thinking about her partner's brother's wedding, five weeks away. It was the first thing she talked about apart from the birth. Looking down at her stomach after Zac had finished feeding, she said:

It’s so good to have got rid of the tummy. Now I've got to try and lose weight for the wedding. I can’t wait to get back to normal.

This 'getting back to normal' was reinforced by her physiotherapist, talking to Marilyn the day after her caesarean section. As she stated,

Pelvic floor muscles should be like a trampoline, but after a few babies they're more like a hammock. It takes about 1 to 3 months to recover. It would be nice if it came back immediately, but it doesn't.

The focus on 'return to normal' often leads to pregnancy and birth being inscribed as abnormal, by both women and their families, and by health care workers. The physiotherapist who visited Marilyn the day after her delivery began by making sure Marilyn knew how to do pelvic floor exercises.

physio: Even though you've had a caesar you still need to do pelvic floor exercises to get you back to normal. [looking at Marilyn's chart] Eight pound two, it's a good thing you had a caesar. How much labour did you go through?

Marilyn: None
physio: That's quite good. By avoiding labour you avoid some of the trouble you get with your pelvis stretching.28

Midwives working in an active childbirth framework objected strongly to negative messages about weight, seeing weight gain as a normal and healthy part of pregnancy. Rennai and Seren, working in the midwife care program, were particularly vocal about it, one of the few circumstances in which they expressed their own opinions strongly to the women they cared for.29

Seren: Any swelling?
Anne: Just a little.
Seren: [looking at her ankles] That’s normal, a sign of a normal, healthy pregnant woman. If there’s a lot of swelling there may be a problem, but a little swelling is perfectly normal.

[during her antenatal visit] Gerri mentioned she was getting pudgy. Rennai objected heatedly, saying "that's not pudgy, you're a healthy, pregnant woman".

While too much weight may be seen or experienced as problematic for some women, babies were expected to gain weight. In babies, weight gain is a crucial sign of growth. At a Nursing Mothers coffee morning, Maria talked about her five week old baby Kate, who was being fully breastfed.

It took her a while to start putting on weight, and that was really worrying. Then when she did start gaining weight, it felt so wonderful, that my body was making her fat. [Maria gently squeezed Kate’s leg, showing us that it was fat and ‘juicy’) It’s so magical, so wonderful, that my body is the one making her grow, keeping her alive. That feels so good. [vigorous nods of agreement from the other mothers].

Stacey was explicit about the difference that weight gain meant for her and Carl.

Stacey: It’s not fair, I look at my thighs all fat and dimpled and they’re horrible, but I look at Carl’s all fat and dimply and they’re beautiful. ..... It changes the way you see your body, having a child. Having a child has been really good for me, it’s made me see my body in a whole new way.

Debbi: In what way?
Stacey: I’m just totally in awe of what it did. It nurtured this child. And gave birth. My body’s miraculous. And then it started producing milk. It’s just amazing.

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28 This typifies the frequently contradictory messages women birthing in hospital are bombarded with. Antenatal education and birthing centre midwives would have been horrified at this statement promoting caesarean section. During her pregnancy, Marilyn frequently had to justify why she was having a planned c-section (she had a bifurcated uterus, making vaginal birth impossible), often to midwives or obstetricians holding her file in their hands. On the one hand she was told she ‘had’ to have a c-section, on the other she was called upon to justify ‘her’ decision.

29 Like the homebirth midwives studied by Cheyney, Rennai and Seren at times consciously and “intentionally manipulated rituals of technocratic subversion designed to reinscribe pregnant bodies” (Cheyney 2006:519).
In the course of the same conversation, less than five minutes later, Stacey expressed her admiration for Briony, who had an eighteen month old child.

She worked so hard to get her figure back, and she's just looking fantastic. I don't know how she did it. I wish I had her willpower.

Unknown to Stacey, not long after this conversation Briony began seeking treatment for anorexia. She was hospitalized in a 6 week “bed-program” reserved for people who are diagnosed as having anorexia regarded as life-threatening.

Within medicalised and many alternative discourses of pregnancy and birthing, shape change is discussed in terms of shape loss, and is inevitably coded as negative. In the Nursing Mothers Association publication, "Breastfeeding Naturally", the first point on the list of benefits for "Why Breast is Best for You" (ie: the breastfeeding mother) is that it "Hastens the return of your pre-pregnant figure" (Cafarella 1996:8). Although at The Grace it was no longer seen as politically correct to promote weight loss as one of the benefits of breastfeeding, the ‘fact’ that ‘breastfeeding helps you get back into shape’ was widely quoted by midwives. After the nutritional benefits for the baby, this was given as one of the main benefits of breastfeeding for the mother. GPs and obstetricians also talk about strategies for 'getting your body back'; 'getting your figure back' and 'getting yourself back into shape.' "Breastfeeding ... helps you return to your pre-pregnant figure more quickly. As your baby gains weight, you may even find that you lose any excess weight gained in pregnancy" (Cafarella 1996:7).

Some midwives argued vehemently that what was missing in these encounters was acknowledgement of the fact that a post-partum body is not a pre-partum body. They felt that there was an assumption that everyone wanted to return to looking the way they did before they were pregnant, or to have an idealised prepartum body. But even when women return to their prepartum weight, postpartum bodies are softer, looser, floppier, wider in some places, narrower in others. 'Your body will never be the same again' was seen as some sort of threat, not an acknowledgement that a major event has occurred in a woman’s life cycle.

Stretch marks were mostly regarded by women as unfortunate and ugly side effects. On the postnatal ward, women who had few or no stretch marks would proudly show off their unmarked tummies, women bearing these maternal skin scars would complain they had them, but keep them covered. A more dynamic view of the body presented stretch marks as symbols to be carried with pride, and a few women expressed this, but they were a definite minority. In the labour ward, male obstetricians and husbands bonded over episiotomies, making jokes about 'tightening up' or 'returning things to new'. One younger female obstetrician remarked that two of her (medically trained) friends had chosen to have elective caesarean sections to avoid "floppy fanny syndrome", ie vaginal stretching during birth. Women and health care workers talk about "getting back to normal" and "getting your body back" after birth and after weaning. Jill, whose son was nearly three, talked about weaning:

I'd had enough by 6 months. I'd given him a good start - I was desperate to get my body back.
She accompanied this statement with a gesture. Her hand, facing down, brushed from her breasts down and away from her body, as if pushing something away. It was not the first time I’d seen this gesture when talking to women about weaning, in fact I had made it myself, when discussing my own attempts to wean. 30

An anthropological colleague, whose post-pregnancy slim figure was similar to her pre-pregnancy svelteness, relayed a conversation she’d had with a pregnant woman, which occurred when her own baby was a few months old.

She got all excited about me getting my body back. I said to her, what do you mean, getting my body back? Where’d it go?

Women’s magazines in Australia inundate readers with celebrity mothers regaining, or failing to regain, their lost figures. 31 This media representation of post-partum beauty was reproduced in the magazine “Good Medicine”, a publication reputedly promoting health, in which plastic surgery is discussed as a consumer item, and health is presented as synonymous with youth and beauty. 32

In an era in which western women and men are living increasingly longer lives, women birthing in Australia birth within a culture in which attractiveness is defined as belonging to a very narrow and specific section of the life cycle. An ideal body is a young, prepartum body. Even if a woman has an ideal body, she does not have it for very long. The shape shifting and shape changing a woman’s body goes through in the course of her maternal life is regarded as neither normal or healthy, nor is it inscribed as attractive. A body which has swiftly returned to its prepartum shape and size, with its boundaries intact, is coded as far more stable and healthy than a soft, floppy, fuzzy-boundaried post partum body. Dynamic personhood, unstable personhood (embodied or disembodied) is, in a framework of epistemological solidity, inscribed as unhealthy and in need of treatment. A state of embodiment with boundaries clearly put back into place, marked by the ‘return of the body’, exemplifies symbolic solidification of the maternal body.

30 I breastfed my son until he was three years and two months, which included attempts at weaning from when he was two years old to “see if he was ready”.
31 New Idea and Woman’s Day, both top-selling weekly magazines in Australia, are particularly prolific. A large part of 2001 saw numerous articles in both magazines on Liz Hurley’s depression at being “fat” during pregnancy, her “flight” to Sir Elton John’s mansion to hide her post pregnancy shape, and her “proud” re-entry into the public eye with a sleek new figure. In 2002 the maternal bodies of Kate Moss and Catherine Zeta-Jones were constantly scrutinised, in 2003 Cate Blanchett, and in 2004 Kate Hudson, and again, Catherine Zeta-Jones were remarked upon for their “success”, while Debra Messing came in for attention for her “depression” at her “failure” to regain her “tiny” figure. In 2005 Jennifer Garner’s pregnant and post baby body shape was closely monitored, and Britanny Spears’ various aesthetic post-baby “failures” were avidly reported. Early 2006 saw a promising crop of pregnant stars lining up for later scrutiny, including Angelina Jolie and Gwyneth Paltrow. Over the last few years there has been a crop of Royal babies added into the celebrity babies, and Princess bodies (Mary of Denmark, Kate, Duchess of Cambridge) have been scrutinized as closely as actors and models. The message has been remarkably consistent through to 2014, where the names of the celebrities change, but the discourse remains the same. An addition into the discussion has been surrogacy. Some celebrity surrogacies have been discussed openly, eg Nicole Kidman. In addition, there has been speculation that some celebrities may have worn a fake “belly bump” to hide the fact they were using a surrogate, eg Beyonce. In all cases the maternal body and its capacity to hold and/or regain its pre-pregnancy shape is a point of extreme focus.
32 For example, discussions are over which type of liposuction is best for which "problem", rather than whether or not liposuction is a “healthy” or appropriate procedure.
mediated paternity, unmediated maternity

The baby which emerges from the shape-changing body is (im)mediately related to the body from which it emerges. There is no third person, no mediation required between mother and child. Paternity, on the other hand, cannot exist unmediated. Just as the inscribed instability of the maternal body makes unmediated parenthood risky, the mediation required for paternity can be a source of tremendous anxiety.

Male and female parenting are fundamentally different cultural tasks: motherhood is something you do, paternity is something you have. As something which requires mediation, and as something you have or own, like property, paternity requires protection. There is a condition among some senior obstetricians that I can only describe as paternity angst. In the first conversation I had with one of the most senior obstetricians, which was of no more than 10 minutes duration, paternity and issues of paternity came up three times. IVF came into the conversation, and he said "Well, you realise IVF is the only way to be really sure of who the father is." From there he went into a story about a mother who had twins, who told her husband during a particularly fraught moment in labour that he was not the father. The alleged non-father toted a picture of the twins round to the midwives in the postnatal ward, saying 'don't you think at least this one looks like me?'. I did not hear that anecdote from anyone else, in my whole time at the hospital. I did, however, hear from a number of women, none of whom (like myself) talked about semen or who were researching body fluids, that in their initial conversation with this particular obstetrician, similar types of comments were made, particularly the comment about IVF.

