THE BIRTHING EXPERIENCE:
TOWARDS AN ECOSYSTEMIC APPROACH

by

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DECLARATION

I declare that **THE BIRTHING EXPERIENCE: TOWARDS AN ECOSYSTEMIC APPROACH** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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MARISA CARPENTER

NOVEMBER 2001

Dedicated to my mother and my daughter
- for teaching me the meaning of motherhood.

SUMMARY

The birth of a child is a life-changing event in a woman's life. However, women's subjective experiences of giving birth have not been extensively researched, while the literature reflects an inherent realist approach. This has resulted in a decontextualised account of this critical event in women's lives. This conceptual study discusses the body of knowledge on the birthing experience from a widened perspective that includes not only the birthing woman, but also the people she interacts with and the context in which birth is embedded. The study comments on the way birth is managed in technological society and how its inherent Newtonian epistemology impacts on a woman's experience of birth. Ecosystemic epistemology is presented as an alternative approach which provides an holistic understanding of this experience. A reconceptualisation is proposed which acknowledges the social construction of birth. Lastly, the alternative birth movement as a more holistic approach to birth is discussed.

Key Terms

Birthing experience; conceptual study; technological society; Newtonian epistemology; ecosystemic epistemology; second-order cybernetics; constructivism; meaning systems; language; alternative birth.

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Finally, my heavenly Father, you give my life meaning and purpose!

"For all things were created by him, and all things exist through him and for him. To God be the glory for ever! Amen." Romans 11:36.

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CHAPTER 1

INTRODUCTION AND ORIENTATION

Introduction

Why do some women experience giving birth as traumatic, while others who seem to have gone through the same experience voice their birthing in totally different nuances? Why has the quality of the birth experience become such an important and controversial topic? How is it possible that the birth process is so greatly interfered with, while the general outcry is to let birth proceed naturally? What is the meaning of birth in our technological society and how does the ascribed meanings impact the birthing experience? These are just some of the questions the writer struggled with during her own journey of pregnancy and birth, which led her on a path of inquiry and discovery. The following chapters are the end product of this conceptual, as well as lived-through journey in finding some of the answers.

Research Focus

A woman's experience of giving birth to her child is a powerful landmark event in her life, as well as in the life of her family. The quality of this experience is considered to be vital both to her own well-being and to her future relationship with her partner and child (Doering, Entwisle & Quinlan, 1980). This perspective is echoed by Halldorsdottir and Karlsdottir (1996a) who propose that the childbirth experience exerts a profound physical, mental, emotional and social effect on a woman. Simkin (1991; 1992) even proposes that the powerful effect of a birth experience has the potential for permanent or long-term positive or negative consequences.

Despite birth being such an important life-changing event in a woman's life, the literature on the woman's subjective experience of birth has remained notably silent especially in obstetric texts (McKay, Barrows & Roberts, 1990). Furthermore, various authors point out that relatively little attention has been paid to how women

feel during labour, their feelings of control and other more subjective features of labour and delivery that might be relevant to their subsequent psychological state (Green, Coupland & Kitzinger, 1990). Martin (in Lavender, Walkinshaw & Walton, 1999) agrees that women's views, experiences and preferences have tended to be neglected. The available literature on a woman's subjective experience of giving birth, however, mostly displays an inherent Newtonian or realist approach. As such a decontextualised account of this important event in a woman's life is given. Efforts to quantify a woman's birth experience by means of reductionistic cause-effect methodologies have resulted in the loss of valuable information that could contribute towards a more comprehensive understanding of the phenomenon. One of the primary aims of this study is to critically discuss the available literature on a woman's birthing experience and to explore the meaning of this experience from a widened perspective that includes the birthing woman, but also the people she interacts with, as well as the context in which the birth is embedded.

A woman's experience of birth has become the focus point of heated debate and controversial opinions as to where and how a woman should give birth to her child. Much of the debate centers on opposing worldviews. The technological management of labour and birth predominant in western society presents a stark contrast to the more holistic approach to birth in traditional societies and in the 'alternative' birth movement. As the inherent thought systems of these different approaches to birth is central to the understanding of the birth experience, the concept 'epistemology' or world-view will be a central theme throughout the study.

A woman's birthing experience has only recently come into the limelight as the reduction of mortality rates has led to higher expectations of the childbirth experience (Gibb, 1994). Many women now enter birth expecting a positive and personally rewarding experience (Brucker & MacMullen, 1987). Most women will have these expectations confirmed by the reality of their experience while others will not. This may be due to unexpected factors such as obstetric interventions (Brown & Lumley, 1994) or to unrealistic expectations (Szczepinska, 1995). By using mortality markers in isolation, however, many professionals fail to understand the sense of disappointment that some women experience following the birth of their child, even if the outcome is a healthy baby (Churchill, 1995). What health professionals consider a

criterion of success may not always correspond with the woman's criterion. If health professionals are to view women holistically, they need to explore both the physical and psychological aspects that contribute to the overall experience of birth. As such this study aims at providing a holistic ecosystemic framework in which the birthing experience can be conceptualised and understood.

Childbirth is of central importance in every culture. Every society has fertility rites, birth myths and art, and persons whose duties to the community involve attending births. Because birth is so necessary for the preservation of society, childbirth practices tend to reflect the deepest values of the culture. This is also true for other rites of passage, including the transition to adulthood, marriage and death. Childbirth can involve unparalleled intimacy and emotional power or can be stripped of both by technical procedures and impersonal attitudes. Such depersonalisation has been progressive in most of the developed countries of the West, where the process of making birth and death technical rather than significant life events has succeeded to an unprecedented extent. This reflects a deeper process whereby technology has taken control of many facets of our lives. Such cultural changes have profound effects on the life of the family and the individual. This study explores the experiential world of the birthing mother and specifically looks at how the meanings attributed to birth influence her experience thereof. The ecology of ideas or shared meaning systems around birth will be explored, specifically as it pertains to the western technological society's definition of birth.

The aims of this study may thus be summarised as follows:

- To explore the meaning of birth in a predominantly technological society and the impact this has on the experience of a woman giving birth.
- To provide an alternative frame in which to understand the birthing experience that is based on ecosystemic principles.
- To explore and discuss the literature on a woman's birthing experience from the stated ecosystemic framework.

- To propose a reconceptualisation of the birthing experience that is based on ecosystemic epistemology.

Chapter Review

This study comprises of an extensive literature review as well as the application of certain theoretical concepts in order to give a better understanding of a woman's birth experience. In order to realise the research aims, the conceptual study includes the following chapters:

Chapter 2 provides the point of departure for the study in describing the concept of 'epistemology' which will be used throughout the study. The chapter also discusses the management of birth in western technological society and how this approach to birth impacts on a woman's experience of giving birth.

Chapter 3 will discuss ecosystemic epistemology as the theoretical foundation for this study. A brief history of the development of this epistemology will be given, while pertinent cybernetic concepts will be highlighted and applied to the field of study.

Chapter 4 is an exploration of the body of knowledge on a woman's birthing experience. A reconceptualisation of the birthing experience within an ecosystemic framework will be proposed.

Chapter 5 describes some of the alternative approaches to giving birth and provides suggestions for the management of birth by the medical profession.

Chapter 6 is the concluding chapter. An overview and evaluation of the study will be provided as well as a discussion of the implications of an ecosystemic psychotherapeutic approach for woman who experienced their giving birth as traumatic. Suggestions for future research will also be given.

Conclusion

This study, adopting a holistic, ecosystemic conceptual framework, will explore the unique experiential world of a woman giving birth. In so doing, it will complement the existing views on this phenomenon that by and large have decontextualised the birthing woman's experience.

CHAPTER 2

BIRTH IN A TECHNOLOGICAL SOCIETY

Do not force nature, do not insult it,
for it is as if you were to open the ears of corn
to make the stalks grow.
- Chinese Medical Review (1852)

Introduction

The transition from almost all births taking place at home to the majority of births taking place in a hospital took less than 60 years. In this time span, birth changed from being an event in the life of a family to being a medical procedure that has come to be regarded as normal only in retrospect. Understanding this situation requires placing it in the larger context in which it occurs. When we try to understand our society's management of maternity care, we must consider the meaning of birth as well as the meanings we attach to the human body. This chapter will be an exploration of birth in our predominantly technological society. The underlying premises of the western worldview will be discussed and how this impacts on the way birth is understood and managed. The term "Newtonian epistemology" will be discussed first, as it will be used throughout the study. The chapter will also include a brief history on the way birth was managed before technology became prevalent.

Newtonian Epistemology

There are various definitions of epistemology and at first glance it appears deceptively simple. Auerswald (1985, p.1) defines epistemology as "a set of imminent rules used in thought by large groups of people to define reality" or "thinking about thinking." Epistemology can also be regarded as the underlying structure of reasoning of an individual or of members of a culture, which may not necessarily be made explicit or verbalised, but which manifests itself in various aspects of the life of the individual or the member of the culture (Maruyama, 1981). According to Keeney and Sprenkle (1982) epistemology is one's way of knowing and

making sense of the world. Epistemology shows how people construct their worldview and indicates basic premises underlying action and cognition. In other words, it is through the lenses of one's epistemology that one sees the world, experience it and attempts to make sense of it. The fundamental act of epistemology is to draw a distinction. All that we know or can know rests upon the distinctions we draw. Bateson (in Keeney, 1982) referred to this activity as punctuation.

The predominant thought system or worldview of the western world is based on a Newtonian epistemology of science. Although this shared way of thinking was influenced by many scientists and philosophers, amongst them Aristotle, Descartes and Newton, it is most often referred to as the Newtonian epistemology of science (Colaptino, 1979; Schwartzmann, 1984). This epistemology is also called the western or mechanistic reality system by theorists such as Auerswald (1990). According to Auerswald (1990, p.28), the western reality system is "mechanistic, objectivist, centripetally reductionistic, dualistic and hierarchical. It uses concepts of linear time and linear causality, and truth is considered absolute." This thought system predominates in industrialised societies. The following figure (Figure 2.1) gives a summary of some of the main characteristics of this thought system.

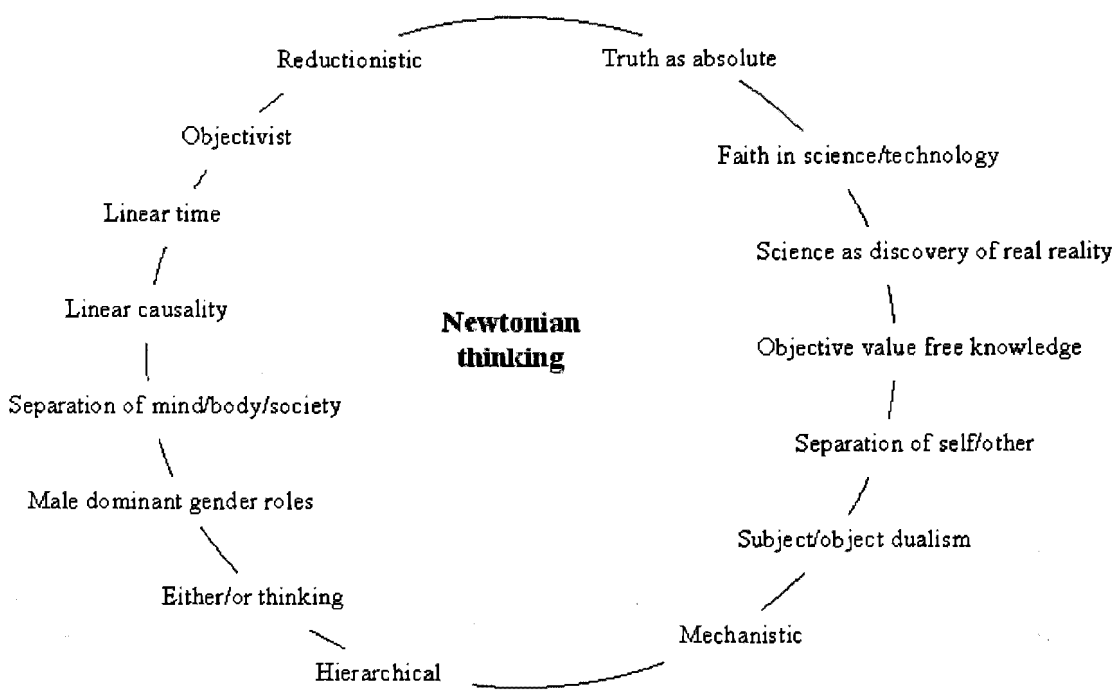

Figure 2.1. Characteristics of western /Newtonian thought

According to Fourie (1996), Newtonian epistemology rests on three basic assumptions, namely reductionism, linear causality and neutral objectivity. Reductionism or atomism is the assumption that a phenomenon can only be understood if its separate parts are analysed. It further implies that once these constituent parts of a phenomenon are known, an understanding of the whole can be reached by recombining these parts. Linear causality is the assumption that human behaviour and experience are independent of context and are the result of lineal causes and effects. Complex phenomena are seen as made up of long causal trains (Hoffman, 1981). Events are thus seen as influencing each other in a direct, unidirectional way. The third assumption is that one can only know what an object or phenomenon is like if one does not influence it. Observation can and must therefore be objective in order to arrive at the truth (Colaptino, 1979). It further implies that the observer or researcher does not influence that which is observed or researched. What is researched is assumed to be real and uninfluenced either by the research process itself or by the researcher's epistemology or way of thinking. Newtonian epistemology thus implies that there is a world "out there" and if we are rigorous enough in our observations, we will be able to obtain an accurate and objective map of this reality (Atkinson & Heath, 1987).

The influence of this Newtonian epistemology on medical thought resulted in the biomedical model, which constitutes the conceptual foundation of modern scientific medicine. It was the French philosopher René Descartes who in the early 1600s laid the groundwork for our technological society with his vision of the universe as mechanistic (Rothman, 1981). That same vision scaled down, provided modern medicine with its founding metaphor, that of the body as machine and individual body systems as machines in themselves (Hewison, 1993). The body can thus be analysed in terms of parts, while disease is seen as the malfunctioning of biological mechanisms and a doctor's role is to intervene to correct the malfunction of a specific mechanism. Centuries after Descartes, the science of medicine is still based on the notion of the body as machine, of disease as the consequence of breakdown of the machine, and of a doctor's task as repair of the machine (Capra, 1983). The biomedical model further assumes that the universe is mechanistic, following predictable laws which mankind can discover through science and manipulate through technology in order to decrease his dependence on nature (Merchant, 1990). Yet

nature, through the human body, and most especially through the birth process, presents constant reminders to our culture that we have not yet succeeded in unlocking all its mysteries. Because these reminders threaten to undermine the ultimate promise inherent in our culture – that we will eventually be free from our dependence on nature, our society is constantly challenged to find ways in which to effectively predict and control these illusive processes in nature. The impact of this perspective will be explored later in this chapter.

At this point, however, it would be fitting to give an overview of what birth was like before medical interventions became effective.

Childbirth Before the Technological Age

Childbearing was a constant and debilitating process before the twentieth century for the majority of women mainly due to the lack of efficient control over their own fertility. While women accepted the burden of motherhood as their natural lot, they approached birth with trepidation rather than joy. As recently as 1914 a working class woman in England said, "I always prepared myself to die, and I think this awful depression is common to most at my time" (in Carter & Duriez, 1986, p.9). Childbearing was in fact a potentially fatal process as complications arose in one in ten births (Carter & Duriez, 1986). Although a woman unable to deliver would sometimes be abandoned to her fate, some form of intervention was usually attempted. Much depended, however, on the skills of her attendants. In many areas women depended on untrained midwives or the advice of friends and neighbours. When a complication arose these attendants had little more to offer than folklore remedies or brute force. The following are but some of the main complications that could arise in labour.

Long labour due to several factors such as the malpresentation of the baby, ineffective uterine contractions, or rickets (a childhood disease that could cause deformity of the pelvis in such a way that the baby simply cannot pass through unless assisted by instrumental intervention), could end in the death of either the mother or the baby or both (Cronjé, 1992a). Despite their inherent danger due to infection, craniotomy and embryotomy were often the only means of dealing with an

obstruction and were used by barber surgeons in extreme cases until the end of the nineteenth century. Embryotomy involved dismembering the baby in order to remove it, while craniotomy meant piercing the baby's skull and pulling it out with hooks. Although such operations could save the mother, she was often lacerated either by the instruments or by the jagged bits of bone that protruded if the baby's skull had to be crushed. Caesarean sections were sometimes attempted when the mother was unable to deliver the baby, but were not really viable before the end of the nineteenth century. Before the days of anaesthesia, the problems of infection in the open abdomen, the shock of pain and the risk of internal bleeding meant that it was usually only performed on mothers who had died. Forceps first began to be used only in the seventeenth century. By the eighteenth century they were fast becoming a popular alternative to craniotomy. The great advantage of the forceps was the tremendous leverage it allowed the attendant, with the result that delivery could be affected much more speedily.

Even with the safe delivery of her child the dangers to the mother were not over. She could still face haemorrhage or infection. The causes of haemorrhage were many: prolonged labour, too many previous deliveries or inept handling of the removal of the placenta. In cases of placenta praevia (where the placenta is completely or partly implanted over the cervix so the baby cannot pass), or abruptio placentae (where the placenta tears loose from the uterus), death from haemorrhage was almost inevitable (Odendaal, 1992). Another ever-present danger was from convulsions or eclampsia. There was no real remedy for this until the late nineteenth century, when some progress began to be made. Even so, it was only in the twentieth century that it became possible to control this condition. Infection following birth (puerperal fever) seems to have inflicted women throughout history, and was the final tragedy associated with birth. Although it might begin a few hours after birth, the fever associated with the infection often did not appear until a week later – just when it might have been thought that the dangers were over. Often many infections overlapped and it has been suggested that virtually all infections recorded in the month after birth may have been related to post-delivery sepsis (Carter & Duriez, 1986). If a woman did survive such an infection, her subsequent health was usually severely undermined and she could be left with a permanently damaged heart or with kidney disease.

The above are but only some of the main complications that a woman giving birth could suffer. It is no exaggeration to say that for centuries women's lives had been overshadowed by the burden of childbearing. At last during the nineteenth century the rapid growth of the sciences made medicine really effective for the first time. In particular a number of breakthroughs had a direct bearing on women in childbirth and were to eliminate many of the hazards they had faced before. The greatest obstacle to women's hopes of improved childbirth was puerperal fever. It was the single most common cause of death in childbirth. In 1879, with the identification of the bacteria that caused the infection and after the widespread adoption of antiseptic measures, the fever began to be controlled. Caesarean sections also became viable in the middle-twentieth century. The effective control of fertility in the 1960s through 'the pill' was monumental in improving women's health in general. First and foremost the pill combined with techniques of sterilisation and abortion alleviated the massive problem of multiparity. The grossly debilitating effects of bearing many children were solved simply and rapidly. The general awareness of healthy living and the popular familiarity that twentieth century lay people have towards their own bodies have improved health in general. Healthy habits such as exercise, balanced diet, plenty of fresh air, unrestricted clothing and basic hygiene have improved health, and pregnant women in particular benefit from this healthier lifestyle.

Implications of Technological Birth

Although the benefits of medical technology, especially as it pertains to childbirth, cannot be denied, much of the improvement in maternal and perinatal mortality rates reflects a more healthy population rather than improvements in medical care (Monk, 1996). People eat better and live more hygienically than they used to, and since women have fewer children, high-risk groups of older mothers having their fourth or later child have been reduced in size. According to Oakley (1979) probably about a third of improvements in maternal and infant mortality are due to these changes. But the tendency is to attribute greater safety in childbirth wholly to better medical care. Tew (1990), however, presents evidence that directly challenges the argument for medical intervention on the grounds of safety. Tew

(1990, p.34) states that "the correlations which obstetricians and others claim between increasing medical care, or specific interventions, and decreasing mortality are quickly shown to be spurious." Scambler (1987) shares the opinion that the case for routine active management on the grounds of safety is scientifically unproven. In the past and still in many cultures today women have their babies without any medical help. Their attendants are other women, usually those who have had babies themselves. Babies are born in the home, in a family setting, and birth proceeds as the woman's body dictates it should and there is little or no intervention in the natural process. Very little of this holds true in industrialised societies, where childbirth is medicalised and is subjected to increasing interventions. This will be discussed later in the chapter.

The colonisation of birth by medicine is a thread in the fabric of cultural dependence on professional health care (Capra, 1983). People do not actively take responsibility for their own health, their own illness, their own births or their own deaths (Oakley, 1979). People have come to believe that doctors can fix anything and place their hopes for health and recovery fully in the hands of the medical profession. The public image of the human body is that of a machine which is prone to failure unless supervised by doctors and treated with medication. The notion of the body's inherent healing power and tendency to stay healthy is not communicated in our society and trust in one's own body is not promoted (Capra, 1983). This attitude towards one's own health and body is also seen when women deliver their babies. It is customary for women in our western society to seek the help of doctors in order to give birth. Women who inherently share the values of technology and who can afford to do so, seek specialised doctors, who with their medical technology promise a speedier and less painful birth. However, the price that women have paid to be relieved of pain in childbirth has been considerable. The interference in the natural birth process has reached its height in recent years as western obstetrical practice has come to include a truly awesome technology for childbirth.

The following discussion will be an attempt to guide the reader through the process of a medicalised birth as it usually proceeds in a hospital setting. It will be shown how the underlying principles of Newtonian epistemology, namely,

reductionism, linear causality and objectivism are imbedded in the medicalised birth process. The effects of this way of thinking and doing will also be discussed.

Admission to Hospital

One of the most dramatic changes that have occurred in childbirth in the last sixty years is that women rarely have the option of giving birth at home. In order to deliver her baby, the mother must become a hospital patient. While the techniques of modern obstetrics have saved the lives of many women and infants from genuine complications during birth, the literature regarding the safety of hospital deliveries does not show that healthy women and normal infants benefit from hospital care. There are studies that would suggest that the opposite is true – Leifer (1980) quotes studies that show that home deliveries for normal women are as safe, if not safer, than those occurring in hospital. It is also interesting to note that Holland, where the majority of babies are still born at home, has long had the lowest infant death rate of any developed country, while the United States, where hospital birth is the rule, has had one of the highest infant-mortality rates (Bean, 1982).

The act of entering a hospital changes the very nature of childbirth. Kitzinger (1980; 1987) and Davis-Floyd (1987) argue that entry to hospital involves a complex ritual that inculcates the dominant values of a technological society. Upon arrival at the hospital, most women undergo a standard series of procedures. After filling in various forms at the admission desk, women are usually separated from their partners and taken to an examination room to determine whether they are actually in labour. Upon confirmation that labour has begun, the woman is taken to a labour room where she waits to be 'prepped'. The procedures used to prepare a woman physically for labour include giving her a number and nametag, removing all personal effects, dressing her in a hospital gown, administrating an enema, and a complete or partial shaving of the pubic hair. Depending on how busy and well staffed the labour unit is, a woman can wait an hour or more to be 'prepped'. During this time she is usually left alone, since partners are usually still busy filling out forms at the admission desk or are not permitted into the labour unit until the preparations have been completed. Shaw (1974, p.65) convincingly argues that during the period of preparation the woman is "stripped of the manifest signs of her individual self." Many of the

procedures are medically unnecessary and serve to depersonalise the labouring woman. This loss of sense of self that occurs is quite analogous to what occurs in other institutions such as the army or prisons and results in what sociologist Goffman (1961) has termed the "mortification of self".

Despite recent findings that many of these procedures are medically unnecessary, many hospitals still routinely apply these procedures. The World Health Organisation (1999) has publicised an extensive research document in which many of these routinely used procedures are evaluated and criticised. It is recommended that many of these procedures, such as the routine use of enemas, pubic shaving, episiotomies and fetal monitoring, to name but a few, are to be discouraged.

Birth According to a Timetable

In the technological model of reality, time is viewed as being measurable in discrete, almost weighable units and is seen as mechanical and linear (Auerswald, 1990). This results in the perception that something should take place within a specific amount of time. Added to this view are the implications of conceptualising the body as a machine. As with all machines in our society, the birthing mother as machine is also treated in much the same way – "pushed to be more efficient, more economical, faster, neater and quieter" (Rothman, 1981, p.40).

The medical literature defines childbirth as a three-staged physiological process (Schoon, 1992). In the first stage, the cervix dilates from being nearly closed to its fullest dimension of approximately ten centimetres. This is referred to as 'labour'. In the second stage the baby is pushed through the opened cervix and through the vagina or birth canal and out of the mother's body. This is the 'delivery.' The third stage is the expulsion of the placenta or the afterbirth. According to the application of these stages, a woman's progress in labour can be measured 'objectively' according to standardised rules that determine how each stage should proceed (Davis-Floyd, 1994). Diagnostic technologies (such as external and internal electronic foetal monitors) are then applied to investigate whether or not these stages are proceeding as they should. When a woman's labour fails to conform to the standardised guidelines, remedial technologies are introduced.

Each stage of labour may be pharmacologically regulated in order to ensure that it fits the timetable. Uterine activity is made to comply with a superimposed itinerary, and if there is a deviation from this schedule, oxytocin is introduced in the woman's bloodstream through an intravenous drip (Davis-Floyd, 1994). In many hospitals an intravenous drip is set up 'just in case' so that drugs of different kinds can be dripped straight into the woman's circulation. This requires, however, that the labouring woman be attached to an intravenous line that hampers her ability to move freely. In no traditional societies are women completely immobilised in this way. In contrast, helping-women encourage the mother to adopt different postures and to move around so as to help the descent of the baby's head (Kitzinger, 1992). In the West, restrictions of a woman's movement have been accepted because of the assumption that the advanced technology is 'better', with little research into the effects of this change (Balaskas, 1988).

The following procedures are all examples of how technology tries to improve on the natural process of birth by 'speeding up' the process so that it can fit the 'objective' standards that have been established. This illustrates how birth in a technological society adheres to Newtonian principles of reductionism, linearity and neutral objectivity. A complex phenomenon is broken up in stages, viewed out of context and complications that are probably initiated by the interventions themselves, are then again managed in a linear way. The 'objective' standards and opinions of doctors and machines are accepted as being the 'only truth' and decisions are made accordingly.

Induction of Labour

Sometimes labour needs to be induced for medical reasons such as toxemia, a condition related to maternal kidney function, or maternal diabetes. The induction procedure has, however, been criticised severely when it is done without proper medical justification. According to Bean (1982), the following are but some of the risks involved for the baby when an elective induction is done: lung and respiratory problems, low birth weight and prematurity. Pitocin (a synthetic form of the hormone oxytocin) is administered or an amniotomy (artificial rupturing of the membranes) is

performed in order to induce labour when it is thought that the baby is overdue. This is, however, very difficult to assess accurately as the procedures used to assess a foetus's exact due date are not very reliable. A baby who is assessed to be 40 weeks gestation (full term), may not necessarily be full term and could potentially be induced too early.

A further problem with induction by intravenous infusion of oxytocin is that unless the dosage is carefully regulated the woman's uterus can go into a state of hypertonic spasm, that is, it can clamp down on itself. This results in a reduction of blood flow to the placenta, and the baby may become distressed or even die. The uterus of the woman who has had a previous Caesarean section, and which is therefore scarred, and that of a woman who has had a number of children, may rupture with induction unless contractions are monitored meticulously (Grobler, 1992). A process that would have developed naturally is now hampered by technology and the mother and the baby are being put at risk. Iatrogenic (illness producing) interventions are giving rise to conditions that in turn have to be treated by still further obstetric techniques.

Electronic Foetal Monitoring

Another example of iatrogenic procedures is the use of electronic foetal monitors. According to Walsh (2000), it is one of the clearest examples of iatrogenesis as false positive rates continue to result in unnecessary caesarean sections. The procedure involves the insertion of an electrode through the mother's vagina and cervix and clipping it unto the baby's scalp. This allows for monitoring of the foetal heart, but introduces with it the risk of infection, prevents the woman moving, and produces data in the form of a printout that may be interpreted incorrectly and result in an unnecessary caesarean section. This technique also carries with it the risk of more easily spreading HIV to the baby. Electronic foetal monitoring is currently very controversial. The use of a foetal monitor, whether it is an internal or external monitor, has the added effect of becoming the focal point of the labour. Nurses, physicians, husbands, and even the labouring woman herself become visually and conceptually glued to the machine, which then shapes their perceptions and interpretations of the birth process (Davis-Floyd, 1987). Assessments and

interventions, which practitioners had previously based primarily on labouring woman's subjective reports of bodily sensations, are now being based on quantifiable objective data from uterine activity and foetal heart rate transducers (Hoerst & Fairman, 2000).

Episiotomy

Another controversial obstetric procedure is an episiotomy. It involves an incision of the mother's perineum to enlarge the birth opening. An episiotomy requires cutting through layers of skin and muscle, while the repair involves pushing cotton swabs inside and then probing and stitching the most sensitive part of a woman's body, often with completely inadequate anaesthesia. Suturing can take anything from 15 minutes to an hour or longer. An obstetrician has described this as "one of the least considered and most painful of all operations performed on the human female" (in Kitzinger, 1992, p.149). Far too many women leave hospital with the memory of perineal pain, which they describe to be far worse than the pain of birth.

Doctors usually perform episiotomies because they have been taught that episiotomies avoid the baby being brain damaged, and because it is the only way to get the baby out without tearing the mother's pelvic floor. They believe it prevents her having a prolapsed uterus or bladder, or stress incontinence. Yet there is no evidence that an episiotomy is effective in preventing injuries of these kinds (World Health Organisation, 1999). Though sometimes a woman's perineum is especially rigid, and some babies need to be born quickly, routine episiotomies for close on 100 per cent of women, as in the United States today, is unnecessary (Kitzinger, 1992). Kitzinger (1992) proposes that the episiotomy rate is so high because the obstetrician wants the task over and done with as quickly and efficiently as possible, without wasting professional time or relying on the vagrancies of nature, or on the biological rhythms that do not readily accommodate themselves to hospital schedules.