Paternity angst is illustrated by comparing two cases of caesarean section. The obstetrician involved in the two cases below is not the same obstetrician mentioned above. I will call the women Marilyn and Karen. Marilyn, whose birth story is presented in Chapter 4, was 31 years old when she had her 5th child. She has a condition that necessitates delivering her children by caesarean section, hence this was her 5th section. She was divorced from the father of her first four children, and was pregnant to a new partner, Peter, who was not quite 21. They were not living together, nor had they any plans to live together, when she fell pregnant. By about half way through the pregnancy he had moved in with her and her children. She was living on social security. He had part time, sporadic and insecure work, and had taken up a paper round to buy his two bags of marijuana a week. Marilyn is opposed to abortion on moral grounds. She had been using contraception when she fell pregnant: in fact she had a long history of experience of contraception failure. Prior to falling pregnant she had decided she did not want any more children. During one of her antenatal visits she inquired about having a tubal ligation at the time of her caesarean section. This was discussed over a series of antenatal visits, with the obstetrician being opposed to doing it at the time. His reasons were twofold. Firstly, that as this was Peter’s only child, it was 'too risky' to tie Marilyn’s tubes. It would be better to wait until the baby was six months old 'it’s not nice to talk about, but it's a good idea to wait, just in case anything happens to the baby.' When

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33 Except in the case of adoption, and now surrogacy. Surrogacy was highly unusual during my fieldwork, but has since become an increasingly ordinary part of the maternity mix. I’d suggest that many of the discussions around how a social mother’s maternity is established support the argument I make in this section.
Marilyn asked 'like what', she was told 'cot death'. The second reason she was given was that the procedure was less likely to be successful when carried out in conjunction with a caesarean section. There was no mention made of the additional risk of a separate surgical procedure. Delaying the tubal ligation would necessitate another stay in hospital, and mean making the necessary arrangements to have the five children cared for. Eventually, and not happily, Marilyn acquiesced to waiting for six months to have her tubes tied.

Karen was 35 years old when her 7th child was born. She’d had three children with her first partner, from whom she’d divorced. This child would be the fourth in her second marriage. Again, she knew well before the birth she would be having a caesarean section. She asked to have her tubes tied at the time of the section. This request was immediately agreed to, with no discussion about the pros and cons of waiting for six months. As far as I could ascertain, there was no discussion of the procedure being less successful when carried out at the same time as a caesarean section. This was with the same obstetrician who had advised Marilyn to wait for six months.

Karen’s partner’s rights to paternity, with four children, seemed secure, and Karen was offered the tubal ligation she requested. Marilyn’s partner’s rights to paternity, with only one child, did not yet seem secure, and she was convinced, at considerable inconvenience and potential additional risk to herself, to wait and return for a second procedure. In a medicalised maternity environment, maternal rights are not protected in the same way as paternal rights. I must add that this is purely my interpretation of the available data: my ethnographic brazenness did not extend to questioning this particular obstetrician regarding the reasoning behind his differential recommendations.

Another problematic boundary area of potential clash of interests involve maternal and fetal rights. Maternal and fetal interests are not always in alignment, and may have to be juggled. Opinions as to the appropriateness of pain relief during labour illustrate this. Typical of most Australian hospital birthing institutions, the three pain relief options involving drugs available at the Grace were gas.34 pethidine and epidural anaesthetic. Gas is seen as unproblematic for the fetus as it does not cross ‘the placental barrier’, and therefore is understood as not affecting the baby. Pethidine and epidural-administered anaesthetic cocktails do ‘cross the placenta’ and enter the baby’s bloodstream, and are therefore seen as less straightforward.

Maternal and fetal bodies, rights and interests are being treated as increasingly separate within biomedical constructions of reproduction. This separation is neither uncontested,15 nor, as the following illustrates, is it clear cut.

In order to track fetal growth, pregnant women's tummies are measured at every antenatal visit.36 The uterus of a woman who is not pregnant is soft, and cannot be felt through her stomach. One of the first changes that happens in a woman’s body at pregnancy is that her uterus becomes firm, and the fundus, the top of the uterus, is usually able to be felt. 'The measurement' is taken from the fundus to

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34 Entonox: a fifty/fifty mix of nitrous oxide and oxygen.
36 A smaller than usual measurement may indicate a range of problems, some of which can be life-threatening for the baby; a larger than usual measurement may indicate the possibility of gestational diabetes or twins (if that is not yet known). A change in the rate of growth between visits may indicate problems in fetal development.
the top of the pubic bone. The number of centimeters roughly coincides with the number of weeks a
woman is pregnant, so at 28 weeks it is expected that 'the measurement' will be around 28 cm. Rennai
was with Trish:

.... let's see how the baby's growing ... (measuring Trish) 27 cms. That's good, that's wonderful.
You’ve certainly grown since last time.

In the first part of the quote Rennai talks about the baby growing. The second reference, less than a
minute later, talks about the woman growing. The example below is again with Rennai, this time with
Stacey. Stacey had been saying that over the Christmas holidays she'd received lots of comments from
her family about how 'enormous' she was.

Rennai: See, that’s only 25, that's not really big.
Stacey: I’m not as big as I was with Carl at this stage, but a lot of people have said that I've got
lots bigger in the last two weeks - I feel like I've popped out.

Comments on the size of the tummy measurement floated indiscriminately between the mother’s size
and the baby's size being commented on. There was no discernable difference between the end of a
pregnancy and the beginning, there was no shift from a tendency to describe the woman’s size in early
pregnancy and the baby's in later stages, or vice versa. Mother and baby grew interchangeably. Women
also switched in the way they talked about fetal growth. Comments about their own bodies: "I feel like
I’m exploding", or "I’m not as big as I thought I’d be" were interchangeable with "the baby’s just growing
and growing" or "this one’s not as big as the first two".

A certain level of fuzziness of maternal/fetal bodies and emotions was recognised and prescribed at
The Grace. Alongside the discourse of the mother as an individual who has separate rights to her fetus,
runs a discourse of a good mother with appropriately fuzzy boundaries. On the birth plan, there is a
section for people to fill in headed "maternal/infant contact eg. skin to skin". Karla discussed this in
antenatal class:

Most people want skin to skin contact. You’re here, you've been waiting all this time for your
present, you're waiting for your present and you want it. We can’t pass the baby to someone
else, because the cord doesn’t reach [lots of laughter].

The baby might only reach up to your tummy [she demonstrates with the fetal doll]

Skin to skin contact was actively promoted at the Grace. Women were not asked whether or not they
wanted it. It was, rather, implied that they should want it. The Grace had a policy of not washing the
baby for the first 24 hours or so, arguing that it was unnecessary, and allowed oils from the vernix, the
substance which covers the baby in the womb, to seep into its skin. Not all women shared the hospital’s
enthusiasm. The day after Ben's birth, Kerry commented:
They handed him to me all gukky. There was a great glob of blood on his head. The midwife wiped that off, but they didn't wash the rest of him til today. I don't understand why they do that. It's ever so much nicer now that he's clean.

Being fuzzy boundaryed, being bonded and linked and connected to your baby, is part of being a good mother. However, being an individual, with your boundaries intact, is part of being a normal human being.

This contestation between fluid and solid ways of defining beingness and personhood leaves pregnant and birthing women in western societies no way in which to fully inhabit space as both a mother and a human being. It is, as Wolf puts it "psychologically crazy-making" (2001:126). There is no space for the maternal figure to fully "be".

In this chapter I have argued that fluid, maternal shape-shifting corporeality presents a particular challenge to a biomedical system underpinned by logics of solidity, which relates health to stability and codes dynamism as instability, and therefore unhealthy. Logical solidity predicates adult personhood upon forms of disconnection: rationality, independence and autonomy. The maternal body is defined by connection, a "good mother" is defined by her ability to "bond" with her child. Within a biomedical framework, there is then no philosophical space for a pregnant or birthing woman to be both a "good mother" and claim full autonomous adult personhood.
In Chapter 2, I discussed modernist, scientific ways of knowing which privilege logical solidity over logical fluidity. Solid, bounded objects and bodies have perceivable and measurable limits. If something is measurable, it is knowable. If something is knowable, it is, in modernist scientific thought, able to be taxonomised, categorised. It is malleable and controllable, and it is potentially improvable.

This chapter explores a variety of aspects of ‘knowing’, including the value placed on particular types of knowledge, and the consequences of certain types of knowledges. Within a biomedical framework, the point of pursuing knowledge is mostly to intervene, to do something about it.¹ A condition is diagnosed, and then it is treated. When something can be done, or is perceived to be able to be done, then there is an imperative to seek knowledge, and an imperative to take action. There is a moral value placed on wanting to know, and a moral value placed on acting upon the knowledge once it is known. This is illustrated in the first two sections of this chapter, ‘the case of the undiagnosed pregnancy’ and ‘but don’t you need to know?’.

As discussed in the previous chapter, accessing biochemical markers through blood tests is a strategy of solidification utilised to render the complex maternal body in simpler, more understandable terms. This chapter discusses one such blood test, maternal serum screening, which produces a dichotomised result. As a result of the test a woman is placed in one of two categories. I illustrate how much more complex the implications of this test are, how many pathways lead from the test, and show the complexity that the “either/or” nature of the test result obscures. As the example of maternal serum screening shows, attempting to simplify inappropriately can, and often does, lead to complications.

Health care workers, women and their families, ethicists, social researchers and commentators, lawyers and judges, scientists, politicians, legislators, and policy makers are currently grappling with complex and difficult issues raised by western biomedical reproductive knowledge and practice.² The case of prenatal diagnostics illustrates clearly how differently issues look from the perspective of a solid logic, where health is defined within certain categories, and personhood granted only to healthy babies which fall within those categories, or a fluid logic where a discomfort with strict labeling and taxonomising makes diversity of acceptable human being-ness much broader.

It would perhaps be expected that a chapter discussing medical technology, generated from data collected a decade and a half ago, there would be significant discussion on changes and developments within the technology. This is not the case. There are remarkably few major changes in principle: the shifts in the last fifteen years are more in scale. The main shifts are that ultrasound offers clearer

¹This is a reductionist description of western biomedicine, which, although valid, at the same time does not do justice to the difficult areas of deciding to withhold treatment, offer palliative care, or otherwise negotiate end-of-life decisions which are faced by health care workers in, for example, oncology and intensive care medicine. See Lock & Nguyen (2010).
images; amniocentesis can uncover more genetic conditions; chorionic villi sampling is no longer widely used in Australia. The framework of what Nelkin and Tancredi labeled the “New Reproductive Technologies” in 1989: amniocentesis, ultrasound, IVF, selective population screening (as opposed to testing), are all still in place. The changes are in quality and refinement: the fundamental technologies, and the ethical dilemmas they entail, retain their currency.

the case of the undiagnosed pregnancy

Carol was 44 years old, married, with two teenage children. Slim, petite, and in the best of health, she worked part time as a sports instructor. She played hockey, and coached her daughter’s hockey team, and in her short skirt was as trim as most of the girls. Her periods had been a bit irregular for about twelve months, and she had quietly reflected, just to herself, that she may be beginning menopause.