Caesarean sections

The rising rate of caesarean sections is probably the most controversial of all technological practices associated with childbirth. A Caesarean section involves major abdominal surgery in which the baby is delivered through the uterine and abdominal walls. It may be elective, which implies that it is planned ahead of time, or is done as an emergency procedure. Some classic reasons for a caesarean section are malpresentation of the baby, foetal abnormalities, and/or multiple pregnancies. Another factor commonly associated with this intervention is cephalopelvic disproportion (CPD) due to a small or contracted pelvis or an unusually large or malformed foetus. A baby is also delivered by a Caesarean section when the mother develops severe toxemia or pre-eclampsia. The diagnosis of placenta praevia or abruptio placenta with accompanying severe haemorrhage necessitates emergency operative intervention (Murray, 1981). Uterine inertia or dystocia (commonly referred to as a 'lazy uterus') accompanied by marked maternal fatigue and unsatisfactory progress in labour are also significant factors in the rate of caesarean birth (Cronjé, 1992b). Foetal distress due to a variety of maternal and/or intrauterine events during labour is a major reason for emergency caesarean birth. Previous delivery by caesarean has almost always been associated with subsequent caesarean deliveries, but this trend is currently changing as many mothers are attempting a vaginal delivery after having had a previous caesarean birth.

These are the medically indicated reasons for a caesarean delivery. They are, however, not the only reasons why caesarean sections are performed and do not explain the increased incidence of this procedure. It seems that obstetricians favour this type of delivery for various reasons. A United States Government report (in Bean, 1982) lists the threat of malpractice suits as the most significant factor. The fear of being sued has a definite effect on the obstetrician's decision making. A caesarean section renders a doctor protected against liability in a way that vaginal delivery does not. It seems that aggressive intervention is considered to be more acceptable than letting nature take its course. It is expected of the doctor 'to do something' in order to legitimise the high fees charged (Feher, 1980).

Another factor is the perception among doctors that a caesarean section is superior to a vaginal delivery. Some obstetricians see the increase in caesareans as progress (Walters, 1998), while others are asking whether an even higher caesarean rate may be appropriate in order to offer the "ultimate in pelvic and birth-canal protection to the mother" (Beecham, 1989, p.57). Feldman and Freiman (1985) discuss the potential advantages of universal prophylactic (preventative) caesarean sections. They question whether, since birth is such 'a dangerous and traumatic process' for both woman and child, the best obstetric care should perhaps come to include complete removal of normal labour and delivery.

However, just because a caesarean can be done relatively safely is not a reason to perceive it as hardly more than 'abdominal birth' as opposed to vaginal birth. The maternal mortality rate with an emergency caesarean is four times that of vaginal birth and double than with an elective caesarean (Cronjé, 1992c). Half of the increased rate is due to the inherent risks of surgery. Other potential complications associated with a caesarean include intrauterine infections; bladder infections; infection of the lining of the abdomen (peritonitis); infection throughout the body (sepsis); haemorrhage; adhesions between internal organs; opening of the incision; rupture of the uterus in subsequent pregnancies; injuries to internal organs including the ureter, bladder, bowel or nerves; complications of blood transfusion; blood clots causing stroke or other damage; death or brain damage from the anaesthesia or cardiac arrest (Bean, 1982; Cronjé, 1992c; Feher, 1980). Most of these risks would have been unnecessary if the woman were able to have a normal vaginal delivery without interventions.

Another reason for the increased caesarean rate is the hospital context itself, as well as interventions that are commonly used. According to Murray (1981), certain obstetric procedures are related to inefficient and ineffective uterine contractions, foetal distress and other problems in labour, and thus to increased incidence of caesarean births. Murray (1981, p. 7) continues in listing the following procedures:

1. The use of drugs (oxytoxics) for induction and intensification of labour

   The oxytoxics used to induce labour or intensify labour cause labour contraction to become much stronger and more frequent and to last longer. As a result of these changes in the labour pattern, the mother

experiences greatly increased pain and anxiety, causing her to become more fearful and more and more discouraged with her ability to stay in control and work with her labour. Eventually, more often than not, she needs more obstetric medication. Her energy reserves are soon dissipated, her fatigue increases and she eventually calls for relief at any cost. Women who receive oxytoxics are put in a high-risk category, even when they have nothing else wrong with them. All of these factors seem to reinforce one another, ultimately making the labour process ineffective, which then leads to a caesarean section, because of 'failure to progress'.

2. The artificial rupture of membranes (amniotomy)

   An amniotomy for the purpose of hastening the progress of labour eliminates the protective cushion of the fluid-filled amniotic sac over the foetus's head. Thus with each contraction the presenting part is driven hard against the lower uterine segment and cervix, hastening dilation. This can, however, increase the danger of foetal brain damage and significantly increase the mother's discomfort and pain experience. This in turn increases her likelihood of receiving a caesarean section.

3. The use of analgesia, sedation, tranquillisers and anaesthesia to reduce the pain and distress of labour and of obstetric procedures

   The use of the above mentioned pain relief options could slow down contractions or even stop them for a period of time, especially with an epidural. Thus the mother's ability to work with her contractions is interrupted. The descent of the baby down the birth canal is slowed or arrested. As a result, the progress of labour may be sufficiently adversely affected to necessitate a caesarean birth.

4. The frequent requirement of bed rest in the supine position during labour

   Various commonly used obstetric procedures such as the giving of intravenous infusions, for example glucose and/or other fluids; the intravenous giving of oxytoxics to speed up labour and the use of

electronic foetal monitors, all require the labouring woman to be attached to either an IV drip or a machine. These practices make it difficult for the mother to assume any other body position than lying flat on her back. Thus the mother cannot utilise gravity or helpful other body positions to aid the progress of the baby through the birth canal. In addition, she is usually not allowed or would find it awkward to walk around with all of the equipment attached to her. Nor can she engage in any other activities, which would serve to distract her and help to curb her anxiety and fear, thus aiding the labour progress.

The above discussion shows how the birth process is viewed and managed in a reductionistic and linear way. It is quite ironic that modern obstetrics have exacerbated the very condition that it seeks to ameliorate. A woman's admission to hospital and her loss of autonomy at the onset of labour invest the experience with a dimension of apprehension that, through the consequent endocrine activity, depresses uterine function and increases the likelihood of a delay in labour and foetal distress. This again requires further intervention. So the process continues with ever increasing interventions, which can ultimately lead to an unnecessary caesarean section.

Hospital Environment

Many women experience the hospital context negatively. Many of these negative reactions are related to the fragmentation and specialisation of medical care that dominates hospital practices. Auerswald (1990, p.33) in this regard suggests that "mechologic thought/reality can only interfere with the ecologic balance and flow of relational connectedness...and results in fragmentation and disconnection." Since nurses are working in shifts, women are confronted with new faces throughout labour and rarely have the experience of being cared for by one particular nurse who remains for the entire labour and with whom it is possible to form a relationship. Because of the extreme specialisation of medical personnel, each member of the medical team tends to see his or her job in terms of particular functions. As a result there is no staff member concerned with the woman herself, her feelings at each stage of labour or her anxieties and concerns. Most medical personnel rely on technology to help the

labouring woman and few provide practical assistance such as suggesting a change in position or a simple breathing technique (Leifer, 1980).

The assertion is commonly made that the new birthing rooms that are currently being used will provide humanistic childbirth. This is, however, far from the truth as it is people and not rooms that provide care. Environmental comfort and beauty hold no guarantees that procedures and technology, when needed, will be used in a humane way. Bergum (1989, p.147) observed that "we take the technological approach for granted. Even the new birthing rooms ... are equipped with all the latest technological machines – the foetal monitor, intravenous supplies, suction apparatus, the respirator, scales, test tubes, the incubator – however well they may be hidden behind the colourful curtains, flowery wallpaper and collapsible oak bed." The imperative of high technology, of 'high tech', continues to dominate caregivers' attention, even in birth rooms. A commonly cited example of how technology can become the focus of attention occurs when a woman is attached to an electronic foetal monitor: caregivers typically look at the data from the monitor to assess foetal status and how labour is progressing, rather than using a 'hands on' approach to feel uterine contractions or asking the mother what she is feeling. Labouring women and their partners also focus upon the monitor and its meaning, and the result is often fear and worry.

The perception of childbirth as a medical event becomes most intense when the woman is being taken to the delivery room. It usually looks just like an operating room and appears frightening and forbidding. From the time she enters the delivery room, a woman is expected to follow the orders of the physicians and medical staff. Typically, she is brought from the labour room on a rolling bed, is slid unto the delivery table, and given a spinal anaesthetic, unless she has already been given an epidural. Her feet are placed in stirrups and she is draped from the waist down. Shaw (1974, p.84) notes that from this point on her active participation in the birth is effectively over and that

> because the obstetrician is seated at the foot of the table and cannot see the woman's face nor she his, and because her body is draped and she cannot

see what is happening unless there is an overhead mirror, she is separated as a person from that part of her that is giving birth.

The posture that a woman may be required to adopt in the delivery room is symptomatic of the relation between obstetrician and patient. It is easier for the obstetrician to examine and to intervene when the patient is supine. The birthing mother lies flat on her back with her legs raised in lithotomy stirrups (Kitzinger, 1992). This posture is, however, more for the benefit of the doctor, and does not benefit the process, nor the woman or child. It is only in our western technological culture that a woman having a baby has to lie almost flat on her back with her legs in the air, and try to push her baby uphill and out through a perineum stretched tight by her legs in an unnatural position. When the mother is in this position, the baby must be moved (pushed or pulled) upwards because of the curve of the birth canal (Odent, 1989). This position renders her totally unable to help herself, and many women describe this as feeling like a 'turtle on its back' or a 'beached whale'. The birthing mother actually fights an uphill battle from this position and wastes her energy while increasing the duration of the labour. Lying on one's back causes compression of the major abdominal blood vessels along the spinal column. Compression of the large artery of the heart can cause foetal distress by hindering blood circulation around the uterus and the placenta, while compression of the large veins leading to the heart blocks the returning blood flow and contributes to hypertension and maternal haemorrhage. Dunn (in Balaskas, 1988, p.8) comments on this ludicrous state of affairs when he says that "no animal species adopts such a disadvantageous posture during such an important and critical event." It is only in the technological world that women adopt such an abnormal posture to give birth. This is another example of how the natural birth process has been tampered with, with detrimental consequences.

The Experience of Pain in a Medicalised Birth

A concept of 'healthy pain' is used in traditions of healing other than western allopathy. Healthy pain is considered to be a necessary part of a 'healing crisis' where symptoms come to a head before the body turns toward wellness (Monk, 1996). The allopathic tradition, on the other hand, involves reliance upon drugs and surgery to relieve symptoms, rather than more holistic techniques aimed at preserving

health via exercise and a healthy lifestyle. Allopathic medicine tends to ignore the contextual factors affecting health. It represents the biomedical model as we know it today (Feher, 1980). Modern medicine considers almost all pain to be 'bad' and believes that pain indicates some form of pathology. People tend to believe that all pain can and should be relieved by medical means, and to expect relief at very low levels of suffering. This belief is reinforced by hospital procedures that provide pain relief as a first line of therapy rather than as a last resort (Priya, 1992).

The meaning and experience of pain is determined to a large extent by culture. Cultural factors can impose a differential pain response where cultural expectations determine not only what the pain means, but also how much pain is experienced and whether and how response to pain is expressed. Pain perception is related very strongly to cultural norms about how it is felt, perceived and shown and reinforced by social expectations in a particular social context (Priya, 1992). Pain threshold, the point at which pain is experienced, appears to be the same in all cultures, but the threshold where it becomes unbearable is subject to cultural influence (Monk, 1996). Birth pain is generally expected as part of childbirth in all cultures, yet in some cultures it is not accepted and is alleviated, whereas in others it is accepted and little or nothing is done about it. In our western technological culture it would appear that women have been convinced that childbirth will not hurt too much – yielding extreme disappointment when it does. Women also expect that if it does hurt 'too much' the pain should be relieved. Moreover, because of the widespread use of obstetrical anaesthesia, most women do not benefit from past experience proving that the pain was not in fact harmful.

In order to understand birth pain, and to be able to alleviate it, we must see it in its wider context, which includes the woman's mental attitudes and expectations, belief system, emotional support from family and friends and many other circumstances. Instead of dealing with pain in this comprehensive way, current medical practice, operating within the narrow biomedical framework, tries to reduce pain as an indicator of specific physiological breakdown. Most of the time pain is dealt with by means of denial and is suppressed with the help of analgesics (Capra, 1983). The most commonly used analgesic agent in birth is Pethidine. Although in some hospitals mothers control their own pain relief, in many others, Pethidine and

Pethidine in combination with other drugs are given as routine, and the mother does not really share in the decision-making. Pethidine may send women into a drowsy stupor in which labour can take on a nightmarish quality, reducing the ability to cope with pain and making it impossible to control their breathing and to actively relax.

Regional anaesthetics, of which the best known is the lumbar epidural, have been hailed as the answer to pain in childbirth. An epidural can give painless and even sensation free labour, and is safer than general anaesthetic. The procedure is, however, not without its inherent risks (Llewellyn-Jones, 1986). Some women experience a swift and dramatic drop in blood pressure that is bad for them and the baby, while some have an allergic reaction to the local anaesthetic being used. The possibilities of the mother having difficulty in breathing, becoming unconscious or remaining paralysed are exceedingly remote, but they exist nevertheless. A much more common problem is that the baby will have to be delivered by forceps, which carries with it its own inherent risks to both mother and baby. According to Wagner (1996), a forceps or vacuum intervention is four to ten times more likely with an epidural, while twice as many caesareans are performed when an epidural was given. An epidural also means that urine must be drawn off from the bladder by a catheter, since the woman has no sense of wanting to empty her bladder. This lack of sensation may persist for the first day or two after the delivery, so during this time she may need to be catheteritised. This in turn increases the risk of infection. A forceps delivery also makes urinary tract infection more likely. The woman having an epidural has the added risk of severe chronic backache (Wagner, 1996). Again the price of a pain free birth is high in terms of added risks to the mother and her baby.

Pain relieving drugs may indeed make a normal labour high risk. It seems to change a mother's time sense, so that her labour is perceived as longer than before the drug was administered. Added to this, drugs tend to decrease the baby's ability to cope with stress and to lower the threshold at which stress becomes distress. The effect of the regional anaesthetics (epidurals, caudals and spinals) actually eliminate sensation, and this has the added drawback of eliminating the emotional experience as well, as though the woman were watching herself on a video screen (Mehl, 1980).

The biomedical, reductionistic management of labour pain has indeed robbed the birthing mother of much of the experience as well as increased the risks of the whole process.