One day, at home, feeling a bit queasy in the stomach, she went to the toilet. Thinking she must be coming down with a tummy bug and a bit of diarrhoea, she sat down. The tummy pains became a little worse. She pushed, trying to cause a bowel movement. Alicia, her 15 year old daughter, heard her cry out, and rushed into the bathroom just in time to see her mother fish a baby out of the toilet bowl. With the umbilical cord still attached, Carol turned on the shower, and told Alicia to call for an ambulance. Alicia called the ambulance, and went and got her grandmother, Carol's mother-in-law, who lives nearby. The ambulance arrived swiftly, an ambulance officer cut the cord, and Carol was taken to hospital to deliver the placenta. Alicia rang her father at work, to tell him that he probably ought to come home, as mum has just had a baby.

Hospital staff estimated that the baby was close to full term, and at around six pounds (approx 2.7kg) he was slightly on the small side of average, but still a nice healthy weight. Carol remained in hospital only a couple of days. The baby was born at the beginning of the Easter break and at the end of the holidays, a week and a half later, Carol was back at work.

undiagnosed pregnancies are uncommon, but not unknown. Carol's undiagnosed pregnancy was one of two that I came to know about during the year I spent at The Grace. According to midwives that was about average. Kelly told me:

We usually get one or two a year. But, normally they're like, young, maybe they've been trying to hide the pregnancy from their parents, or are just pretending to themselves it's not happening. Or they're quite overweight, and they don't notice it. It's rare, but sometimes you can keep getting your period through your pregnancy, or with girls who aren't very regular anyway, they sort of don't really take much notice if they don't get their period for a while.

Talking to Carol a couple of months later, I asked the question that all the midwives on the postnatal

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1 In a chapter published in 2014, anthropologist Rayna Rapp, who has been researching and publishing on amniocentesis since the 1980s, refers to it as "one of the new reproductive technologies" (2014:129). See also Rapp (1984 & 1993).
ward had been dying to ask: Did you really not know? I asked if, in retrospect, there were signs that she
didn't recognise at the time. She told me she'd asked herself that endlessly, but there really weren't.
Women she'd played hockey with only days before the birth, and had been seeing her regularly over the
preceding months in her hockey uniform, hadn't noticed. She'd said she had felt she'd put on a bit of
weight, and that her periods had stopped, but she told me she'd never really bothered about her weight
one way or another, and she'd put the changes down to menopause. Certainly she never experienced
her shape as 'pregnant'. She hadn't noticed the baby moving. I asked how that compared to her other
two pregnancies. Completely different, she said, I knew right from the beginning with them.

Carol had felt that something was not quite right, and in fact had made an appointment with her GP
a couple of days before the birth. But she wasn't in any hurry, and the appointment had been for after
the Easter break. And she'd certainly had no suspicion that the something might be a baby.

Back at the hospital, when the case was discussed, the midwives remained sceptical. How could she
not know? The level of distrust remained as high as it was when Carol had first arrived. This distrust was
so strong that the baby was 'comp fed': fed from a bottle, in direct contravention of usual hospital
practice and policy. Carol did also breastfeed, but the bottle feeding happened at the midwives’
suggestion, something unheard of for a healthy, term baby well within what is regarded as the normal
weight range. Somehow, Carol and her body couldn't be trusted, in spite of the fact of her having no
problems having breastfed her other two children, and in spite of the fact that she was fit, a non-drinker
and non-smoker, who had given birth - naturally, vaginally, with no intervention - to a healthy baby. In
spite of all that, Carol was 'suss'. One aspect of being (accepted as) an adequate pregnant woman is that
you've got to KNOW. How could she not have known?

Carol's story illustrates the importance placed on 'knowing' within a medicalised reproductive
environment. To not know, places a person, particularly a woman, under suspicion, and raises doubts
about the adequacy of one's parenting, especially mothering, ability. Not only is there an expressed
need to know, but there is an expressed desire to (re)produce and accept knowledge in certain forms,
and not in others.

Carol’s story points out an irony embedded in the medical concept of 'natural' birth. Natural birth,
by which is meant a birth with little or no intervention, is overtly promoted at The Princess Grace as the
ideal form of birthing. The aim is for as many women as possible to 'achieve' a natural birth. Carol’s was
surely the most natural of pregnancies and births, however it was coded as unnatural and abnormal.
Even Carol herself coded it that way, telling me that she was really worried before the baby’s six week
check up, and very relieved after it. When I asked why, she said that because she hadn't known, and
because she hadn't had any antenatal check-ups during her pregnancy, she might have caused
something to be wrong in her baby. She said she'd felt really guilty about it, and was immensely relieved
when the baby received the all clear at his six week check up. She was relieved, she said, that she hadn't
caused him any harm by not having antenatal check ups.

The point of antenatal check ups is to monitor the mother's and baby's progress. If there is

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4 The concept of 'natural' in birthing was discussed in Chapter 4.
something wrong, it will be 'wrong' whether or not a woman has her check ups. Monitoring doesn't make problems go away, it merely reveals them. Not being monitored doesn't create problems, it merely means you don't know about them. Learning that there is a potential problem may allow intervention, but the monitoring itself will not heal. Carol's concern reflects significances attached to medical knowledge in an Australian birthing environment.

This conflation and transformation of meaning, from 'the hospital will tell me whether my baby's likely to be healthy' to 'the hospital will ensure my baby is healthy' is an example of the simplification and decontextualisation firmly embedded in a logic of solidity permeating western biomedical environments.

This slippage between indicator and cause, symptom and agent, abounds in biomedicine. The most compelling examples are currently in genetics, as discoveries are made of variations in genes that indicate certain physiological conditions. Genes are inscribed as "blueprints" of human-beingness, and are attributed casual agency in the creation of unwellness and dis-ease. In an article exploring laboratory culture, anthropologist Deborah Heath explains that "It is mutations in the gene that codes for fibrillin that cause Marfan syndrome" (1997:75). As will be discussed later in this chapter, carrying a gene for Down syndrome or Neural Tube Defect can indicate a range of potential ways of being for the human that results, but reading the gene does not give a full and accurate picture of the person. The gene does not generate the human, but we are understanding genetics in ways that grant vast, possibly unwarranted, amounts of agency to genes.

but don't you need to know?

The emphasis placed on the importance of knowing, and the link between knowledge and adequate parenting, was illustrated in a medical encounter in which I was the patient/client. During my fieldwork, I was granted access to observe antenatal, delivery, postnatal and domiciliary areas of the obstetrics unit. However, I was not given permission to carry out observations in the reproductive medicine unit, the unit which aims to assist people conceive, commonly referred to as the IVF unit. At the time I was completing my fieldwork, I fell pregnant. I subsequently miscarried. As it was my fourth miscarriage, I qualified for a referral to the miscarriage clinic, which is part of the reproductive medicine unit.

Although I am fascinated by the so-called NRTs (New Reproductive Technologies), having read widely on the experiences of people undergoing fertility treatment, and having had close friends go through IVF, I felt hesitant about placing myself in the hands of NRT medical personnel. I decided to attend this particular clinic as I knew the clinician involved. An obstetrician, he is outspokenly and actively supportive of midwife births and natural childbirth, and openly critical of unnecessary obstetric intervention. I assumed that this indicated he would have an understanding of the concerns and/or doubts that I may have in my own treatment.

The consultation took place with myself, the consultant, who I will call Dr White, and a specialist in
training, who I will call Dr Tan. Dr White knew me from my fieldwork, Dr Tan and I had never met before. Initial blood tests showed a possible cause of the miscarriages, however they were, as is not uncommon, inconclusive. Little is known about causes of miscarriage, and the process of searching for causes can be unsatisfying and even distressing.

Having discussed the ramifications of the blood test result, Dr White said he would like some further tests: two levels of chromosomal or genetic testing. One type of test would be just for me, the other would involve both my partner and myself. When I asked why, he explained that there could be a chromosomal abnormality in myself or my partner, or in our genetic combination. I asked about the resultant information. If there were 'abnormalities', could anything be done? No. Would it indicate further testing or treatment? No. If there weren't, would that indicate another path to be travelled, or would that be the end of the line. No, ruling chromosomal conditions out would not lead us to look for anything else.

I said that I couldn't see the point of the testing, and didn't think it was necessary. Dr White looked at me in surprise, as did Dr Tan. "But don't you want to KNOW?" asked Dr White. Not particularly, I replied. "But you're an anthropologist ... don't you need to know?"

From this point, both doctors, while still polite, appeared to be slightly offended. I was told that unless I ruled it out I was at risk of having a deformed fetus. I didn't quite have the wits about me to tell them what I was thinking, which was that my body had so far proved to be extremely efficient at disposing of inadequate fetuses, and of allowing a healthy one to develop. I did reply if there were problems such as they were alluding to, antenatal monitoring would pick them up. Eventually, Dr Tan, in an 'ah-ha' tone of voice, said that it was important for my son that I know. I looked in amazement, and said "He's not yet three years old!". Dr Tan continued: if it is chromosomal, it may have been passed on to him, however healthy he may appear. He may have similar difficulties when he comes to have children. Dr White came in with the punchline, seemingly triumphantly certain that a guilt trip should clinch the argument. "Yes, this is not just about YOU, you know."

Both Carol's story and my own illustrate the importance placed on "knowing" within a medicalised reproductive environment. The ability to know becomes an imperative to know. For many of the parents Rayna Rapp spoke to in her study of women's experiences of ultrasound in pregnancy, "once technology exists to provide the information, ignoring it constitutes deprivation" (1997:41). To not know, or worse still, to not desire to know, places one under suspicion, and raises doubts about the adequacy of one's parenting ability.

the point of knowing: perfectible humanity

The aim of monitoring is to anticipate and deal with problems which may be dangerous, even life threatening, to a pregnant or birthing woman and her child. Monitoring is about risk management, and
the risks in childbirth are, without being in any way melodramatic, issues of life and death.

In terms of mortality, Australian obstetrics is among the safest in the world. Globally, Australia is one of the major players in medical research and development into reproductive technology. New tests, new developments, are constantly being explored in obstetrics. Very quietly, in almost whispered asides, some midwives expressed the view that childbirth is now about as safe as it can get, that there will always be some level of risk, and that to try and minimise that even further creates more problems than it solves. Midwife educator Andrea Robertson articulates what a number of midwives in my fieldsite mumbled, but were not prepared to say publicly.5

The modern desire of medicine to save all babies and to cure all ills is creating unrealistic expectations, and leaving parents with sometimes insurmountable problems. It is to be expected that some babies will die, and whilst this is regrettable, and tragic for those concerned, it must be accepted as part of the fabric of life. (1994:101-102)

Narratives of pregnancy loss - miscarriage and stillbirth - were profoundly muted in obstetric discourse during my fieldwork (Layne 1996:144). Side by side with this muting, and with modern obstetrics’ zero tolerance for maternal and fetal mortality during childbirth, sat the belief that not all fetuses should get as far as delivery.6 Just as interventionist modes of birthing favour controlled birthing environments as being safer, it is regarded as preferable to control and/or prevent the births of fetuses whose health is understood to be severely compromised.