Dehumanising Effects of Obstetric Routines and Technology

Dehumanisation – the feeling that one is isolated from others and is regarded as a thing rather than as a person (McKay, 1991) – inevitably results in managed birth where the principal actors are the caregivers, their procedures and technology. When obstetric procedures and technology are used extensively, a woman's physical and psychological responses increasingly are of less interest to her caregivers. This is another consequence of Newtonian thought – there is only one 'objective' truth. Once the obstetric 'facts' are known, the touchstone of truth has been provided. The only accepted reality is the medical construction of childbirth. For example, the birthing mother is not needed as a data source because monitors do a better job. Furthermore, she may have little information to offer – especially if an epidural has removed her ability to feel her body. She thereby relinquishes control to obstetric caregivers. Howard (in Howard & Strauss, 1975) described this aspect of dehumanisation as "thinging" where people come to be viewed as objects of action instead of subjects and are "done to" rather than being active doers. A common way labouring women become "things" and are disempowered is through the routine procedures of the maternity care system that treat all women as alike.

Increasing Medical Technology

The mechanistic view of the human body and the resulting engineering approach to health has led to an excessive emphasis on medical technology, which is perceived as the only way to improve and manage health. Hard technology has taken a central role in obstetric care as today's pregnant woman faces, along with her natural childbirth classes, amniocentesis, ultrasound diagnosis, ultrasound monitoring, and in many hospitals a one-in-four chance of having a caesarean section. Many machines that are not only highly sophisticated, but also extremely expensive, are being used. However, the use of high technology is often unwarranted. The increasing dependence of medical care on complex technologies has accelerated the

trend toward specialisation and has enforced the doctor's tendency to look at particular parts of the body, forgetting to deal with the patient as a whole person. Hospitals have grown into large professional institutions, emphasising technology and scientific competence rather than contact with the patient.

Increasing Medical Costs

The costs of medical care have increased at a frightening rate. The development and widespread use of expensive medical technologies is one of the main reasons for the sharp increase in health costs. The excessive use of high technology in medical care is not only uneconomic, but also causes an unnecessary amount of pain and suffering as discussed before.

The high risks of modern technology have led to a further significant increase in health costs through the growing number of malpractice suits against physicians and hospitals. There is now an almost paranoid fear of litigation among doctors, who try to protect themselves from lawsuits by practicing 'defensive medicine', ordering even more diagnostic technologies that further increase the costs of health care and expose patients to additional risks. This malpractice crisis is the result of several things, among other the excessive use of high technology within a mechanistic model in which all responsibility is delegated to the doctor. According to the biomedical model, only the doctor knows what is important for an individual's health, and only he or she can do anything about it, because all knowledge about health is rational and scientific knowledge is based on objective observation of clinical data. Thus laboratory tests and measurement of physical parameters are generally considered more relevant to the diagnosis than the assessment of the patient's wider context. A more holistic approach is not being followed and important context markers in terms of a patient's condition are often missed.

Hierarchicalism and Patriarchalism

According to Capra (1983), physicians' authority and their responsibility for the patient's health make them assume paternal roles. They can be benevolent parents or dictatorial parents, but their position is clearly superior to that of the patient.

Moreover, since most doctors are men, the paternal role of the physician encourages and perpetuates sexist attitudes in medicine. This trend is, however, not provoked by medicine as such, but reflects the patriarchal bias in society as a whole, and especially in science. In today's health care system physicians play a unique and decisive role in the health teams that share the tasks of patient care. Nurses, although often highly trained as therapists and health educators, are considered merely assistants of the doctors and can rarely use their full potential. Many authors believe that because of the narrow biomedical view of illness and the patriarchal patterns of power in the health care system, the important role that nurses play in the healing process through their human contact with the patient is not fully recognised (Capra, 1983; Rothman, 1981).

Conclusion

The biomedical management of birth with its inherent Newtonian epistemology has decontextualised the birthing process. The reductionistic and lineal cause-effect conceptualisation of birth within this epistemology has led to a simplistic understanding of a complex phenomenon. A new perspective on the birth process is needed - a perspective that recognises and integrates the multiplicity of interdependent and interconnected components. What seems to be required is a biopsychosocial conceptualisation of the birth process that will take not only the biological factors into account, but also the contextual factors. The following chapter will therefore describe ecosystemic epistemology as an alternative to the Newtonian worldview.

CHAPTER 3

AN ECOSYSTEMIC APPROACH

The reality "out there" is unknowable because it changes as we watch, and because our watching changes it.

- Paul Dell

Introduction

This chapter will provide a description of the ecosystemic approach followed by a more thorough discussion of some of the key principles of second-order cybernetics on which this alternative worldview is primarily based. The last part of this chapter will be a conceptualisation of a woman's birth experience within this holistic, ecosystemic perspective.

The Emergence of a New Worldview

The key assumptions of the Newtonian approach were discussed in the previous chapter and therefore will not be repeated here. It is important to note, however, that under the influence of the Newtonian way of thinking classical physics reached tremendous heights by the end of the 19th century. At that time most physicists thought that the basis for understanding the universe was close to complete. However, during the early 20th century, revolutionary trends in physics highlighted the limitations of the Newtonian worldview. It was especially the work of Einstein, Planck and Heisenberg that showed that the application of the Newtonian way of thinking to more complicated phenomena obscured, rather than enhanced understanding (Auerswald, 1985). Einstein's relativity theory and quantum theory, and Heisenberg's uncertainty principle (Capra, 1983) led to a completely different view of the universe. For example, the observation that light may appear as electromagnetic waves or as particles depending on how it is observed, made uncertain the classical assumptions of objectivity and of the reality of matter (Capra, 1983). Scientists were forced to question the classical assumptions of science.

Quantum physics led to a dramatic revision of the scientific concepts of reality, rocking the very foundations of classical thought. This resulted in the emergence of a radically different worldview that can be described with words like "organic, holistic and ecological" (Capra, 1983, p.66).

Ecosystemic Epistemology

The shift in scientific thinking introduced by the revolutionary discoveries of quantum physics is mirrored in ecosystemic epistemology. Whereas the Newtonian worldview emphasises the notions of reductionism, linear causality and neutral objectivity, the ecosystemic perspective attunes itself to holism, relationship, complexity and contextual interrelatedness (Keeney & Sprenkle, 1982). Auerswald (1990, p.29) describes this thought system as

> monistic, relativistic, centrifugally creative, patterned, emergent, connectionist, and evolutionary. That which is observed is thought of as relational differences that expose shifting, emerging, receding, patterned shapes of events in a timespace terrain, and truth is considered heuristic.

In this new epistemology the image of the universe as a machine has been replaced by a view of the universe as an indivisible whole, whose parts are interrelated and can be understood only as patterns of an ongoing process (Fourie, 1998). Fourie and Lifschitz (1989) state that ecosystemic epistemology adopts an ecological way of thinking, a non-lineal view of life and interaction, and a constructionistic view of reality. It further takes synergy into account, which implies that the whole is considered to be greater than the sum of its parts as Gestaltists such as Perls (1969) have realised a long time ago. Figure 3.1 is a summary of some of the main characteristics of ecosystemic thought.

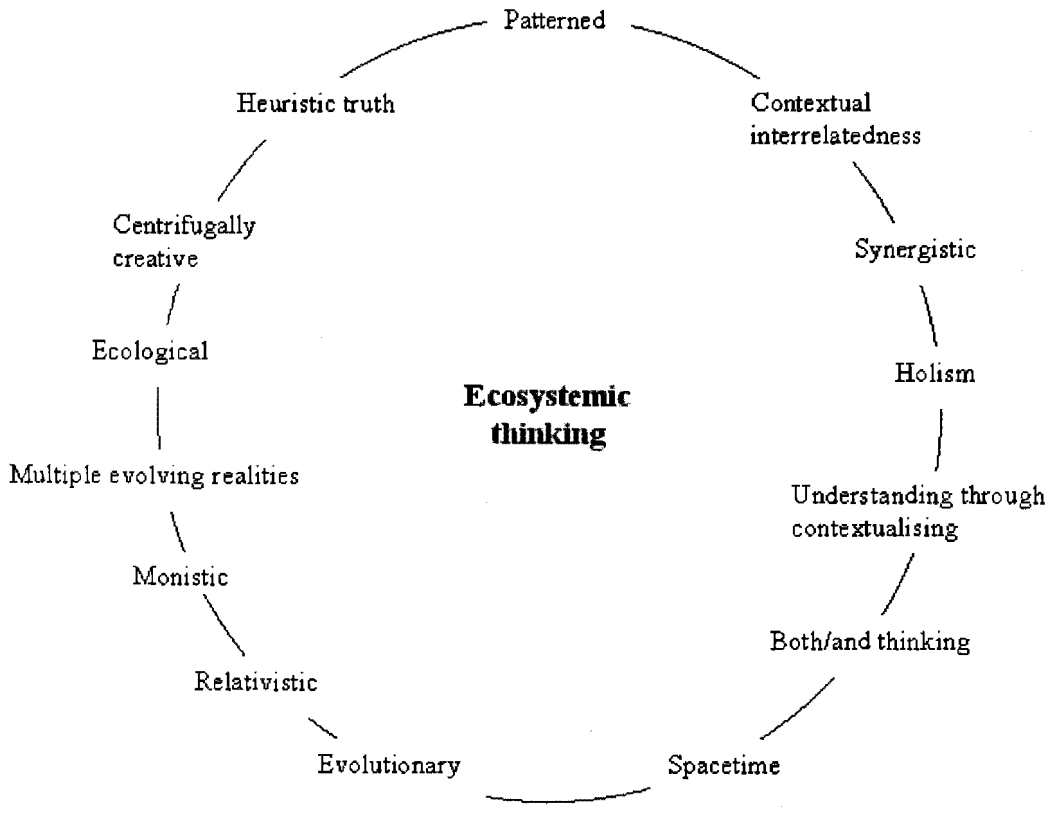

Figure 3.1. Characteristics of ecosystemic thought

Ecosystemic epistemology further represents ideas from ecology, systems theory and cybernetics (Keeney, 1982; 1983a). In the development of this epistemology the exposition of general systems theory and the emergence of second-order cybernetics played a central role. A brief discussion of these perspectives will be given with specific reference to certain ideas pertinent to second-order cybernetics.

General Systems Theory and Cybernetics

Von Bertalanffy (1950) is considered to be the father of general systems theory. The theory he developed gives an account for the behaviour of all systems, whether they are mechanical, chemical or human. General systems theory emphasises a shift from focusing on the parts of a system to viewing a system as a whole. The whole is then conceptualised as a system whose elements are in a patterned relation with each other. These parts are continuously interconnected in such a way that a change in one component of a system inevitably changes the other components with which it is interrelated (Bloch, 1984).

Cybernetics developed in the early 1940s when cyberneticians began to study inanimate machines to ultimately compare it with living organisms in an effort to understand and control complex systems. Their main focus was not only on feedback mechanisms, but also on how this forms the basis of information processing and patterns of communication. Norbert Wiener (1961) named this unified approach to problems of communication and control "cybernetics" and defined it as the "science of control and information feedback in systems" (Loos & Epstein, 1989, p.153).

General systems theory is so closely related to the science of cybernetics that authors such as Becvar and Becvar (1996) do not distinguish between them. Both general systems theory and cybernetics are built on the same fundamental principles, such as recursion, feedback, rules, boundaries, relationship and wholes. Some of the principal ideas from general systems theory and cybernetics will be discussed briefly.

Recursion

One of the central concepts of systems thinking is the idea of circularity. Traditionally the world has been viewed in terms of linear cause/effect, while events have been isolated and looked at out of context. From a systemic perspective, however, we need to be aware that an isolated cause/effect event is but a partial arc of a larger pattern of circularity (Becvar & Becvar, 1996). Given this recursive perspective, every system is seen as influencing and being influenced by every other system. As a result of this conceptualisation the terms 'cause' and 'effect' become redundant. People and events are rather seen in the context of mutual interaction and mutual influence. Individuals or elements are not examined in isolation, but in terms of their relationship and how each interacts with and influences the other. In the light of this study then, a woman's birth experience will be viewed contextually. A specific birth experience will be conceptualised within its wider context and would thus include not only the birthing woman, but also the people interacting with her during the delivery, her partner, the hospital and other aspects of the birthing environment. The birth experience will not be seen as the result of certain factors impacting on the birthing woman, but rather as a 'dance' of different people interacting with each other in a recursive manner.

Feedback

Feedback is another central concept in both systems and cybernetic thinking. Feedback is the aspect of recursion involving self-correction. It refers to the process whereby information about past behaviour is fed back into the system in a circular manner (Becvar & Becvar, 1996). The skill of riding a bicycle or steering a boat is reliant on the concept of feedback. When a boat, for example, deviates from a preset course, the helmsman assesses the deviation and counter-steers to correct it. Continual feedback is therefore necessary to keep the boat on course.

Feedback can be considered to be either positive or negative. While positive feedback acknowledges that a change has occurred in and has been accepted by the system, negative feedback indicates that the status quo is being maintained. Positive or negative feedback thus refers to the impact of behaviour upon a system and the system's response to that behaviour. As a simplified example, one can conceptualise that positive feedback has occurred when the birthing mother has accepted change. She could for instance have planned a natural birth, but due to advice from the medical staff decide to have an epidural caesarean birth instead. If she declines this option and decides to still follow her original plan, one can say that negative feedback has occurred.

Systems and Subsystems

Any system exists as part of a larger system, or suprasystem, and has smaller subsystems for which it is the suprasystem. An individual, for instance, is part of a family system that is part of a larger system, the society. Every system – the individual, the nuclear family, et cetera – is both a part and a whole. The nuclear family is a subsystem of the extended family, the extended family of the community, and so on. Part and whole contain each other in a continuing, current and ongoing process of communication and interrelationship (Minuchin & Fishman, 1981). A key characteristic of ecosystemic thinking involves the shifting of focus between levels of systems. Different systems nest within other systems. The same concepts can thus be applied to different system levels to gain insight, if it is remembered that these different system levels represent levels of differing complexity (Capra, 1996).

From this perspective the birthing mother is a part of a larger family system, which is again part of a particular society and so forth. This study particularly focuses on how a woman's birth experience is embedded in the western technological society as suprasystem.

Rules and Boundaries

The concept of a boundary connotes the separateness of a system from a larger system. In other words boundaries divide systems, subsystems and suprasystems. A boundary (or a system's rules) acts as a gatekeeper for the flow of information into and out of a system. The rules according to which a system operates are comprised of the characteristic relationship patterns within the system. These rules express the values of the system as well as the roles appropriate to behaviour within the system. According to general systems theory and first-order cybernetics, boundaries in human systems are never completely impermeable. These systems are thus referred to as open systems. If a birthing mother, for instance, believes that medical intervention is always necessary in the birth process, she will not be 'open' for a natural childbirth experience. A woman in the western technological society is expected to deliver her baby in a hospital setting. The hospital or medical system has its own rules and values as discussed in Chapter 2. How an individual birthing mother interacts with this larger system depends to a large extent on the rules and boundaries of her own system that regulates the flow of information across the system's boundaries. The birthing woman's attitudes, beliefs and expectations (rules or boundaries) will thus profoundly influence her reactions to the situation.

Second-Order Cybernetics

General systems theory and cybernetic theory is a way to describe a system's functioning. Both these conceptualisations are mostly a description of interaction. While both these theories broke away from reductionism, they still imply an outside, objective observer and linear causality through their emphasis on interaction and power. Implicit in their interactional description is the presence of an observer who makes these particular descriptions. These descriptions are considered to be

objective, irrespective of the observer that draws the distinctions and makes the descriptions (Bateson, 1972; Hoffman, 1985). In the case of living systems, however, objective observation is impossible. According to Dell (1985), the very act of observation influences the behaviour of those being observed, whereas the observation itself is also coloured by the observer's way of thinking or his or her epistemology. Any description of a system thus has to account for the observer as much as for the system being described. It follows then that a specific description is assumed very often to reveal more about the observer than about the system being observed (Golann, 1987; Loos & Epstein, 1989). This understanding implicitly implies a higher order of observation. The study of such a higher order of observation was coined cybernetics of cybernetics or second-order cybernetics (Hoffman, 1985).

It is, however, important to note that the change from first- to second-order cybernetics is not as simple as purely taking the influence of the observer into account (Fourie, 1996). The whole view of the functioning of systems changed – no longer are systems conceptualised as mechanistically interacting with one another through the means of feedback across boundaries. A number of influences and different ways of conceptualising culminated in a radically different view of systems. The following discussion of some of the pertinent concepts of second-order cybernetics will highlight the new way of viewing systems.

Structure-determinism and Autonomy

Chilean biologists Maturana (1975, 1983; Maturana & Varela, 1980) and Varela (1979) contributed some of the most important concepts to second-order cybernetics. They postulated a theory of structure-determinism that implies that the actions of a living system are determined by the structure of the system itself, and not by occurrences outside of the system. Living systems are therefore seen as self-organised and autonomous (Maturana, 1975). In essence, the term "autonomy" refers to the identity of the system (Keeney, 1982, 1983a). A system's identity is always being conserved as to maintain the system's viability. The system itself determines the range of structural variations acceptable without loss of its identity. This further implies that the system is limited, by virtue of its own structure, to what it can and cannot do. This perspective has become known as the doctrine of structure-

determinism and has also been discussed by authors such as Kenny (1989) and Loos and Epstein (1989). Kenny (1988) proposes that structure-determinism implies that outside influences can 'perturb' the system, but that the reaction of the system to such perturbations is determined by the system itself. In other words no direct or linear influence by one system on another is possible. Self-determination also means that systems are conceptualised as informationally closed, not open, as conceived in general systems theory. Whereas the focus in general systems theory is on interaction, the focus in second-order cybernetics is on the autonomy of the system (Fourie, 1993).

In terms of the birthing woman's experience, one can conceptualise that the birthing mother is an autonomous system whose actions or behaviour are not determined by outside influences. According to this view then, no one can linearly determine the birthing mother's behaviour or experiences. The birthing mother herself determines her reactions through her own structure. In this regard a woman can only give birth in a way that her body as system structurally allows. If she is therefore not structurally able to deliver her baby vaginally due to for instance a malpresentation of the baby, she will not be able to do so despite perturbations from her environment.

Structural Coupling

From the perspective of structure-determinism, two or more living systems get together and couple with each other as determined by the structure of each particular system. They then form a composite system that in turn is autonomous in determining its own actions. By coupling structurally, systems are able to mutually co-exist or fit together. As Becvar and Becvar (1996, p.80) explain: "organisms survive by fitting with one another and with other aspects of their context, and will die if that fit is insufficient". Dell (1982) calls this coherence and explains that it has to do with how pieces of a system fit together in a balance internal to itself and external to its environment.

In the case of human systems, this coupling takes place by means of an exchange of ideas through verbal or non-verbal communication (Anderson & Goolishian, 1988). Each system attributes meaning to the words and actions of the other system, meanings that are determined by the perceiving system's structure. As Reddy (in Fourie, 1996) points out, the meanings attributed by the recipient may or may not be what the communicator intended it to convey. The recipient system does not extract precise meanings from the communication, but it autonomously creates its own, often idiosyncratic meanings that might only superficially resemble the intended meanings of the communicator.

When a birthing mother enters a hospital setting, she structurally couples with this system through language. As an autonomous system, she will interpret the verbal and non-verbal messages from the environment in her own individual way. For instance, if a doctor advices a mother that she should undergo a caesarean section because she is not 'progressing', the mother will interpret the doctor's verbal and non-verbal language according to her own individual structure. She might interpret his message as meaning that she is a bad mother because she is unable to deliver her baby normally. Or she may be very relieved that her suffering is going to be ended by the medical intervention. In other words, the mother as autonomous system can only be 'perturbed' by the system – what she makes of it is determined by her own structure.

Ecology of Ideas

The anthropologist Gregory Bateson (1972, 1979) influenced the movement away from first-order cybernetics in a powerful way. His conceptualisation of 'mind' and 'ecology of ideas' has profoundly influenced how systems are viewed. Bateson (1979, p.101) defines mind as "an aggregate of interacting parts" that is triggered by difference, resulting in transformations of the preceding events or experiences. He further postulates that mind is found in communication networks; it is a process and not something inside a person's skull (Anderson & Goolishian, 1987; Golann, 1987). Ecologies of ideas refer to the way in which ideas are interlinked in systems (Bateson, 1972). Ecologies of ideas are also understood to be the shared linguistic discourses through which our actions are co-ordinated to derive co-created realities and, thus, meaning (Anderson, Goolishian & Windermand, 1986). In other words, the world of

communication is made up entirely of ideas and their meanings. There are no actual objects or events in the mind, only representations and images and rules for making these. Behaviour is then dependent upon the meaning of events rather than upon the events themselves. Understanding how any particular system is organised, is essentially how the ideas and behaviour of each member in the system support and sustain the ideas and behaviour of every other member so that the system displays order, pattern or redundancy. The acquisition or modification of an idea in one or more individuals leads to change in other individuals so that new ideas and new interactional patterns are evolved. Thus, the core assumption is that people behave according to how they frame, define or punctuate the situations in which they are actors. The birthing woman's experience is thus closely related to the meanings that she, in communication with others, ascribes to her experiences or how she defines them.

Constructivism

Another influence away from general systems theory came from the work of Von Foerster (1981), Von Glasersfeld (1984) and others (eg Efran, Lukens & Lukens, 1988; Watzlawick, 1990). Their work constitutes what is called constructivism. "Constructivism means that all knowledge of the world is the result of our own constructing, ordering, inventing, languaging, constituting, creating (and so forth) processes and not the result of our discovery of how the world really is" (Held, 1990, p.180). In short, it implies that it is impossible to observe reality as it really is – assuming that a stable reality does actually exist. This perspective, which implies that no 'real' reality exists and that all 'realities' are constructed by the observer, has come to be known as radical constructivism. More recent theorists such as Hoffman (1990) and Speed (1991) modified this position to an understanding that what is observed is co-constructed by the observer and by the observed. This modern constructivist approach views perception as an interaction between the observer's idiosyncratic way of observing and that which is really there. When two observers agree on their observation it is said that they co-constructed a reality. This links with what Bateson (1972) called 'ecology of ideas' and Maturana (1975) a 'domain of consensus'. Both these conceptualisations imply that a co-constructed reality exists in the domain of shared meanings. According to Anderson and Goolishian (1988) these networks exist

in language, because language is the only way in which meanings and ideas can be communicated.

Constructivism versus Social Constructionism

At this point it might be useful to distinguish between constructivism and social constructionism, as these two positions are easily confused. Social constructionism can be regarded as the shift from a cybernetic view to hermeneutics. One can say that in this shift from cybernetics to hermeneutics, feedback loops have been replaced by the intersubjective loops of dialogue (Anderson & Goolishian, 1988). Replacing cybernetic analogies with metaphors that originated in semiotics and literary criticism such as narrative, text and story, social construction theory argues that ideas, beliefs and memories emerge in social exchange through language. Accordingly, all knowledge is seen as evolving "... in the space between people, in the realm of the 'common world' or the 'common dance'" (Hoffman, 1992, p.8). Therefore there is no absolute truth or reality, only co-created stories about the world (Hoffman, 1992). Constructivist theory also clearly supports the view that the world we live in is created in social discourse (Anderson et al., 1986). Although constructivism appears to emphasise the individual's internal structure, it is closely aligned with social constructionist thinking in the importance it places on the role of language in the creation of meaning. It also shares its opposition to the modernist idea of the existence of a 'real' world that can be discovered (Hoffman, 1992). Both constructivism and social constructionism converge into a post-modernist approach where 'experiences' and 'meaning systems' emerge from the interactions and language people share with each other. The writer will be using both constructivism and social constructionism for explaining certain theoretical concepts in this study.

An example of how constructivism can be applied to the current study is in terms of the experience of pain during birth. According to the constructivist approach, "pain is not simply the firing of nerve endings – it is a 'package' of interpretations surrounding sensations" (Efran et al., 1988, p.29). The experience of pain therefore partly takes place in language as part of a socially sanctioned narrative. Proponents of childbirth education has recognised this long ago and particularly pay attention to how they frame or punctuate the birth experience. They would talk about

'contractions' rather than 'labour-pains', thus recognising that the use of vocabulary colours our experiences. Longacre (2001) even challenges the use of the word 'contractions' in her discussion on painless childbirth. She considers birth to be the opening up of a woman's body spaces large enough for a baby or babies to emerge. Longacre (2001, p.1) continues in asking a pertinent question: "With all that we know of the mind/body connection, don't we do ourselves a huge disservice by constantly thinking about and hearing repeated the word contractions?" She proposes that we rather use the word 'expansions', thus acknowledging that the way in which we voice our experiences influences our perception and understanding thereof.

Multiverses of reality

An important question that arises with the ecosystemic approach to science involves our understanding of the world we live in. How can we ever hope to understand anything, if everything is connected to everything else? Capra (1996) states that the discovery of approximate knowledge makes it possible. Science can therefore never provide complete and definite understanding, but can only provide limited and approximate knowledge. "No matter how many connections we take into account in our scientific descriptions of a phenomenon, we will always be forced to leave others out" (Capra, 1996, p.42). We are therefore forced to acknowledge that we are never dealing with the 'truth', but with limited and approximate descriptions of reality. From this perspective we can no longer talk about a universe, rather, we must concede that we live in a 'multiverse' of many equally valid observer dependent realities. It follows then that ours is a reality that is inevitably subjective and that at most we may refer to "objectivity in parentheses" (Simon, 1985), thus acknowledging the interrelatedness of observer and observed.

According to ecosystemic epistemology then, events can be patterned or organised in countless ways depending on how an observer chooses to see them. A system, for example, can be punctuated as an autonomous whole with no reference to external events, in keeping with a second-order view, or as interconnected with other systems, consistent with a first-order perspective (Keeney, 1982, 1983a). We also can choose to punctuate events in a linear fashion and/or to see them as recursively linked (Keeney & Sprenkle, 1982). This implies that ecosystemic epistemology represents a

both/and, that is, a nondualistic perspective. This is one of the fundamental premises of ecosystemic epistemology. Both sides of any distinction that an observer draws are embraced. This is known as the study of complementary relationships. Cybernetic complementarity involves different orders of recursion that demonstrate how pairs can be related and yet remain distinct, illustrating the recursive nature of a natural epistemology. As Keeney (1983a, p.92) explains: "The perspective of cybernetic complementarities transforms our ways of knowing toward the aesthetic vision poets have always known. The alternative is to chop the world into innumerable dualisms that separate us from the various parts of our experience."

An Ecosystemic Conceptualisation of the Birthing Experience

An ecosystemic conceptualisation frames a woman's experience of giving birth in a context in which many other actors take part. The birthing experience is viewed as embedded in a network of continuously evolving meanings constructed by those people interacting around the issue. Meaning is considered to be an intersubjective phenomenon, created and experienced by individuals in conversation with others and themselves. This conversation provides the frames within which social action takes place, a statement that echoes Bateson's notion that the mind is social (in Sluzki, 1992). In this line of thinking, Watts (1972) argues that not even our most private thoughts and emotions are our own as we think in terms of languages and images which were given to us by society, thus again supporting the idea that the mind is social. It is therefore in the process of languaging with herself and others that the birthing mother creates meaning from her experiences. The way she defines or frames her experience in language becomes the 'reality' of her birth experience. From this perspective, language is not representational, what we call 'reality' resides in and is expressed in an individual's description of events, ideas, feelings and experiences. These descriptions in turn evolve through social interactions that are themselves shaped by those descriptions (Sluzki, 1992).

Women in the western world are inextricably part of the wider societal system they live in, and more often than not share the implicit ecology of ideas or 'stories' around birth. If we accept the postulation that our ideas about our experiences are shared ideas, consensually arrived at and mediated through givens like culture and

language, the role of language and culture moves to central stage. How we language our experiences in a given culture and how this impacts on our understanding of our own world and experiences becomes very important. In this regard Hewison (1993) argues that language is a central component in our understanding of the social world as it both constructs and reflects the social reality that we experience.

Language plays a crucial role in the construction of the shared view of reality held by speakers of a common language (Poynton, 1989). In the western technological world, this 'common language' with regard to birth is predominantly a medical interventionist language. The dominant birthing story in our society is a medical version that perpetuates obstetrical intervention as explained in the previous chapter. However, in accordance with constructivism, there is no single objective truth about the birthing experience. Rather there are multiverses, each being as valid as the other. Many contrasting discourses exist around childbirth. The dominant discourse on childbirth in the western world was discussed in Chapter 2. Competing discourses have emerged that offer alternative 'names' for the experiences and processes involved in birth. This occurred partly as a result of the feminist movement in the 1960s and 1970s prompting women to question the care they received from the medical profession (Stacey, 1988). Closely associated with the questioning of birth practices from a feminist stance is a more general consumer concern. This emerged as a result of detailed examination of the practice of medicine by, among others, sociologists and statisticians and the provision of information for clients based on the results (Hewison, 1993). These and other alternative stories around the birthing experience will be explored in Chapter 5.

Conclusion

The ecosystemic perspective represents a clear shift from an anticontextual and reductionistic epistemology concerned with objectivity and truth, to a worldview that encompasses complexity, contextual patterns of relationship and multiple realities. This conceptual framework views the individual birthing mother and her experiences within the wider context in which the drama of birth unfolds. It also acknowledges how the experience is being voiced in the language of shared meanings. This approach thus facilitates a more flexible and aesthetic understanding

of the birthing woman's experience. The multiple 'realities' or different 'voices' about the factors that are said to influence a woman's experience of birth will be discussed in the following chapter.

CHAPTER 4

A WOMAN'S EXPERIENCE OF BIRTH: A LITERATURE OVERVIEW

My body is like an island fretted by waves, like a widening bay filled by the swollen tide. My cliffs and beaches are relentlessly eroded; the channels run with the foaming water. The widening bay turns warm, prickles with heat, as the tide urges toward it. My body has become the vessel from which life is poured...