The following conversation is from my fieldnotes, and occurred at a change of shift on labour ward. Kate, an experienced midwife in her thirties, and Dee, a midwifery student of about the same age, talked about genetic testing. There were a number of other midwives milling around, who also put in comments, and there was general agreement with opinions expressed by Kate and Dee.

Kate has a deaf sister. Her sister’s condition is one that is now grounds for genetic termination.

With tears in her eyes, and a lump in her throat, she said "they want us to get rid of her before she was born - when I think of everything she’s brought into our lives ..." ... She talked about being with a couple having an amniocentesis, and the ultrasound to locate the baby. The baby ‘waved’ at them, and they ‘waved’ back, and were really thrilled. "They were bonding with the baby, that bonds you, that type of ultrasound. I often thought about how it would be for them if they had to abort that baby".

Kate had done some of her training in England, and had worked in an antenatal clinic, where she said she "got to observe the doctors and midwives." There were two things that upset her: firstly that when they talked about the possibility of a bad result with an amnio, they said "and

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5 During my fieldwork, the only published English-language discourses critiquing obstetric and reproductive technology (that I was aware of) came from what was regarded within my fieldsite as radical and potentially dangerous sources. Homebirthing advocates and feminists critical of birthing and reproductive technology (eg: Daly 1978; Davis-Floyd 1992; Gaskin 1977; Haraway 1983; Hrdy 1999; Katz-Rothman 1982 & 1986; Kaufert 2000; Murphy-Lawless 1998; Nelkin & Tancredi 1989) were regarded with suspicion, if they were known about at all. Since then, more mainstream medical, academic, clinical midwifery and birth advocate voices have joined the ranks of those querying both the usefulness and the potentially iatrogenic (harm causing) nature of some testing and screening (eg: Buckley 2009; Jomeen 2012, Sandal et al 2004 & Stapleton et al 2002). These arguments have in some cases, and to some extent, been supported by Cochrane meta-studies, regarded as the ‘gold standard’ of evidence based medicine (eg: Alfieri et al 2013; Bricker et al 2009; Green et al 2004; Nahban & Faris 2010).

6 Although there has been a change in terms of articulations of pregnancy loss in media and other discourses, and in midwifery and support group literature, the biomedical response to this is still most commonly to avoid the births that may result in such a loss. On grief and loss in pregnancy and birth, see McCreight (2004); Layne (2003); Mitchell (2014) and McNiven (2015).
then we could abort it for you - nothing was mentioned about support services or fostering". She said only once had a doctor ever talked about other alternatives apart from abortion. The other thing she thought was outrageous was they explained the maternal screening test as "just a blood test". "And it's NOT 'just' a blood test. It's NOT." She talked about the ramification of considering abortion if you went through with the amnio. I voiced my concern about the high rate of false positives, and the anxiety they create.

Kate said that from what she'd heard they were more responsible about suggesting it "down there" [in The Grace's antenatal clinic]. I said that from what I'd seen they went into the ramifications more, and had a very thorough pamphlet on it, but still presented it as a very simple test. Kate made the comment about the pamphlet: "along with everything else they get bombarded with".

Dee, who had had placements in the antenatal clinic, said that she thought they were fairly responsible about it here, but she agreed that the "simplicity" of it was stressed. She had a friend who had maternal serum screening, had a positive result, and chose not to have an amnio. The baby was OK. I asked if it made her worry more, and she said yes, emphatically, she worried all the way through pregnancy after that.

We also talked about the pressure that women with a genetic disability, for example multiple sclerosis, have put on them NOT to reproduce in case they have a "baby like themselves."7

Although disquiet about extensive and intrusive testing was expressed, there was a sense of inevitability about the development and implementation of an ever-increasing range of tests.

Antenatal screening transforms the approach to a pregnant body from an assumption of 'healthy-until-symptomatic' to one of 'risky-until-cleared'. Women inhabiting pregnant bodies are expected to comply with this recategorisation. It carries a moral imperative as well. "Being screened is a duty; evasion is tagged as irresponsible behaviour, a moral dereliction." (Kaufert 2000:167). The tests are numerous. Nelkin & Tancredi use the term "new diagnostics" to describe tests which:

... are intended not simply to diagnose manifest symptoms of illness or malfunction but rather ... to detect conditions that are latent, asymptomatic, or predicable of possible future problems. ... diagnostic technologies ... have expanded our ability to detect subtle biological differences among individuals and to predict many diseases before symptoms appear. (1989:3-4)

These diagnostic techniques, which include chromosomal testing of fetuses via amniocentesis:

...can detect ever more minute individual differences with increased precision ... improved diagnostic techniques have refined our ability to identify subtle deviations from the norm ... advances in testing have redefined what is normal and expanded the number of ... persons ... identified as problematic. (1989:922-23)

7 See Finger (1984) for a relevant commentary on the impact of reproductive technology on people with disabilities. See Saxton (1984) for a first hand account of the reactions of members of the medical profession to a woman with spina bifida who chose to have a child. See also Finkler (2000), Gammeltoft & Wahlberg (2014), Rapp & Ginnsburg (2011) and Ginsburg & Rapp (2013).
I heard very little articulation in my fieldwork about a crucial differentiation in diagnostics: the
difference between testing and screening.\(^8\)

... diagnostic technologies are useful not only for clinical diagnosis - that is, for providing an explanation of
an individual’s health status - but also for screening, where the purpose is to identify from a large
population those individuals who in some way deviate from a statistically derived norm. ... The use of
diagnostic tests for screening has always been directly linked to social or medical intervention, through
therapy, prevention or exclusion. (1989:23-24)

Kaufert, writing on mammograms and pap smears in Canada, discusses the impact of pathologising
people who are not ill, noting there is a difference between referring a woman with a lump in her breast
for a diagnostic mammogram to offering screening mammograms to asymptomatic women (2000:172).
She argues that the “transition from diagnosis to screening set in place a process which ... dramatically
altered women’s relationships with their bodies” (2000:173).

Screening challenges notions of wellness and illness: ”commonsense notions, which assume a
relationship between feeling well and being well, needed to be replaced by the idea of the deceptive
body, which may feel well, but is a hiding place for disease” (2000:170). With the explosion of genetic
information currently available; with the prospect of almost exponential growth in this area of
‘knowledge’ for the foreseeable future; and with the diagnostic technology already available,
increasingly complex ethical, moral, psychological, emotional and medical terrain is being actively,
materially traversed on a day to day basis (Armstrong 2009; Lehoux 2010). Parents are being asked to
make decisions about whether the fetus they have conceived has the right to be born, if it is good
enough, fit enough, to be allowed to continue to live. “Many women were compelled at an early stage
of the pregnancy to ask themselves what kind of baby they could ‘accept’ and what kind of mother they
could be” (Wolf 2001:4).

... the concept of responsibility is undergoing a subtle but significant change. ... the concept of
responsibility has been adapted to the new options of reproductive medicine and prenatal diagnosis. Now
it is interpreted in the way of a qualitative selection taking place before birth, perhaps even before
conception. (Beck-Gernsheim 2000:130-131)

Potential mothers and fathers are being asked to weigh up factors such as whether or not they will be
able to cope emotionally, financially and socially with an other-than-perfect baby.\(^9\)

Sophisticated diagnostic tests serve many useful and humane purposes: in clinical settings they may point
the way to particular therapeutic measures. They can provide families the opportunity to avoid the
anxiety and cost of bearing a child with an untreatable disease; they can identify potential health or
behavioral problems for remedial or preventative treatment. ... the language used to describe diagnostic
techniques speaks mostly of such benefits ... ‘New genetic clues to heart disease, cancer, AIDS and other
killers could save your life’ reports a journalist. ‘We’ll achieve the ideal in medical care, the prevention of
disease,’ predicts the director of a biotechnology firm. (Neilkin & Tancredi 1989:7)

\(^8\) That does not mean it was not talked about. I had extensive access to interactions between pregnant women and health care
workers, midwives and obstetricians, midwives amongst themselves and pregnant women amongst themselves. I rarely, if ever,
was present when obstetricians ‘talked among themselves’. Based on experience in later studies I have undertaken where I have
had access to conversations between medical staff, I would be surprised if issues of screening vs testing were not at least
occasionally raised when obstetricians were talking with each other (see also Lehoux 2010). My experience is that hospital medical
staff are mostly aware of the difference between testing and screening at least at a technical level, but rarely question the
inherent value of screening. The most frequent context in which the testing/screening differentiation is discussed by doctors, in
my experience, is in terms of economics and cost-effectiveness.

\(^9\) See below, in a quote taken from the information brochure about maternal serum screening, for an example of a ‘healthy’ baby
described as a ‘perfect’ baby. This is not uncommon: normality and perfection are frequently conflated in fetal discourses.
In the case of genetic screening, "disease prevention" involves prevention of the person with the disease. In constructing deviation from the norm as disease, and in constructing disease as something disembodied from the person, western medical discourses often allow us to forget or overlook that in genetic screening, getting rid of the disease can be synonymous with getting rid of the person. Beck-Gernsheim comments on euphemisms used in discourses of disability prevention.

... more is at stake here than dental hygiene. What is actually meant here is avoiding the birth of a handicapped\textsuperscript{10} child, either by way of renouncing biological parenthood altogether or (more likely in practice) by way of a 'tentative pregnancy' (Katz-Rothman 1986) and induced abortion in the case of a genetic deficiency. (2000:131)

With genetic screening, other-than-normal fetuses are coded as defective, and it is regarded as appropriate to actively intervene to prevent some of them from being born. The speed with which prenatal diagnostic screening has become routine is remarkable. Writing on the US, Rapp states that:

... prenatal diagnostic technologies have moved out of academic settings into commercial labs with great speed over the last decade, and the most experimental technologies are often available, for a price, long before their accuracy is fully tested. (1997:36)

Australian hospital-based maternity care is predominantly publicly funded, and commercial imperatives play far less of a role than in the USA. However, the speed with which the latest diagnostic technology is introduced is no less astounding in Australia than in the USA.

The 1980s and 1990s saw an influx of diagnostic tools that changed antenatal screening irrevocably, introducing ultrasound and amniocentesis as standard antenatal diagnostic procedures. Since then, the changes have been in terms of precision: the clarity of ultrasounds is remarkable compared to early ultrasounds; the types of and number of conditions that can be picked up in an amniocentesis has increased. Downey & Dumit highlight "our hunger" for biotechnology:

We all live with a concrete awareness that we cannot say No to science, technology and medicine. Even if we wanted to, we cannot say No to the medical complex that appropriates out bodies, defines our state of health, and positions us in a continuum of fitness from the temporarily able to the permanently disabled.... how are we to understand our often intense hunger to say Yes? (1997:5)

This "intense hunger to say Yes" to medical technology is particularly applicable to reproductive screening and diagnostics. Slippages have occurred at a great rate of knots in this discourse: from diagnostic screening being a choice, it has become in many cases a responsibility. Beck-Gernsheim, commenting on the use of antenatal genetic screening in Germany, writes:

Do ethics in the age of genetics mean that avoiding the birth of a handicapped\textsuperscript{11} child becomes the obligation of today's responsible citizen? .... in everyday life, we ... see a change of attitudes creeping in. Increasingly, women who do not undergo prenatal testing are seen as ignorant, stupid, and even egoistic [i.e: selfish]. ... the person who does not take part in this kind of responsibility is now being labelled 'irresponsible'. His or her behaviour is seen as failure: blame comes in. ... the person who does not play along must appear irresponsible, suspect, if not outright guilty. (2000:130-131)

Nelkin & Tancredi, over two decades ago, commented on the sociopolitical dimensions of neurological and genetic diagnostics in the USA, suggesting that:

... this medicalisation has incorporated notions of biological fitness or perfectibility. ... in 1963 chemist Linus Pauling stated that parents who know they are carriers of the cystic fibrosis allele and who continue to produce defective children “add to the amount of human suffering and should feel guilty for their

\textsuperscript{10} In current disability discourse, it would be more usual to use the term “disabled” rather than “handicapped”.