- Sheila Kitzinger

Introduction

This chapter will be an exploration of the factors in the literature that are indicated to impact a woman's experience of birth. The body of knowledge on this topic will be critically discussed from the ecosystemic perspective. Although research on the topic is done from various fields such as nursing, social anthropology, sociology and psychology, the literature overview will be presented along the major themes that emerged from the body of knowledge. There are many factors listed in the literature that are said to impact the mother's experience of giving birth. The following presentation will organise the various factors starting with the innate qualities of the birthing mother, her immediate family and support network, to the wider societal context in which the meanings women ascribe to their birth experiences are imbedded. The many different variables that can potentially colour a mother's experience are thus presented in widening circles of influence. The lens through which the experience of birth will be viewed, will be widened to include larger pieces of the ecology of birth. A reconceptualisation (Figure 4.1) will be presented to organise the wealth of information on the subject and to suggest a common theme running through the data.

In accordance with the constructivist approach, all the 'pieces' presented in the literature can be seen as different perspectives which are pieces of the bigger picture. One perspective cannot be absolutised to be the only 'truth'. However, it may be a part of the bigger picture giving depth to the overall understanding of a woman's birthing experience. This perspective thus gives credence to the 'multiple realities' of this phenomenon. It is also important to remember that the way in which the literature is presented here is only one way of punctuating the 'reality' of a woman's birthing experience and constitutes a pragmatic approach to describing a complex phenomenon.

The Women's Individual Dispositions

There are many researchers who conceptualise that there are certain traits or dispositions of the mother herself that determine her experience of giving birth. Explanations of the birth experience are thus conceptualised as caused by inherent or acquired qualities of the individual mother concerned. Reductionism is evident, however, as the mother's complex experience is reduced to something that happens with or within her. The birthing mother as 'subject' becomes the sole focus of the research in such a way that the broader context is being disregarded. This perspective also adheres to the notion of linear causality as it conceptualises that certain traits or factors inherent to the birthing mother linearly influences the quality of her birth experience.

Research from both the quantitative and qualitative traditions report factors inherent to the birthing mother as influencing her birth experience. Many of the more recent research findings (eg, Halldorsdottir & Karlsdottir, 1996a; VandeVusse, 1999) come from the narrative or post-modern perspectives. As these research findings correspond more with the author's own epistemology, these will be discussed in more detail. However, the following factors that are said to impact the birthing mother's experience are briefly mentioned for the sake of comprehensiveness. Crowe and von Baeyer (1989) propose that there are certain psychological variables that are predictive of a positive childbirth outcome. They list the following factors as being significant in contributing to a woman's childbirth experience: knowledge of childbirth, anxiety, fears regarding pregnancy and birth, locus of control, expectations

of anticipated pain, and confidence in ability to control pain. Other factors inherent to the mother herself that are mentioned in the literature are age (Norr, Block, Charles, Meyering & Meyers, 1977); social class (Nelson, 1983; McIntosh in Quine, Rutter & Gowen, 1993); life-experience and marital status (Halldorsdottir & Karlsdottir, 1996a).

The following main themes emerged from the literature and will be discussed in more detail. Although these themes are discussed separately, they nevertheless overlap and cross-influence each other. Most of these themes or 'variables' are part of the larger gestalt of the birth experience and are only considered individually in order to understand the complex phenomenon more fully.

Control

Control is a concept that has many different roots and meanings. Several writers have considered the concept of 'control' in childbirth and many meanings have been reported (eg, DiMatteo, Kahn & Berry, 1993; Green et al., 1990; Knapp, 1995; Lavender et al., 1999). However, there seem to be two major themes concerning control in childbirth. Although the two themes are not necessarily easily distinguishable, they are considered separately as many women voice their birth experience in these terms. The one has to do with self-control as discussed by, for instance, Lamaze (1958) and indicates the ability to maintain or develop control over one's own behaviour. The other suggests external control or control over one's circumstances. According to Halldorsdottir and Karlsdottir (1996a) one of the primary needs of women giving birth is the need to be in control of self and circumstances. Whether these needs are met or not seem to be very important in women's subjective experiences of birth. Lavender et al. (1999) report that being in control is seen as a positive aspect of labour and that many women in their study state that it is necessary to maintain personal 'dignity' during labour. One woman in a study by Lavender et al. (1999, p. 42) reports that: "I was pleased that I felt I had a lot of control during labour. If I had lost control I would have felt very embarrassed. I thought I might let myself down by screaming or swearing but I'm so glad to say I never did."

The literature suggests that control over what is being done to one, is associated with a more positive birth experience, increased satisfaction and less depression (Green et al., 1990). Many women report disturbing feelings of loss of personal control during the birth process when they experience that they have no control over what is being done to them. The effect of managed birth in our technological society has been explored in Chapter 2, and will thus not be reiterated here. Suffice to say that many women experience giving birth in a hospital setting to be a depersonalising event in which they feel that they have no control. A mother in a study by DiMatteo et al. (1993, p.205) relates her experience:

> The anaesthesiologist took my glasses, and I had an absolute fit because I wanted to see the baby right after it was born. I don't think they realised that I cannot see the baby when she's two feet in front of me without my glasses on, and I could see them (glasses) there on the table, and they had both my arms strapped down.

There are, however, women who paradoxically only experience their birth as positive when they are able to let go of control. According to Flint (1986) and Green, Kitzinger and Coupland (in Green et al., 1990), many women are only able to have a positive childbirth experience when they are able to flow with their bodies rather than trying to assert control over events or their own behaviour. In this line of thought, Michel Odent (1986) writes that birth is an extraordinary event for the primal adaptive system and that the best way to give birth is to reduce the inhibitions of the 'new brain' or the neocortex. The active part of the brain during childbirth is the archaic brain or the primal brain. It is this part of the brain that secretes the hormones necessary for childbirth. In order for a woman to effectively give birth thus implies reducing the control of the neocortex or in other words for her to let go of the 'conscious' control of herself and her surroundings. Janet Balaskas (1988, p.65) suggests that women "need to lose control, to surrender and trust in the birth process which take place automatically." A mother in Balaskas (1988, p.65) describes this beautifully when she says: "It's easy if you can surrender to the birth force as it passes through you. If you relax you float, if you struggle and fight you sink."

The whole idea of control can, however, be considered to be linear or nonholistic in the sense that it "chops up the ecology" (Bateson, in Hoffman, 1981, p. 342). This happens when one takes the parts and pieces of what one is describing and decides that one part 'controls' another part or has 'power' over it. Any sense of control is merely an illusion, as control ultimately lies within the larger ecology, and even the concept of control can be argued to be false (Keeney, 1983a). To use this kind of language is to assume a dualism between one part of a system and another part – a Newtonian way of thinking about the world. However, it is sometimes useful to look at a phenomenon from a first-order cybernetic perspective. As Keeney (1983a, p. 82) argues: "we do not throw away the pragmatic advantages gained by a first-order view", but we rather contextualise the pragmatics of it. Bateson (1972) also states that we may continue committing epistemological errors as long as we know we are committing them. He labelled this position 'wisdom'. In this sense then, it is useful to acknowledge a woman's experience of control in the birth process. Even if 'control' is only a constructed reality, it nevertheless is part of the reality many women voice in relating their birth experiences.

Shared Information and Decision Making

Both qualitative and quantitative studies indicate that women in labour desire to receive information and to have their views heard and considered (VandeVusse, 1999). Studies on client satisfaction with women who have given birth often state preference for shared information and decision-making (Bramadat & Driedger, 1993). The features rated most important were that procedures were explained, information shared and women given some control in decision-making (Drew, Salmon & Webb, 1989; Green et al., 1990; Seguin, Therrien, Champagne & Larouche, 1989). When labouring women are not informed or the information they are given is inaccurate or inadequate, they are unable to be active participants in the labour process and may, therefore, respond with fear and passivity. McKay (1991) suggests in this regard that a lack of information disempowers women. One woman in McKay's study shares her experience about lack of information:

> I was wishing that a little more explaining would be done. I didn't understand what all this 'plus two', 'plus three' meant and they kept

> saying that. But I was too tired to ask questions. When they said terms I did not understand, I would panic thinking: 'What are they talking about? Is something wrong?' Sometimes I felt like they were busy. They're concentrating. Don't bother them. So I didn't ask a lot of questions I wanted to (McKay, 1991, p.290).

McKay (1991) continues in explaining that information sharing involves proactive behaviour, not simply reacting to questions labouring women may ask. The woman needs to be oriented to time, place and likely events. Fleissig (1993) asserts that in addition to information about procedures many women want constant support and information on how their births are progressing. She continues in saying that one way to increase a woman's confidence and satisfaction with childbirth is to make sure that she understands what is happening to her. In this line of thought, McKay and Yager Smith (1993) claim that when information flows freely women are empowered and able to participate more fully in decision-making. They conclude that keeping women informed during labour about what to expect, interpreting the sensations they are experiencing and explaining the labour's progress, are important aspects of emotional support and affect how women view their birth experiences. A woman in McKay's study describes how being given adequate information helped her:

> The whole way through she kept explaining every little detail, what was happening and how long things were gonna be and when something was changing, she'd tell me what they were doing, and she wouldn't do anything before she'd tell me... That helped a lot... when you're more informed of what's going on instead of them just doing their business and leaving you to it (McKay, 1991, p.292).

However, some professionals argue that allowing women to be involved in making decisions may confuse them and increase their anxiety level, which may have a negative effect on their ability to relax (Green et al., 1990). It may lead to panicky feelings and so to a sense of being out of control rather than in control. According to these professionals, giving woman control, particularly in decision making, may burden them with a sense of over responsibility with which they cannot cope. Green et al. (1990) argue that an inherent danger in women's desire to be in control of what

happens to them during childbirth is that they are set up for conflict with midwives and doctors who also want to be in control. Staff may feel threatened and be put on the defensive by women's assertive behaviour. Poor interaction may result, thus placing women in an even more vulnerable position.

A study by Lazarus (1997) found that women's full participation in decisions about birth is rare as they choose not to participate in any decision-making processes during birth. The women in this study believed that quality care and healthy outcomes are the responsibility of the medical personnel. They generally believed that the positive outcome of their giving birth would result only if they rely on the hierarchically organised health care system. This system is based on the assumption that caregiver's professional knowledge and technological expertise are superior to the women's own knowledge. The women thus did not assert their own power in the system as the holders of bodily knowledge about what is occurring during their births.

It is therefore clear that the literature does not give a consistent opinion on the impact of shared information and decision-making on a woman's birthing experience. It seems that the meaning the individual birthing mother ascribes to shared information and decision-making to a great extent determines whether or not she perceives it to be an important variable in influencing her experience or not. The 'ecology of ideas' around this particular variable and how the birthing mother 'fits' with the birthing environment's stance on information sharing and decision making thus seems to be the deciding factor. Monk (1996) acknowledges the importance of congruence between the birthing mother's belief system and that of her birth attendants. The importance of the compatibility between the midwife's birthing beliefs and that of her client's beliefs are also discussed by Morison, Percival, Hauck and McMurray (1999). In other words the coherence or fit (Dell, 1982) between the birthing mother and her birthing environment comes into play.

Expectations

A woman's expectations can significantly influence her perception of the birth experience. According to Prince and Adams (1978) women respond to the cultural expectations and norms of the culture they belong to when they give birth. Some

expect the experience to be agonising and behave as if it is so; others that giving birth is part of the annual round occasioning only a brief break in the day's work. Margaret Mead (1950, p.23) described this interplay fittingly: "So childbirth may be experienced according to the phrasing given it by the culture, as an experience which is dangerous and painful, interesting and engrossing, matter of fact and mildly hazardous, or accompanied by enormous supernatural hazards." Mead (in Oakley, 1979) further points out that in a sense birth is always a cultural act, affected by people's beliefs, expectations and customs. In essence these ideas link with what was described in Chapter 3. The shared ecology of ideas around the birthing process thus influences how a mother voices her experience of giving birth. It is in the process of languaging with herself and others that the birthing mother creates meaning from her experiences. The way she defines or frames her experience in the language of her particular culture becomes the 'reality' of her birth experience.

According to Green et al. (1990) many assumptions are generally made about what women want and expect from childbirth and about the consequences of unmet expectations. There is a common stereotype of the middle-class, well-educated woman for whom the emotional fulfilment of birth is just as important as the end product. She has read all the books, imagines that she knows exactly what to expect and believes that she will be in control. This is probably her first child, otherwise she would know better. When her expectations are inevitably not met she may be devastated and may even suffer from post-natal depression. This stereotype is juxtaposed with that of the uneducated, working-class woman for whom birth is merely a means to an end, who has no airy-fairy notions about fulfilment, and who is happy to hand over control to the staff as the professionals who know best. These stereotypes are, however, not supported by research. Rather the opposite seems to be true. High expectations are found *not* to be bad for women, although low expectations often are (Green et al., 1990). Other researchers also found a relationship between positive expectations and positive experiences (Byrne-Lynche, 1990; Slade, McPherson, Hune & Maresh, 1990). However, negative expectations may be associated with poor psychological outcome. Women who do not expect birth to be fulfilling are less likely to find it so. The idea of a self-fulfilling prophecy comes to mind. Watzlawick (1984, p.95) defines a self-fulfilling prophesy as "an assumption or prediction that, purely as a result of having been made, causes the

expected or predicted event to occur and thus confirms its own 'accuracy'". In this line of thinking the words in which the expectations about the future birth are punctuated becomes the frame within which the birthing mother experiences her giving birth. Watzlawick (1984), however, qualifies that it is only when the 'prophecy' is believed that it can have a tangible effect and thereby fulfil itself. This links with the idea of 'meaningful noise' as described by Keeney and Ross (1985). It is only when the ideas inherent to the expectations fit with the mother's belief system that it will be accepted by her.

Another perspective on the influence of expectations on the birth experience is put forward by Katz (1993). Katz argues that advancing technology, for example, ultrasound, foetal monitoring and prenatal genetic analysis have promoted the perception that physicians have control over the intrauterine environment and birth process. The expectation is therefore fostered that the perfect pregnancy outcome is nearly assured. An outcome less than perfect leads to bitterness. At the other end of the spectrum, mothers and the birthing family have begun to expect increasing control over the birth process and the failure to achieve a perfect birth experience leads to feelings of bitterness as well. Thus, according to Katz (1993) unmet expectations lead to feelings of bitterness and negative birth experiences.

It is clear from the above discussion that there are many opinions about the impact of expectations on a birthing mother's experience. Once again the author believes that the constructivist perspective is useful in exploring whether this 'variable' will be interpreted as being a significant contributor to a mother's birthing experience. It is the way in which the mother in communication with herself and others frames her experience that is of importance. Thus, the meanings ascribed to fulfilled or unfulfilled expectations determine whether it will be viewed as contributing to a woman's birth experience.

Antenatal Classes and Confidence in Preparation

Many studies (eg, in Leifer, 1980) report a range of benefits resulting from childbirth training and preparation. These benefits include reduction in length of labour; a decreased incidence of birth complications, surgical procedures and

anaesthetics; a more positive attitude after birth; increased self-esteem and a more pronounced sense of being the agent in control of one's own behaviour. Niven (1992), however, argues that although antenatal classes seem to offer some benefits, these appear to be limited. Research does, however, generally indicate that attendance of antenatal classes is associated with some limited reduction in pain and stress in labour.

Various forms of antenatal preparation exist, but most aim to address the primary concerns of anxiety and pain in childbirth. The two main movements in antenatal education developed from the pioneering work of Grantly Dick-Read (1942) and Lamaze (1958). The relief of fear and anxiety during childbirth was central to Dick-Read's thinking and 'childbirth without fear' became his aim. The underlying idea is that education about the mechanisms of pregnancy and childbirth and preparation to use relaxation and breathing techniques during labour and delivery would appease the labouring woman's fears and anxieties. The Lamaze method aims to produce 'childbirth without pain'. It has evolved from the Russian and French schools of psychoprophylactic training and utilises more intensive education in methods of pain control. Both approaches, however, provide "accurate information regarding the processes of pregnancy, labour and delivery; training in relaxation and in the use of breathing techniques" (Beck, Geden & Brouder, 1979, p.252). Therefore they are considered to be very similar. Niven (1992) believes that the provision of accurate information should relieve some of the anxieties women experience during childbirth, as it tends to normalise their experience.

Most antenatal class attendees acquire relevant obstetric and procedural information. However, research seems to suggest (in Niven, 1992) that although antenatal education provides information that is accurate in medical and biological terms, it is not accurate in experiential terms. A lot of information that is given about childbirth is procedural, but this is less helpful than sensory information combined with coping instructions. Sensory information describes the sights, smells, sounds, tastes and tactile sensations involved in an experience. The provision of sensory information in childbirth would thus need to concentrate, for example, on the sensations of contractions during each of the stages. Kitzinger (1987) mentions in this line of thought that childbirth education can be impoverished and drained of much

that it has to offer if it is restricted to mere anatomy and physiology, relaxation drills and breathing techniques. The preparation for birth involves much more than learning what happens during the birth process itself. In a sense preparation also involves working through feelings, and concerns emotional aspects of adjustment to a new life-phase, a different image of the self, and a different social role (Kitzinger, 1987). Monk (1996) adds to this perspective in her criticism of antenatal classes. She argues that most hospital antenatal classes are based on a biomedical mechanistic approach where the body is viewed as a machine to be controlled by the mechanic-physician. Information that used to be held by older women is now "packaged as 'expert advice' provided by professionals and, all too often, classes are just forums in which women are told about the advantages of technology and how it will be used" (Priya, 1992, p.63).

Despite valid criticism, antenatal classes and preparation for birth can be considered to be an important contributor to the mother's birth experience, especially as it tends to normalise potentially frightening bodily sensations. The information presented in these classes becomes part of the ecology of ideas surrounding birth. These shared ideas have the potential of becoming the frame in which many mothers punctuate their birth experiences. The 'fit' between the mother's own ideas, expectations et cetera and that of the wider system she interacts with once again comes into play. If her ideas 'fit' with the content of the ideas presented in the classes, she may benefit from it and thus perceive it to be a positive contributor to her overall birth experience.

Experience and Perception of Pain

Some researchers suggest that pain seem to be a very important contributor in women's overall sense of well-being during delivery. Although some women relate that the pain is unbearable or a lot worse than they expected, others believe that the pain is not so bad or a lot better that they expected (Lavender et al., 1999). In their narrative study, DiMatteo et al. (1993, p.206), found that women almost uniformly expressed surprise, and even shock at how painful and physically threatening childbirth was. Many mothers related that they were poorly prepared for the process of labour and birth and that the pain of childbirth was a 'well-kept secret'.

As was mentioned in Chapter 3, pain is more than just 'the firing of nerve-endings'. The experience of pain is very closely linked to the interpretation thereof. As an example, a mother's experience of birth in a hospital setting is primarily interpreted in terms of pain. Rothman (1981) discusses a number of reasons why pain becomes a central issue in hospitalised births. For one thing, birth in hospitals is experienced as more painful than birth outside of hospitals. The lack of emotional support and the simple lack of distraction play a large part in the experience of pain. Second, the physical management of birth in hospital can make it more painful. Confinement in bed prolongs labour, and the comparatively inefficient contractions in the horizontal position may make it more painful as was discussed in Chapter 2. Third, the mother's experience needs to be conceptualised as pain in order to justify medical control. This is not to say that labour is not in itself painful. It usually is. But there is a difference between experiencing pain and defining the entire situation in terms of pain. Pain in itself – felt pain, real pain, can be handled in different ways. It can be met with chemical, pharmacological technology (to such an extreme that the mother is rendered unconscious); with physical contact and comfort; with reassurance of its normalcy and its passing; or any combination of these. In the situation of childbirth in hospital, the mother's demands for attention in labour is generally responded to with pain medication, thus reaffirming the conceptualisation of her needs as stemming from pain and reaffirming the view of her as a patient like any other surgical patient, and the delivery room as any other operating room.

The experience of pain, however, can also be interpreted in such a way that it enhances a woman's birth experiences. Monk (1996) argues that pain in labour stimulates endorphin production and that this provides an intrinsic reward system during the labour process. Odent (1984) explains that the longer and more difficult a woman's labour is, the higher her endorphin level will be. A higher endorphin level is closely connected with prolactin release. Prolactin is the 'mothering hormone' responsible for milk secretion. In other words, the more pain, the more endorphins and thus more milk. Monk (1996) continues in saying that the use of painkillers and synthetic hormones that compete with natural hormones alters the complex hormonal balance. This affects how the mother feels after birth and influences her breastfeeding potential. This perspective on the management of pain thus drastically differs from

the medical approach to pain management. Pain is considered to be part of the process of childbirth and indeed as a necessary part in the complex flow of hormonal interaction.

Monk (1996) describes a radical perspective to the experience of pain during labour. By interpreting birth as a growth experience or as the passage from girlhood into womanhood, pain is accepted as an integral part of the experience. "When in pain your whole reality crumbles...a woman in labour...lets go of her girlish selfishness, so that when the baby comes, she will be able to surrender her own needs for baby's first..." (Monk, 1996, p.48). In this reframe, pain becomes a positive experience in the woman's transition into motherhood.

It can thus be said that the way in which pain is framed significantly impacts the experience thereof. The ecology of ideas or shared beliefs about labour pain, as well as the individual mother's fit with the belief systems she interacts with, becomes important in the understanding of pain as a contributor to the birth experience.

A Woman's World-view or Epistemology

A compelling study by Davis-Floyd (1994) suggests that a woman's belief system or world-view to a great extent influence what she perceives to be important in her birth experience. Davis-Floyd (1994) expected to find that most women would resent and resist the increasing number of impersonal intrusions of technology into birth. Many researchers such as Arms (1981), Rothman (1981) and Shaw (1974) perceive these technological intrusions as women's loss of power as birth givers. However, as Davis-Floyd (1994, p.1128) discovered, "seventy percent of my 100 interviewees, if not exactly thrilled, were at least comfortable with their highly technologised obstetrical experiences, and were not much interested in resistance."

Most women are socialised throughout pregnancy and indeed for most of their lives to believe that birth is a medical event requiring a hospital and a physician. The shared ecology of ideas in our western technological culture provides the backdrop of the drama of childbirth in such a way that birthing mothers in our society willingly play their part as patients that are 'delivered' of their babies instead of delivering their

babies themselves. Peterson's statement (1981, p.67) that "as a woman lives so shall she give birth" gives credence to the idea that a woman's inherent epistemology or her world-view will also be recognisable in the way that she gives birth.

Interactional Approach

The following discussion highlights the focus of a widened lens to include the other actors and circumstances of the birthing drama. The basic assumption of the interactional approach is that the understanding of the individual mother's birthing experience lies in the relationships between the mother and her social environment. This perspective, however, still adheres to the Newtonian worldview as it seeks to explain human experience and behaviour by identifying linear-causal relationships between objectively observable elements.

Partner Support

Henneborn and Cogan (1975) have found that the presence of husbands has a positive effect on their wives' reported feelings of pain and there is a decreased use of medication because of this. Monk (1996) confirms that spousal emotional and physical support has been shown to help improve the birth experience and to reduce the need for interventions. This is probably due to increased pain tolerance when a woman feels that she is supported. These research findings are also mentioned by Somers (1999) and Bartels (1999). There are, however, researchers who report that some women do not necessarily experience their partner's presence positively. Odent (1986) even questions whether men really have a place in the birthing room. Partners, who have no experience with hospitals and who are distracted, upset or terrified to see their wives in pain are not able to be supportive and can even distract the birthing mother and her attendants. A partner's emotional reaction to the medical aspects of delivery can very easily interfere with his or her effectiveness. Many women wonder if another woman who is familiar with childbirth might not be more supportive, as is also suggested by clinical research (Kennel, Klaus, McGrath, Robertson & Hinkley, 1991). A woman in DiMatteo's study explains how she experienced her husband's presence during delivery:

> My husband's kind of nervous and particularly about medical things. From the moment I walked in the door, he said, 'Take an epidural.' He didn't want to deal with it, I mean, he was scared for me. He didn't like seeing me in pain, and he couldn't handle it very well. Once I had the epidural, he was fine (DiMatteo et al., 1993, p.207).

Thus, it seems that the way in which the birthing mother interprets or frames her partner's presence at the birth determines whether or not she perceives it to be a positive contributor to her overall birthing experience. The ecology of ideas on the presence of the father during birth also impacts on the woman's experience. In this regard Odent (1986) mentions that the presence of the baby's father has become a necessity in the context of modern obstetrics as it makes hospitals more humane.

Support from Midwives, Nurses, Medical Personnel

The way a woman is treated by the professionals on whom she depends may largely determine how she feels about her birth experience for the rest of her life (Simkin, 1991). Simkin (1992) further notes that the physical and clinical features of labour are of less importance to a birthing mother's overall experience. What seems to be of more importance is the way women are treated. A woman in labour is very vulnerable as her most private body parts are exposed, she is in pain, and she may sweat, tremble, moan, and cry out while among strangers. All this also takes place in a strange environment in which she more often than not feels unsafe. If the woman is treated without respect, if her efforts to maintain dignity are rebuffed, or if she is taken advantage of, the negative impact might be permanent. However, if she is nurtured, treated with kindness and respect, and feels like a participant, the positive impact is significant and lasting (Simkin, 1992). Research by Halldorsdottir and Karlsdottir (1996b) confirms that when women in labour perceive their caregivers to be uncaring that they experience a sense of discouragement and see the uncaring caregivers as an unfortunate hindrance to a successful birth experience. Lavender et al. (1999) and McKay (1991) also acknowledge that the support of midwives and nurses are one of the most important aspects of labour. One woman (in Lavender et al., 1999, p.42) relates her experience with staff: "I felt that the care I received throughout a long labour was appropriate and I felt I was treated excellently by all I

came in contact with. These were the factors that were most significant to my well-being throughout the birth."

However, a woman entering the birth context does so with preconceived ideas, attitudes, expectations and attributions of meaning. These are communicated through various verbal and non-verbal ways to the system she interacts with. The opposite also happens in the sense that the ecology of ideas implicit in the birth context is also communicated to the birthing mother through various verbal and non-verbal ways. Whether these ideas "fit" with each other in the new larger system will probably give an indication of the mother's satisfaction with the care she receives.

Intervention

According to DiMatteo et al. (1993), women who have more obstetric interventions express greater dissatisfaction and report more negative reactions than those who have fewer interventions. These findings are also supported by Green et al. (1990), Oakley (1983) and Simkin (1991). Crowe and Von Baeyer (1989) found that women who have spontaneous vaginal deliveries rate their experience as significantly more satisfying than those who have a forceps or caesarean delivery.

However, Lavender et al. (1999) found that the women in their study did not perceive intervention as a negative aspect of labour. Many women in their study saw intervention as a positive contributor to their experience when abnormal labour patterns developed. In this regard Green et al. (1990) found that interventions used did not affect women's views of birth as much as whether they believed that "the right thing had been done" (in Shearer, 1990, p.24). In this sense then it seems that the meanings ascribed to the interventions used are what influences the birthing mothers perception of her experience and not so much the interventions themselves.

Financial Factors

DiMatteo et al. (1993) discuss another factor that seems to influence a mother's experience of giving birth. In their study they found that some women describe how insurance coverage affect their birth experiences, the nature of decisions

made about prenatal care and even the management of the birth itself. Some insurance policies do not cover maternity care. In these cases it pays to rather have a caesarean section because surgery and hospitalisation in the case of surgery are covered by the hospital plan of most medical aid insurance policies. A woman in the study by DiMatteo et al. (1993, p.207) explains: "We had no insurance for basic delivery, and in a way we were hoping for something to go wrong so the insurance would kick in and we'd save that couple of thousand dollars." Financial pressures and worry may also influence a mother's birth experience negatively as documented by Affonso and Mayberry (1990). However, as was discussed before, the way in which the birthing mother frames her experience becomes the 'reality' of her experience. This is also the case in terms of her experience of financial considerations – the ecology of ideas surrounding financial factors comes into play. Thus, the shared beliefs on how birth should be managed (as well as the financial administration thereof) influence the birthing mother's experience.

Birth Environment

Once again the literature is inconsistent in its opinion in terms of this variable. Some birthing mothers express great satisfaction with hospital delivery (Davis-Floyd, 1994). Prince and Adams (1978) discuss how women who have had difficult or painful deliveries before may be reassured by the quality of technical achievement manifest in the labour ward. For others the mechanisation of a human experience is objectionable and alienating as was discussed in Chapter 2. The mother's own preference regarding the birth environment is important in how she would experience her birth. The 'fit' between her and the environment in which she births seems to be an indicator of the quality of her birth experience. This links with what was discussed under some of the previous headings.

The Social Construction of Birth

When a woman embarks on the complex process of bearing a child, she brings with her a whole array of social and cultural definitions about childbearing and motherhood. Her definition of giving birth as well as the definitions the culture she belongs to have about birth, will influence her behaviour, her experience and the decisions she makes (Kehoe, 1981). The ecology of ideas around childbirth thus has a profound effect on the experience a woman has when she delivers her baby. The language (verbal and non-verbal) used during childbirth further influences her understanding of what happened during the birth process. A labouring woman in a medicalised birth is usually lying in a hospital bed with an intravenous needle in her arm, listening to doctors being paged, with strangers coming in and out of her room. The verbal and non-verbal cues are no different from cues she would expect if she were any other patient in hospital. People cannot be placed in hospital gowns on hospital tables under hospital lights wearing little bracelets that will identify them, without there being created for them and for those caring for them, the image of a patient (Rothman, 1981). This example illustrates how the ecology of ideas evolves through a qualification process. The birthing woman and the medical personnel she interacts with have co-created a shared ecology of ideas in which the birthing mother becomes a patient who is to be delivered of her baby. The effect of this on the mother's experience would depend on the structure (Maturana, 1975) of the ecology of ideas of the birthing mother at the time. If the ideas and meanings expressed can be accommodated in the ecology of ideas she holds on giving birth, one can say that a process of mutual qualifications has taken place.