\textsuperscript{11} See note 10, above.
actions”. ... Bentley Glass, in his retirement address as president of the American Association for the Advancement of Science [in 1970], called for “the use of the new biology to assure the quality of all new babies. ... No parent will have the right to burden society with a malformed or mentally incompetent child.” (1989:10-12)

Eugenics is a loaded term. However, it is important to acknowledge that, as in most if not all western countries, Australian antenatal screening programs are actively engaging in eugenic medicine.

... for the most part ... the "new eugenics" has avoided generalisations about class and race, focusing instead on the individual benefits that follow from genetic research. ... geneticist Margery Shaw ... has asserted that: "The law must control the spread of genes causing deleterious effects, just as disabling pathogenic bacteria and viruses are controlled." She argues that parents may be liable for failing to respond to information about potential genetic disorders by controlling their reproduction, and that the police powers of the state could be employed to prevent genetic risks.

Other geneticists assume that families informed of genetic problems will voluntarily eliminate defective fetuses. (Nelkin & Tancredi 1989:13)

Maternal serum screening, mentioned by Kate and Dee in the conversation quoted above, was offered to every woman birthing at The Grace. It illustrates the complexity and ambiguity of large scale screening. A maternal serum test is a blood test. A sample of the mother's blood is taken from a vein in her arm, and the levels of four hormones which are normally present in pregnancy are measured. If the pregnancy is affected by chromosomal disorders, the levels of these hormones may vary. According to the director of the laboratory that coordinates the statewide screening service, Dr Johnson, "about 5% of mums have that disturbance anyway" without it being indicative of a problem with the baby. However, this 'disturbance' is an indicator that the baby may have either a neural tube defect (NTD) such as spina bifida or anencephaly, or that it may be a Down syndrome baby. Maternal serum screening illustrates the complexities inherent in antenatal screening.

Like all diagnostic tests ... both genetic and imaging technologies function by establishing a statistical definition of "normal", which becomes a standard against which to measure individual differences. Deviations from statistically defined standards are defined as abnormal or deviant. (Nelkin & Tancredi 1989:22)

Nelkin and Tancredi argue that western biomedical reductionism and the faith in simplistic, numerically constituted data, "has obscured the uncertainties intrinsic to such diagnostic tests, and they are widely accepted as neutral, necessary and benign" (1989:10). They suggest that “the boundaries of the ‘normal’ or the ‘healthy’ are often fuzzy. ... When interpretive margins are fluid, they can easily be manipulated by diagnostic evaluations cloaked in the neutral garb of science” (1989:19).

Results of the maternal serum screening test are reported as "increased risk" or "not at increased risk". The leaflet on maternal serum screening, distributed by all hospitals in the state, including The Grace, is laid out in question and answer form. It explains these terms as follows:

What do ‘increased risk’ and ‘not at increased risk’ mean?
A maternal serum screening report which says not at increased risk means that there is only a small chance (less than 1 chance in 2000) that your baby has either a neural tube defect or Down syndrome. It does not guarantee you a perfect baby, but almost all pregnancies screened not at increased risk result in a normal, healthy baby.

A maternal serum screening report saying increased risk means there is a greater than expected chance

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12 I came across almost no evidence of thinking that genetic abortion should be enforced, and I think that idea would be shocking to most health professionals at The Grace. Genetic termination was discussed strictly in terms of parental choice. The one exception to this I observed, involving an obstetrician distressed at a woman deciding to continue her pregnancy having been diagnosed carrying a Down syndrome baby, is discussed further on in this chapter.
that your unborn baby has either a neural tube defect or Down syndrome. It does not mean that there is
definitely something wrong with your baby. It is only a guide saying that something may be wrong.
About 29 in every 30 reported pregnancies reported as being at increased risk will produce normal,
healthy babies. Only 1 baby in every 30 reported as being at increased risk will actually have either a
neural tube defect or Down syndrome.
If you receive a report saying your baby is at increased risk of having a neural tube defect or down
syndrome, only further testing will show whether or not your baby really does have one of these
abnormalities. ¹³

The further testing, in the first instance, involves a "morphology scan", a detailed ultrasound which
examines the appearance of the baby's head and spine. According to Dr Johnson, many abnormalities
will be picked up with a "thorough ultrasound", including the majority of babies with neural tube
defects, while "45% of affected babies won't show up". As the brochure puts it "Unfortunately, unborn
babies with Down syndrome do not usually look very different from normal unborn babies on
ultrasound scanning."

The levels of hormones measured in the maternal serum screening test are extremely date sensitive,
which means the accuracy of the test is dependent on the accuracy of the dating of the pregnancy. It is
believed that ultrasound can more accurately date a pregnancy, and if it appears that the baby is
younger than first thought, the hormone results from the test may be seen as consistent with a 'not at
increased risk' result. This happens in about 25-30% of ultrasounds resulting from maternal serum
screening.

If a woman receives a report saying she is at increased risk, but nothing shows on the ultrasound,
and the size of the baby indicates the dates to be accurate, then she has to decide whether or not to
have an amniocentesis. The brochure explains:

What is amniocentesis?
Amniocentesis involves inserting a needle into your womb to take a sample of the fluid surrounding your
baby. The needle is guided under ultrasound scan so as not to damage your baby. If your baby has Down
syndrome then testing the fluid will show it, although it will take 2-3 weeks to get the result. There is a
small risk (about 1 in 300 amniocenteses performed) that there will be damage to your pregnancy as a
result of the amniocentesis, and this may cause a miscarriage.

When reading this, Lucy, who had experienced more than one amniocentesis, commented sarcastically,
"They make it sound so easy. It didn't feel like that from where I was." Reading on, she came to the risk
of miscarriage. She had experienced a stillbirth in between the births of her two surviving children. "1 in
300," she said, in a subdued voice. "That's not small." She echoed my feelings when I was first
confronted with that statistic. Having experienced pregnancy loss in the form of miscarriages prior to a
'successful' pregnancy, a 1 in 300 risk of miscarrying¹⁴ an otherwise healthy baby seemed far too high a
risk for me to take, and therefore amniocentesis had always been out of the question for me. On the
other hand, for my friend Victoria, whose first pregnancy had resulted in a highly traumatic stillbirth (on
a bed in a corridor in an overcrowded New York hospital) due to anencephaly, 1 in 300 seemed like a

¹³ I use inverted commas for terms such as 'abnormal' and 'defective', although in the literature available to health care workers
and parents these terms are used fairly unproblematically. It is interesting that while a 'person' is still a fetus, or a newborn baby,
it is acceptable to label them abnormal or defective. To call an adult with spina bifida or Down syndrome 'abnormal' or 'defective'
would not be generally acceptable in these sorts of official publications in Australia. The term 'disabled' would be seen as more
appropriate.
¹⁴ The risk is now understood to be higher: in 2014 the risk of miscarrying after amniocentesis was generally given as 1 in 250 or 1
in 200 on government health websites in Australia.
very small risk to avoid carrying another child with neural tube problems. In pregnancy and birth, assessment of risk is rarely, if ever, merely numerical. Statistics are given meaning within an individual woman's personal, social and reproductive context.\textsuperscript{15}

If a neural tube defect is indicated by ultrasound, or if Down syndrome or some other problem is indicated by the result of amniocentesis, then a decision needs to be made about whether or not to continue with the pregnancy. In other words, the woman, couple or family have to decide whether or not to abort their unborn child, which has been tested as abnormal.

*What happens if your baby is shown to have a neural tube defect or Down syndrome?*

If your unborn baby is shown to have either a neural tube defect or Down syndrome, you will be given information about the likely effects the abnormality may have on the rest of your pregnancy and on the baby which may be born. You should ask advice about what the medical consequences are likely to be, and what support services are available to you and your family. You will then have to decide whether to continue your pregnancy or to end it early.

If a neural tube defect is indicated by ultrasound, the location of the 'defect' can indicate the level of 'abnormality' in the child. "Babies with anencephaly usually die soon after birth" if they have not already been miscarried or stillborn. "The severity of spina bifida depends on the size of the abnormality and where it occurs on the baby's back", which can be indicated by the ultrasound. Parents can get quite specific advice from their doctor or the spina bifida association about the level of 'abnormality' and what this may mean to them and their child. On the other hand, the level of health impairment in a Down syndrome baby is enormously variable, and cannot be indicated or predicted by amniocentesis.

The brochure described Down syndrome in the following way:

Children with Down syndrome usually have a characteristic appearance. They have varying levels of intellectual disability. They may also have one or more medical problems involving the bones, heart, bowel and thyroid gland. Some may have poor sight and hearing as well. With medical treatment and social support, however, children with Down syndrome may grow up in good health and with a reasonable quality of life.

Between 75-80% of women at the Grace chose to undertake maternal serum screening. Of those who received a result of 'increased risk', virtually all chose to have a further ultrasound. Of those who are left with an unresolved result from the ultrasound, 82% choose to have an amniocentesis. In Dr Johnson's words, the "overwhelming majority" of women whose results show, from the ultrasound or amniocentesis, that they are carrying a child with a neural tube defect or Down syndrome, terminate the pregnancy.\textsuperscript{16}

These are not easy or straightforward decisions for women and their families, nor for the health care workers called upon to care for them. They are complex, both medically and emotionally. The medical complexities are generally well explained to the families, however many of the emotional implications are left unaddressed. One of the most complex issues for health care workers and families to deal with around maternal screening is the high rate of what are called "false positives".

The human costs - false positive tests and treatment that is not beneficial to the individual - are virtually ignored in the development of screening programs in the United States. The focus instead is on trying to

\textsuperscript{15} See Liamputtong et al (2003).
\textsuperscript{16} These figures are consistent with national figures, and from data available, appear to have remained remarkably consistent over time.
ensure that no case of disease is missed, which leads to recommendations for more frequent screening - a practice that leads in turn to larger numbers of false positives and more treatment without benefit. That bias has probably be aided and abetted by a simple failure to calculate how many people will experience false positives or unnecessary treatment. (Russell 1994:79)17

In the case of maternal serum screening, only 1 in 30 women whose result comes back as "increased risk" is carrying a child with ‘abnormal’ chromosomes. This means the rate of false positives for the maternal screening test is 29 out of 30.18 More than half will have an amniocentesis. There was nothing in the literature given to parents, nor did I ever hear any discussion of, the emotional implications of that pathway.

Many GPs and a number of clinicians at The Grace offer maternal serum screening as a "simple blood test" to help "rule out Down syndrome and other potential problems". A comprehensive brochure, written in straightforward English, detailing the ambiguities of the test, is handed out to every pregnant woman. Beyond handing out the brochure, there's little counseling. Maternal serum screening is sometimes presented as perhaps being able to rule out the 'need for an amnio', often to women who would not normally have had an amniocentesis.19

At the time of my fieldwork, maternal serum screening was offered from the fifteenth week of pregnancy. I was told by the head of obstetrics that “this will change in the near future, with the technology now being available to offer testing from the 10th week of pregnancy”. He explained that that chorionic villi sampling (CVS), taking a small sample of placental tissue, can be used in place of amniocentesis, which is not usually undertaken until 18 or 19 weeks. CVS introduced the possibility of first rather than second trimester terminations, which is an enormous difference, as I will discuss below. CVS, however, brought its own set of potential risks and complications, including damage to the fetus n the form of limb budding (hands, feet, arms or legs incompletely formed) and a higher risk of causing miscarriage. These complications proved to be too great for CVS to effectively replace maternal serum screening.

For a woman having a first baby, she will have a definite 'bump' by her 15th week, but she will probably have not yet felt her baby moving. For women carrying their second or subsequent child, they will probably already be aware of the baby's movements. Her baby will be very real to her, and making its presence felt many times each day. She may be telling her partner when the baby kicks, although he will be unlikely to be able to feel it yet. They will probably have talked about names, sorted out colour schemes, there may be a few baby clothes bought already.

The following construction of a maternal serum screening experience is compiled from composite individual stories. It is neither worst-case nor best-case: it is an averaged-out and average story of a positive result from a maternal serum screening test. Say the woman has the blood test on a Monday, in her 16th week of pregnancy, with her GP. The results will usually be available at 4 pm Tuesday afternoon. She's in a meeting at work, and gets a message to ring her GP, which she does when she gets

18 In the US, maternal serum screening is known as MSAFP (maternal serum alfa fetoprotein). Rapp comments on the issues of high false positive rates for MSAFP screening in the US (1997:36).
19 In that if the test comes back “not at increased risk” it reduces the perceived 'need' for an amniocentesis.
out of her meeting at quarter past five. Her GP asks her to come in to see her tomorrow. The woman knows there's something worrying about the test results. Either her GP tells her what it is, and she doesn't sleep all night, or the GP doesn't tell her, and she doesn't sleep all night. Or the GP sees the result, thinks 'I can't call and give her a sleepless night, I'll have to leave it til the morning' and the GP has a restless night. And the woman has a sleepless night anyway, because she's wondering when the test results will come.

She sees her GP first thing Wednesday morning. The result of "at increased risk" is explained to her. They book an ultrasound for the following morning. Another sleepless night, this time for both the woman and her partner. She has to drink vast quantities of water prior to the ultrasound, and the ultrasound takes twenty minutes to half an hour, with the sonographer pushing down heavily on her full bladder. This is usually described as uncomfortable, a word which does not do justice to this sensation. The woman and her partner, the father of the baby, spend a significant amount of time looking at their baby. For some, it will be their first scan, and they will be 'seeing' their baby for the first time. For others, their baby will have grown demonstrably in the month or so since the 12 week scan. In either case, in the back of their mind will be the thought that they may be making the decision to 'terminate' the pregnancy. Seeing an image of your baby in this situation is one of the most emotionally difficult things demanded of expectant parents: 'terminate the pregnancy' becomes 'kill this baby' you are looking at. The woman will be feeling the baby's movements as she sees them on the screen. Trying to disconnect while she is having her senses bombarded by connection requires phenomenal disassociative skills. For her partner disconnection is easier. He has only to shut his eyes.

If the ultrasound shows a neural tube defect, then there are decisions to be made. We will come to those in a minute. However, let's assume that the ultrasound comes back OK. The woman races to the toilet, intent on emptying her bladder before she wets herself. She sits on the loo, peeing and crying.20

It is 11:30, and the antenatal clinic at the hospital have made time to see the couple right after the ultrasound. A sympathetic clinician explains the options. There is a one in fifty chance of Down syndrome (a 49 out of 50 false positive rate). There is a one in three hundred chance of miscarriage. The hospital only does amniocenteses on Thursday afternoons: we can fit you in at two o'clock. If you want time to think it over you'll have to wait til next week. Maybe the couple have talked about this beforehand, about what they'll do. Maybe they haven't really had time to, or they've assumed it would be all right, or they've said 'let's not panic, we'll see what we need to do when we've got all the facts'. If they have discussed it beforehand, they may be one of the 82%, and they'll book the amnio for that day. Or they may be one of the 18% who say "we wouldn't terminate anyway, thanks but no thanks, no amnio."

If they haven't discussed it fully enough to know what they want to do, and are looking a bit stunned, the clinician suggests they go and talk about it. She books the appointment for them, for that afternoon, in case they decide to go ahead. The couple go and have a coffee in the crowded hospital

20A significant number of women told me, of as part of their pregnancy experience, some version of: "I sat on the loo and peed and cried and peed and cried".
coffee shop with its weak tea, sugary buns, plastic chairs and laminated tables. He says "We should do it now." She says "I'm not sure. Let's talk to the Down syndrome people." He says "Are you mad? If there's anything wrong with it, we'll have to abort it."

He's scared, and doesn't know what to do. She reads his panic as his final word, understanding (and very possibly misinterpreting) from his reaction that he'd never accept an even mildly disabled child. She pictures trying to raise a Down syndrome baby, as well as their active two and half year old, as a single mum, and decides to take the two o'clock appointment.

They have the amniocentesis. Another ultrasound, another chance to see their baby, bonding-but-not-able-to-bond. A very large needle, puncturing the protruding belly, showing up on the ultrasound screen near the baby, withdraws the amniotic fluid to be taken away for testing.

Two days later, they get preliminary results back, but they have to wait for two and a half weeks before they get the all clear. In that time, the baby is growing, starting to become a more visible bump. Friends and family are commenting and making 'preggy' jokes and clucky sounds. She feels the baby move, every hour, every day, but doesn't say, excitedly, to her workmates, to her partner, to her mother, to her toddler, "here, put your hand there, you'll feel it kick." It has become what Barbara Katz Rothman calls a "tentative pregnancy" (1986). If the results come back all clear, the pregnancy continues. But it can never be quite the same. The couple have lost nearly a month of their 'expectancy', and may have said things to each other in stress that may take a long time to heal. But at least they have the expectation of a healthy baby. That is the twenty-nine out of thirty 'false positives' who have a healthy baby. Then there is the one in thirty that the test was designed for: women and couples who receive confirmation that their baby is in some way 'defective'. Nearly all of the 82% of those who chose to have an amniocentesis following a result of "at increased risk" will terminate their pregnancy if the results of the amniocentesis show an 'abnormality'. An easy, straight-forward decision for some, an excruciating emotional and moral dilemma for others.

In Australia, second trimester terminations are all induced labours, where the woman has to go into labour and deliver the child she has made the decision to not let live: what one midwife termed 'giving-birth-to-death'. The experiences of the parents in this situation can be an unacknowledged arena in maternity care. The only comment I received about this from a health professional in my fieldsite was in my discussion with Dr Johnson, the laboratory manager, who was responsible for producing the information booklet on maternal serum screening, said as almost an aside: "There is guilt associated in ending a pregnancy early."

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21 Wolf discusses differential impact of children on men and women, the impact this has on relationships and marriages, and the grieving that some women can go through when they realise things will 'never be the same again' (2001:198-215).
22 A woman in Rayna Rapp's study also used that term: see Rapp (1984:320).
23 In an article published in 1984, US anthropologist Rayna Rapp describes her and her partner's experience of having been diagnosed as carrying, and then aborting, a Down syndrome baby (Rapp 1984).
24 He commented that he had included in the soon-to-be updated version of the booklet on maternal screening the comment that if a child is "affected" by either Down syndrome or neural tube defect, there is a significant chance it would eventually miscarry anyway. "...there's a 40% chance that nature would take its course. There is guilt associated with ending a pregnancy early, and women have found this [idea] helpful. The booklet was updated in 2001. The information that with Down syndrome there was a significant chance of miscarriage anyway was not included. Risk of miscarriage following amniocentesis had been adjusted from one in 300 to one in 200, and risk of miscarriage following CVS (chorion villus sampling) was estimated at one in 100. Apart from minor changes to the wording, the brochure otherwise remained the same. In 2014, information on government health websites
Extrapolating the figures nationwide on maternal screening allows us to see some of the implications of just this one test. Between 75-80% of pregnant women undergo maternal serum screening each year, or around two hundred and eighty-seven thousand women. Of the one hundred and sixty thousand not screened, there will, statistically, be up to two hundred and thirty babies born with either Down syndrome or a neural tube defect. Of those screened, more than 264,500 women will receive a 'not at increased risk' result. 'Not at increased risk' does not mean 'no risk', and of those labelled as 'not at increased risk', statistically, 115 will have a child with a neural tube defect, and 161 will have a Down syndrome baby.

Statistically, 18,676 will receive an 'increased risk' result. All of those could be expected to have an ultrasound. From the ultrasound, 621 will learn that they are carrying a neural tube defect baby, and most will choose to terminate. 4,876 women will have their dates adjusted, and become labelled 'not at increased risk'. Around 35 of those will have a child with either a neural tube defect or Down syndrome.

This leaves 13,179 women with an unresolved test result. 18%, or 2,369 women, will choose not to have an amniocentesis. Chances are that 23 of these women will have a baby with a neural tube defect, and around 35 will have a Down syndrome baby. The other 82%, 15,510, will choose to have an amniocentesis. 207 of these women will find out they are carrying a Down syndrome baby, and most of them will choose to terminate. Statistically, around 42 of the 10,603 women who were given the all clear with the amniocentesis will miscarry or have a stillbirth of an otherwise healthy baby as a result of having had the amniocentesis.25 This process will result in the termination of over 70% of pregnancies carrying potential Down syndrome or NTD babies. Around 310 babies affected with Down syndrome or NTD will be born to women who received information that their babies were unlikely to have these conditions.

To avert the live births of 828 'abnormal' babies, 10,603 women and their families may be put through four to six weeks of 'anxious pregnancy'. Another 2,369 go through the rest of their pregnancy having received worrying information, and 'not knowing' until the birth. Is the suffering of bringing in to the world and raising a disabled child fifteen times as distressing/disabling than having a bad pregnancy experience? Is avoiding the birth of each 'defective' child worth putting more than fifteen other families through distress? That is certainly not a question I can answer, but it is one that obstetric health care workers face. These are the types of choices that health professionals in obstetrics are grappling with.

Maternal serum screening was standard in 1999-2000 in my fieldsite, and is still standard in 2014/2015. As one GP who offers shared care put it "yes, it's still standard, and GPs still hate it". Naomi Wolf, describing North American medicalised maternity care, mounts a very similar argument to mine in regards to AFP26 screening, false positives and amniocentesis, showing the unintended ripple effect of high false positive rates (2001:29-35). Like Wolf, the point for me is not the fallibility of particular individual tests, it is the under-acknowledged systemic fallibility and knock-on effect of this type of

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25 Statistically, around eighty of the women will miscarry or have a stillbirth after the amniocentesis. There is no way of knowing which of these are caused by the amniocentesis, and which would have occurred regardless.
26 Same test, another different name.
screening. More recently, Australian GP and “gentle birth” advocate Sarah Buckley has added her voice to these concerns in an argument grounded predominantly in biomedical research (2009:37-94).

My research suggests that the vast majority of the birthing public are manifestly unaware of, and in general choose to remain uninformed about, the complexity of medical issues surrounding screening and testing. I suggest that there is a lot that we, as a society, are choosing not to know, about our Need to Know. Health care professionals operating in a non-interventionist mode are usually extremely aware of the complexity of the issues, and are mostly very skilled at gently directing women they are caring for to think about these issues in a more in-depth way. Health care professionals operating in an interventionist mode are also well aware of the complexity of medical issues, but often choose not to go into great depth with their ‘patients’ about them: both to protect their patients from what for many will be unnecessary distress, and, I suggest, to distance themselves (often in the name of ‘professionalism’) from the depth of emotional issues raised by screening programs.

Rayna Rapp’s research into amniocentesis in New York, which has now spanned three decades, has shown that doctors’ judgements of Down syndrome can vary wildly from that of parents, particularly mothers. Rapp quotes from an interview with mother of a Down syndrome child:

They diagnosed Amelia right away, on the delivery table, she was barely out, I barely got a chance to catch my breath or marvel at my first baby when this doctor pours this bad news all over us. “She’s got Down syndrome” he says to us, very coldly. “Don’t expect much. Maybe she’ll grow up to be an elevator operator. Don’t expect much.” (Rapp 2000a:263)

Doctors and parents often inscribe very different meanings to prenatal diagnostics. Another one of Rapp’s participants, from a more recent study, shared the following experience:

When we walked into the doctor’s office, both my husband and I were crying. He looked up and said “What’s wrong? Why are you in tears?” “It’s the baby, the baby is going to die,” I said. “That isn’t a baby,” he said firmly. “It’s a collection of cells that made a mistake.” (2014:128)

Another mother of a child with Down Syndrome told her:

My doctor was angry with me, he couldn’t believe I didn’t take that test, “how could you let this happen?”

he yelled at me, "you’re 40!” (Rapp 2000a:263)

Standing at the reception desk in antenatal clinic, Dr Fox told Janine, the midwife who usually worked with him in clinic, that one of their patients whose amniocentesis result had come back as positive for Down’s had decided not to abort. He was quite angry about it, saying petulantly “It’s her decision of course, but honestly, I can’t believe it. She’s got NO IDEA what she’s in for.” He stomped off. Once the door to his consultancy room was safely shut and he was out of earshot, Janine said “You know the woman who has ‘got no idea’? She works in special ed. She teaches Down syndrome kids.” Astonished, I asked if Dr Fox knew that. “Oh yes. It’s been a big decision for her. We’ve had lots of discussions about it. Honestly, the arrogance of it is unbelievable. But they always think they know better about everything.”

Although many potential parents who do abort Down syndrome babies have similar attitudes to many of the doctors, and although this is not the only medical reaction to Down syndrome, it does illustrate the judgementalism explicit in the medical gaze. “Down syndrome babies are ‘wrong babies’, marked almost from the moment of birth by medical scrutiny as incurably damaged” (Rapp 2000b:186).
Even if a woman does the 'right thing' and aborts, the insistence that it is the only rational or sensible thing to do allows little space for complexity, or acknowledgement of emotional ambiguity and pain. Rapp’s interviews show the sometimes enormous value differences between the perspective of ‘doctor’ and ‘mother’.

I think it’s like something positive, they’re always feeding you all this negative stuff about the extra chromosome, all these disabilities, but I think it’s something positive. Maybe the extra genetic stuff carries some mutation and that causes positive things, too. I think that all that heart, that generosity, the lovingness, the feeling one with the world, those qualities, that’s the positive side they never talk about. And it’s got to be genetically built into them. Those are traits, too. (Rapp 2000b:192)

Another mother of a Down syndrome child commented: “My son just has a different brain ... his feelings are much more available to be expressed by this brain. What's so bad about that?” (Rapp 2000b:192).

The discourse of antenatal screening is framed in terms of ‘offering reassurance that everything is all right’. But the very reason for the existence of antenatal screening is that everything is not always all right. Monitoring doesn’t pick up on problems that have already made themselves known, it is a process whereby technologised birthing care actively goes looking for things to fix. Although there are active discussions in scientific, feminist and other academic literature as to the complexities of decisions involved in this type of testing and intervention, only a small proportion of this debate makes its way into the media or other public forums. Much of what is presented to women and families is simplistic, with little space for exploring emotional ramifications of decisions. 27

birthing death 28

In a piece that did make its way into the magazine of a weekend newspaper, novelist Jonathan Tropper describes the experience of prenatal diagnostics, seven years after the event.

You’ve seen this before: a young couple staring in wonder at an ultrasound monitor, getting a first, magical glimpse of their unborn child. It wasn’t like that for us. "What I’m seeing is a fairly significant abnormality,” Dr Eddleman said, shaking his head sympathetically. Tears ran from my wife Liz’s closed eyes as she wiped the blue goop off her swollen belly. ... The foetus might make it to term or die in the womb. Either way, it wouldn’t survive for long after birth. This disease, the doctor said, is “fatal in infants”. You know you’ve arrived in a different universe when the work "fatal" comes as a relief. ... Liz would tell me later she was also sadly relieved. “ Fatal” was our abolution - we would not have to learn darker truths about ourselves. (2006:29)

At The Grace, as in most if not all hospital maternity units in Australia, women undergoing genetic terminations, 29 in the second trimester of their pregnancy, do so on the labour ward. On their way in, in the lift, at the desk, it is highly likely they and their partner will be standing next to a woman in labour, breathing heavy, grunting, looking pleased and excited or nervous or downright terrified. Although the soundproofing isn’t bad, it isn’t complete, and during their hours on labour ward they will hear the

27 There were some exceptions to the rule, but I found them to be a very small minority.
28 Parts of this section were presented at the 2013 Australian Anthropological Society annual conference (Long 2013).
29 Saline or urea is injected into the womb, which kills the fetus. Labour is then induced, and the woman goes through labour to birth the foetus (which is not as large as a full term baby). I am not sure the extent to which parents are always aware that one of the injections they were receiving was to make sure the baby/fetus is not alive when born. For a harrowing account of procedures in the USA in the 1980s, see Rapp (1984:320-321).
muted sounds of other women labouring, cries of live, healthy newborns, tears of joy, and squeals of excitement.

You've seen this scene too: a young husband and a pregnant wife arriving at the hospital to deliver their baby. ... we entered the birthing ward, two sad, sombre people engulfed in a miasma of nervous, sweaty joy emanating from all of the spanking-new parents. Nothing can prepare a woman for 18 hours of labour to deliver something she knows will be dead on arrival. ... When it came time to push, they gave Liz a Valium-Demerol drip. She would remember nothing. No one offered me a drip, so I still remember what came out of her that day. (2006:29)

Tropper's story has resolution: two months later another pregnancy, eleven months after the end of the previous pregnancy, a healthy baby.

But this pregnancy was not accompanied by the innocent wonder of our ill-fated one. There were high-risk screenings and amniocentesis, and I had recurring dreams in which the doctor handed me a baby with shocking deformities. The first time round, it hadn't occurred to me something might go wrong. Now, even after we were assured at our mid-term screening that the baby was perfect, I couldn't fathom the reality of a normal baby. The spell had been broken, and from here on in, I would always be afraid. ... [in] the very same birthing room ... I watched as the very same doctor delivered my son ... he came out long and pink and impossibly whole. ... at long last, he took his first breath.

A few seconds later, so did I. (2006:29)

The anxiety, fear and "loss of innocence" (Layne 1996) generated by pregnancy loss were not created by antenatal diagnostics. Miscarriage, stillbirth, neonatal death, severely compromised babies who die soon after birth: these have always been a part of life, a possibility present at every pregnancy and birth. The potential for deep trauma has always walked hand-in-hand with joy and celebration in the birthing chamber. Reproductive diagnostics, in attempting to address some of these traumas, is extending the experience of anxiety to a wider than ever before population (Mitchell 2014, McNiven 2015), and the jury is still out whether it is helping to avoid or resolve deep trauma in some, and whether or not it is creating it for others (Green et al 2004).

Another unacknowledged level of experience in 'giving-birth-to-death' is the experience of health care workers who have to care for women undergoing genetic terminations. Women labouring with terminations were placed in the delivery room at the far end of the corridor, the room furthest away from the midwives station. The midwife caring for the woman would walk quietly between the midwives station and the delivery room. No one would ask, like they did normally, 'how's she going?'. There were no progress reports shared with the other midwives, just a quiet nod and acknowledgement when the birth-which-was-a-death was recorded on the whiteboard.

Labours for terminations weren't talked about much. But they were acknowledged by midwives and doctors to be difficult. As one midwife, who didn't work on labour ward, put it:

You spend all of your training learning how to bring live, healthy babies into the world.

Midwifery is about life. That's what we do it for, to bring life into the world. Not death. Sure, not all babies are born healthy, and it's heartbreaking with the premies sometimes, but at least you know you've done your best. To have to deliver a baby that's been deliberately killed ... that's hard. That's not what midwifery is about.

I was particularly surprised to learn that Kate, the midwife quoted earlier in this chapter as having

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26 Baby who are born prematurely.
qualms about genetic testing because of having a deaf sister, often took responsibility for dressing and photographing terminated fetuses. This was undertaken by the hospital to provide the family with a record, as it was felt that this helped “in the grieving process”. The woman and her partner, if he was with her, were offered the opportunity to view and perhaps to hold the terminated fetus/baby, as it was felt that this aided emotional resolution. Both experience and research had shown that some women felt regret at not having seen the baby, and so even when the parents didn’t want to view the baby, it was customary for the baby to be dressed and photographed, and the photo left in a file with the hospital social workers, in case she changed her mind at some later stage.31

The appearance of a terminated fetus can vary: descriptions used by midwives range from ‘extremely deformed’ to ‘perfect’, ‘exquisite’, ‘you wouldn’t have known there was anything wrong.’ The following is a description from my fieldnotes, of a baby/fetus I helped Kate prepare and photograph. This was a 19-20 week termination, where the ‘problem’ was picked up at the 19 week ultrasound.

He/she was actually quite beautiful. I’m going to call her she, because that’s what they thought the sex was on the ultrasound, but it was hard to be certain. There were spinal problems, and according to the ultrasound she had no ribs or diaphragm. She looked very short in the body, and as if she had no neck. The head was disproportionately large for the body. She was a very dark red colour, almost purplish red in places. Exquisite face and mouth. Kate said at one stage she’s ‘even got eyebrows’. She was in one of the normal perspex baby cots, wrapped over with a thin wrap and then a thicker bunny rug [identical to a live newborn], but with her face and head covered. She weighed 300 grams, and was the length of the span of my right hand [20 cm].32

There are boxes of clothes made specifically for these baby/fetuses. Kate explained they were knitted by some of the ‘Friends of The Grace’ an organisation providing volunteer services to the hospital. There were six boxes of clothes, labelled: "20-30 weeks"; "mid"; "term"; "jackets - term"; "quilts - varying sizes"; and "hypothermic - term size". We chose a knitted matinee jacket from the 20-30 weeks box. It was like choosing dolls clothes. The exquisitely handmade patchwork quilts were called "little quilts of love". Kate chose a quilt to use for photographing the baby, and explained it would be given to the parents, along with a card. The card read “In memory of your special loss.” On the inside: "Please accept this expression of heartfelt sympathy in the loss of one who meant so much to you." Kate carefully inked the baby’s hands and feet, printed footprints and handprints on the card, and then just as carefully cleaned the residue of the ink of the baby’s feet and hands.

Kate worked hard at getting a good photo. Later, I commented on how tiny the hand and foot prints on the card were. Kate said "the last one I did was so deformed, it was difficult to get a good footprint."

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31 Some did, and were grateful that the photos had been taken. However, I was told that there was at least one case where the mother was outraged when she found out that this had happened. She demanded an apology and that the photos be destroyed.
32 Less than half the length of a healthy newborn baby, and a tenth of the weight.
When the midwives did talk about these fetus/babies, they referred to them as babies, whereas the obstetricians would be more likely to call them fetuses. In the case of the baby above, talking about the level of problems she had, one of the other midwives commented that "the child would have been compromised", meaning that even if she had been carried to term, she would not have survived for long after the birth.

The following excerpt from my fieldnotes illustrates the difference in the way baby/fetuses were approached by obstetricians and midwives.

While Kate and I were photographing the baby, Dr Dickenson brought in a group of students to have a look. Liz [an obstetrician in training, who had diagnosed the condition at the scan] came in a bit later, and was his proud protegé. The difference was remarkable in terms of the way the baby was talked about and handled. Kate had been handling her with such love and respect. Dr Dickenson wasn’t in any way disrespectful, but she was more of a 'thing'. He said to the students "they picked up a shortened spine on the ultrasound, no diaphragm, and no ribs." He asked Kate for a glove, gloved up. Prodding the fetus with one finger, he said "It feels like there's one or two ribs there. But with no diaphragm the bowel would be up here" (pointing to neck/chest) He then prodded again, and with one finger turned the fetus over on its side. He pointed out the spine to the students. I felt a little nauseous, my response to the incredible difference between him and Kate. And it wasn’t that he did anything wrong. Just that he was treating it as a thing, rather than a dead baby. I said something about it being so sad, and he said, kindly but firmly, that it would be sadder to go to term and have the baby die. I don’t think it’s as simple as that, but in front of the stony faces of the medical students, I hastily agreed.

In a logically solid way of ordering the world, terminating a deformed fetus makes sense. It is sad, but necessary. In a reductionist cosmology which values conformity to defined norms and is uncomfortable with contradiction and deviation, issues of genetic terminations are fairly clear cut. In the best of all possible worlds, we need the best of all possible people. It is logical, rational and compassionate. It makes social, economic and emotional sense not to have to support severely disabled people within our community. And a logically solid approach to the world offers the tools to handle the difficulty of these situations: separate, disconnect, disassociate. Within a framework of solid logic, this is logical. Within a framework of fluid logic, it is highly illogical.

In a logically fluid way of ordering the world, terminating other-than-normal babies is a less clear cut issue. In a complex cosmology which encourages diversity and is tolerant of contradictions, genetic terminations are not necessarily logical, and they don’t necessarily make good sense. For some women, 'getting rid of it as soon as possible’ may be the best solution. For those approaching this issue in a logically fluid way, it makes more sense to also leave openings for other options, for supporting women who do not want to actively terminate these pregnancies, but allow their babies to be born and then die without life support, allowing them to be born and live and be supported, in a community which doesn’t count cost as the only measure of human health. Logical fluidity encourages social and emotional
connection between health care workers, families, and the community which could see a broad range of options accepted and supported. Under 'solid logic', this makes no sense, it is unnecessarily messy, distressing, irrational, and highly illogical.

Throughout this thesis I have argued that fluidity and solidity offer vastly different metaphorical frameworks for understanding, for knowing, the world. In this chapter, I have shown that what we come to know, how we come to know it, and what we choose to do with knowledge can be quite different experiences within different logics. I have illustrated a number of cognitive and linguistic conflagrations and slippages that enhance and make possible reductionist understandings. The slippage with the most intense ramification for the maternal body is that monitoring and screening are somehow in and of themselves healing activities, rather than data gathering activities which can (but do not always) lead to healing. In the case of maternal serum screening, I have suggested that the test itself can and not infrequently does create complications for women’s well-being during their pregnancy. I have discussed one of the more difficult and painful aspects of maternity care for both health care workers and parents: chromosomal testing leading to second trimester termination.

There are no easy answers offered by any of these stories. Above all, they illustrate the ambiguity, the complexity and the diversity inherent in pregnancy and birthing experiences. It does suggest that, like its corporeal counterpart, many of the sociopolitical aspects of the maternal body are intensely fluid.
Chapter 8

Conclusion: Ontological Determination

Based on ethnographic engagement with the field of maternity care in an urban Australian public hospital, this thesis has presented experiences of pregnant and birthing mothers, their families and communities, and the health workers who provide care for them. An exploration of dynamic, shapeshifting maternal bodies in a biomedicalised birthing environment has highlighted many contradictions inherent in attempting to provide optimal care of dynamic bodies in an environment that conflagrates health with stability. I have argued that fluidity and solidity provide metaphors for logic systems that underpin core contestations in biomedical engagement with the maternal body, and that an understanding of these metaphors can lead to a deeper understanding of these contestations and their ramifications.

Within (more) interventionist birthing, dynamic, shapeshifting, fluid bodies are ‘solidified’ to make them more amenable to biomedical management, with the intention of making childbirth safer for mothers and their babies. Strategies of solidification include: dissecting the body into component parts; viewing the body-in-parts in two dimensional, static renderings; distilling components of body fluids in order to obtain diagnostically significant information; the organisation of time into controlled, measured periods with corresponding standardised expectations of birthing progressions; establishing physical symbolic, social and emotional distance between caregivers and birthing women and their family/community; minimisation and technological mediation of physical contact between birthing women and their caregivers; asymmetry of information flow between women and their clinicians; and muting of experiences which fall outside diagnostic parameters.

These biomedical strategies of solidification, privileging certainty and stability, and expressing an intolerance for ambiguity, complexity and excessive context are embedded in treatment protocols and technology use that are seen to have contributed to radically decreased infant and child mortality across the western world. Undertaken within discourses of safety and risk management, strategies of solidification have resulted in a number of unintended consequences in birthing care, including: iatrogenic impacts of intervention cascades; alienation of women from their bodies; alienation of communities from birthing experiences; and complex testing and screening interventions which can result in potentially traumatic uncertainties and/or choices, exemplified by second trimester genetic termination of pregnancies. Strategies of solidification create a number of professional and personal dilemmas for clinicians, mostly unacknowledged, including alienation of emotional connection with patients; personal and professional vulnerability created by the impossibility of gaining fully informed
consent, especially during labour; and the structural necessity to engage in potentially coercive discursive strategies when ‘guiding’ their patients to make ‘informed’ choices.

Central to interventionist paradigms are constructions of a Self firmly rooted in Cartesian dualisms. In this paradigm, human relationships are characterised by hierarchy, and to be a fully adult, self-determining person requires independence and autonomy. This egocentric view, with the individual central to the determination of Self, is achieved by the conceptual and physical separation of Self from Other. Central to non-interventionist paradigms are concepts of a Self predicated on connection with Other(s). In this paradigm, human relationships are characterised by reciprocity, and to be fully human is to be woven into a web of relationships. This egocentric view, with context, environment and other people central to the determination of Self, is achieved by conceptual and physical connection with Others.

Poststructuralist feminist critics have argued that Cartesian mind/body dichotomies valourised within biomedical frameworks diminish and infantalise women, and deny fully adult autonomous agency to female corporeality. They argue that women should be able to be recognised and acknowledged as rational, autonomous beings with full moral agency. Discussions of the fluidity of women’s corporeality argue for valuation of the dynamic, shape shifting capacity of women’s bodies to produce new life. I argue that these two things are incompatible. Full autonomous personhood is predicated on corporeal stability, and relies on strategies of solidification to create an individualised Self capable of rational autonomy. Women can claim individual autonomous moral agency as independent Selves in western constructions of personhood, OR corporeal dynamism can be acknowledged as healthy and normal. But as individualised autonomy is based on solidifying dynamic embodiment, both are not possible at the same time. I argue that the recognition of all human beings’ capacity for corporeal dynamism, and an understanding of health in terms of the dynamics of human embodiment, offer more fruitful ways through the impasse created by an attachment to western conceptualisations of individualised autonomous moral agency.

Along with conceptions of ontology, this thesis has also explored conceptions of nature. Within a (more) non-interventionist paradigm, nature is understood to be trustworthy. Birthing bodies, if supported by ‘natural’-like environments, will (mostly) perform optimally. In this view, intervention is appropriate only in exceptional or extraordinary circumstances, and to intervene unnecessarily is potentially traumatic and frequently iatrogenic. Interventionist birthing, however, is predicated on a distrust of nature. Birth is viewed as risky and dangerous for both mother and child. Appropriate and timely medical intervention is seen as necessary to make birthing as safe as it can be, and to deny this to women and their babies is regarded as irresponsible and negligent. Risk averse paradigms within western biomedicine increase attachments to, and the attractiveness of, highly interventionist birthing care.
Conceptions of Self, the relationship of humans to their embedded contexts, and understandings of what is ‘natural’ are echoed in configurations of maternal and fetal bodies. Understanding maternal and fetal bodies as independent, separate and autonomous inscribes stable, bounded bodies-as-individuals as healthy. Understanding maternal and fetal bodies as interdependent and interconnected inscribes dynamic, complex, fluid, flexible, context-dependent bodies-in-relationships as healthy. I suggest that this contestation - around meanings of health and what is regarded as healthy - is central to many current challenges to biomedical hegemony, and to biomedical resistance to those challenges.

Spaces where new humans are born, named and welcomed into their families and communities are sites of particular ontological intensity. Definitions of what it is to be human are produced, reproduced and contested in birthing spaces. As this thesis has shown, exploring birthing spaces through the lens of material and metaphorical fluidity and solidity allows insights into underlying logics of ontological determination.
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