When people have negotiated a definition of a situation, that becomes the reality for them, and they have to work within that reality (Rothman, 1981). An example to illustrate this is a woman at term having painful contractions at ten-minute intervals, who has not begun to dilate. Whether she is in true labour depends on whether she then begins to dilate. Whether this woman will be considered to be in 'real' labour or 'false' labour further depends on what happens when she enters the hospital setting. If she presents herself to the hospital claiming that she is in labour and is admitted, the medical acknowledgement that she is in labour will have been established. If she, however, does not begin to dilate for 24 hours, and then delivers

her baby after 12 hours – 36 hours after her admission - she will be considered to have had a 36-hour labour. The medical authority will see it as a 36-hour delivery, and so will she. That reality, which they negotiated when labour began, becomes the only reality they have. On the other hand, if she is denied or delays admission, and only presents herself to the hospital 24 hours later for a 12 hour in-hospital labour, she will have had a 12-hour labour preceded by a day of discomfort. For the labouring woman, the physical sensations in both scenarios would probably have been the same. It is the social definitions – calling it labour or not – that made the difference between a terribly long labour and a pretty average labour with some strange contractions beforehand. The example (in Rothman, 1981) illustrates how crucial a role language plays in the construction of a shared view of reality held by speakers of a common language.

Reconceptualising the Birthing Experience

The following reconceptualisation is an attempt to organise the wealth of information on a woman's birthing experience. The writer suggests that the theme running through all the research presented so far has to do with the meanings ascribed to the birth experience. Figure 4.1 presents the following ideas:

- The mother's birthing experience is partly a constructed reality done in language, both internally by the mother to herself, and externally, in communication with others.
- Language as a digital representational system of the birthing mother's experience represents her experience to herself as well as re-presents (communicates) her representations of her experience to others (Keeney, 1983b).
- The birthing woman ascribes meaning to her experience through languaging with herself and with others.
- The continued exchange of meanings between the birthing mother and those she interacts with leads to a co-construction of a particular reality system.

- The mother's experience of giving birth is thus embedded in the ecology of ideas (shared meaning systems) around the issue.
- The language of the culture the birthing mother belongs to (shared meanings or ecology of ideas) gives words to how the experience is punctuated or understood.
- The birth experience cannot be ascribed to a single cause or positively associated with a particular combination of factors; rather, each individual mother experiences giving birth uniquely and her experience thereof thus has to be understood in its unique context.
- The recursive interaction between the birthing mother and other people involved in the birth process and the birth environment is acknowledged. (Not a linear cause-effect event as in Newtonian thinking.)

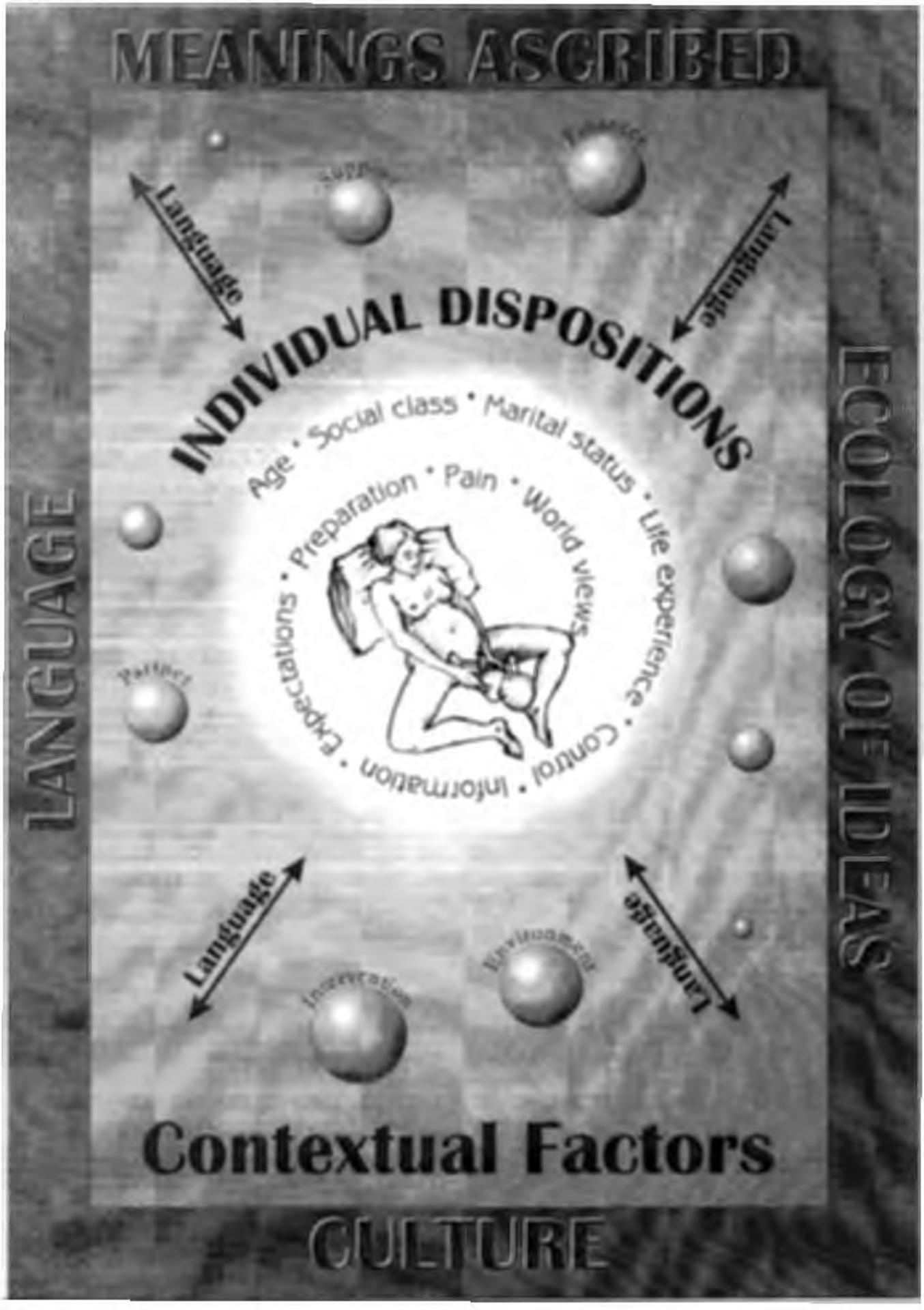

Figure 4.1. Reconceptualising the birthing experience

Conclusion

As Auerswald (1986, p.15) so fittingly comments: "Whenever we construct a theory or a curriculum or any other structure, we are editing the Universe. We are imposing on the infinite randomness, a set of connected ideas that are ours alone. If we assume that our particular edit has anything to do with some ultimate reality, we are not only arrogant, but foolish." In agreement with Auerswald, the author acknowledges that in punctuating a particular reality, one inevitably excludes many other versions that might have been equally relevant. This chapter, however, is a way of making sense of the vast amount of literature on the birth experience through conceptualising it within an ecosystemic framework.

The main focus in this chapter has been on the factors influencing a mother's birthing experience in a medicalised context. As was discussed, the ecology of ideas in this context centres on the dominant medical perception of the need for obstetric management and the birthing mother as a compliant patient. It begins with the medical and technological conceptualisation of childbirth and is developed into a basis for necessary medical control that is accepted by others as shared knowledge. The following chapter will discuss other discourses on childbirth that has developed in reaction to the dominant technological version.

CHAPTER 5

ALTERNATIVE BIRTH STORIES

Two roads diverged in a wood, and I –
I took the road less travelled by,
And that has made all the difference.
- Robert Frost

Introduction

This chapter is an exploration of the alternative birth narratives that have developed mainly as a reform movement to do away with the excesses of medical management in the technological western society. It will be shown how many of these alternative ways of dealing with birth adheres to ecological principles and are coherent with an ecosystemic epistemology. A comparison between the inherent epistemologies of the technological- and the alternative birth approaches will be given as well as recommendations for the care of birthing women by the medical profession.

At this point though, it is important to clarify some of the terms used in this chapter. The terms 'natural', 'prepared' and 'alternative' childbirth may easily be confused. 'Natural childbirth' especially is a very slippery concept as it has been used to indicate anything from no surgical incision at the time of the birth (episiotomy), to whether or not the woman was conscious, and even to consciousness alone (with an epidural or spinal anaesthetic). 'Prepared childbirth' is associated with the woman's active preparation for birth through learning breathing- and/or relaxation techniques. 'Alternative childbirth', however, describes an alternative to the medically prescribed birthing practices and involves a different epistemology altogether. Stacey (1988) defines 'alternative' birth as more than just a single or specific natural method. It encompasses a philosophy and theory that combines high levels of continuous social support for the birthing woman, low levels of intervention, birth at home or in a birthing centre and a holistic approach to the whole event.

The Development of Alternative Birth Practices

From the mid 1960s it became apparent that many women were beginning to question the experiences they were having in hospitals. The questioning of birth practices, however, had been triggered much earlier. One of the first people to question the meaning and quality of the experience of birth was a male doctor, Grantly Dick-Read, who is considered to be the father of natural childbirth. Dick-Read worked for many years among mothers in the slum areas in London and his work there convinced him that there was more to motherhood than the aseptic, sterile, anaesthetised conveyer-belt system that the hospitals were offering (Carter & Duriez, 1986). Dick-Read (1942) developed a theory that has come to be known as the 'fear-tension-pain syndrome'. The theory proposes that the pain of birth is largely due to the effect of fear and tension on the muscles of the uterus. Dick-Read (1942) believed that through understanding, relaxation and breathing exercises women can control these muscles and reduce or eliminate labour pain. He also proposed that women needed continual comfort and support throughout labour.

Some years later, a French doctor by the name of Ferdinand Lamaze (1958) took up the idea of conditioned reflexes that had been developed out of Pavlov's (1955) work in Russia. Lamaze introduced the psychoprophylactic method of childbirth to the West, a method that entails distracting the mother from sensations of pain via an elaborate breathing drill. For the first time since the beginning of the takeover of birth by the medical profession, birth was not something that happened *to* the woman, but something the woman could actively participate in. The Lamaze method largely succeeds because it is a practical method that fits with the hospital context.

Frederick Leboyer (1975), a French obstetrician, proposed a natural childbirth from the baby's point of view. He believed that the baby should be born into twilight or near darkness, in a peaceful room, and should be placed immediately after birth against the mother's body and be massaged by her. The umbilical cord should not be cut until all the remaining placental blood has passed to the baby. Later the baby should be placed in a bath of warm water, returning it to the wet weightlessness of the uterine environment. The Leboyer method proposes a non-threatening environment

in which the baby should be born. Leboyer proposed that the slow stimulus of the baby's senses placed him or her in good stead for future development.

Another step away from medicalised birth practices came from the work of Dr. Robert Bradley (1974) whose *Husband-Coached Childbirth* made the father an integral part of the birthing team and allowed him not only to be present, but also to take an active role in the birth of his child. The Bradley technique teaches slow, deep breathing and encourages the woman to focus on the sensations within her.

However, even though natural childbirth leaves the woman awake and aware, it does so within a framework in which she is still a patient, under the authority of a doctor and subject to the schedules and indignities of hospital routines. In most of the natural childbirth models the woman is encouraged to work alongside the doctor in the delivery of the baby. The doctor, however, remains the one in charge. The woman can only watch and help in the process of birth and thus is not truly recognised as the central and responsible person in the act of birth.

Most of the advocates of natural childbirth have shown a narrow concern for the position of women. Their prescriptions are based on a particular definition of the meaning of motherhood. Dick-Read (1942) views the mother in a reductionistic light. He sees childbirth as a woman's destiny and her greatest achievement and joy. Leboyer (1975) considers the mother's body as a prison, and the mother herself as ejecting her helpless baby painfully and forcibly into the harsh bright world – a very limited and prejudiced perspective on motherhood. Lamaze (1958) stresses the mother's personal need to control birth, advocating control through detachment and therefore taking away the mother's mental and emotional awareness of her body. Bradley (1974, p.117) is clearly patronising in his description of the mother as a little woman or little girl who is "nuttier than a fruitcake" during pregnancy. He advises that the birthing woman should follow her husband's and the obstetrician's more rational lead in areas such as routine episiotomy.

None of these prescriptions for natural childbirth places women at the centre of their own experience of childbirth. For the most part the reform movements in natural childbirth and Leboyer's work with newborns have not challenged the

dichotomies inherent in the medical management of birth. Mind and body, and emotional and physical needs are still seen as separate, with emotional needs clearly secondary. In emphasising pain and the control thereof, many of the prepared childbirth education groups reinforce the medical model of childbirth as a crisis situation. The substitution of for instance, breathing techniques, for control by drugs does not challenge the essential model of what is occurring at birth. Childbirth continued to be defined in terms of medicine and the hierarchical and patriarchal systems were still very much in place. It is the homebirth movement that presented genuine challenges to the medical model.

The Homebirth Movement

A more determined demedicalisation of the birth process became evident on two fronts in the United States during the early 1960s. On the one front was the feminist movement with its concerns for the control by women over their own bodies, their fertility and their ability to give birth without male dominated aid. The other front reflected women whose views were based on tradition, on the dream of a woman, snug in the midst of her family giving birth to another member of her family (Carter & Duriez, 1986).

In a sense the homebirth movement presented an awkward alliance between these two groups. For the feminists, childbirth tended to be one of many fronts on which the struggle for woman's control of their lives was taking place, while the traditionalists centred the issue on the traditional wife-mother role. The traditionalists did not focus so much on the issue of a woman's control over her body, but rather on the involvement of the family and their control over birth. While both these groups challenged the medical model and the profession of medicine, the feminists went beyond that and challenged the patriarchal family structure as well, which presented a threat to the traditional family structure. However, both groups recognised the need for solidarity in order to effect change, and thus issues of conflict, such as abortion, were never raised outside of small homogenous groups.

Both groups have contributed to the demedicalisation of childbirth and still play a big part in effecting change worldwide. Their contributions have, however,

developed in different directions. The differences between the traditionalist and feminist approaches are probably most clearly visible in the role that fathers play in the birth process. Marion Sousa's (1976) *Childbirth at Home,* presents the traditionalist argument for childbirth at home. The book is written for parents who feel that the birth of their children should be a family event rather than a surgical procedure. The Bradley method (Bradley, 1974) is also closely associated with the traditionalist movement. While some may interpret the traditionalist perspective as supportive of the patriarchal system, many others frame the traditionalist's contributions as applicable to the father as an equal in a supportive role. The father who participates actively in preparing for birth, helping the mother do the exercises, learn breathing techniques, and so on, who actually supports her in labour, may be exhibiting a truly supportive and mutual relationship preparatory to non-sexist and cooperative child rearing.

The feminist contribution is probably most clear in the midwifery movement. Essentially, the feminists believe that birth is women's business in which men do not have a place. The midwifery approach exemplifies this strong female solidarity when women support each other in the uniquely female journey of giving birth. The use of midwives during birth will be discussed later in the chapter. The feminist movement can also be credited with much of the growing awareness and scepticism regarding health-care and medical practice in general (Rothman, 1981).

Many other alternative birth approaches developed out of the homebirth philosophy. Some of these will be briefly discussed. Narratives of women's birthing experiences within the alternative birth movement will be included. At this point, however, it is important to remind the reader of the reconceptualisation of the birth experience as was outlined in Chapter 4 and in Figure 4.1 specifically. The birth experience of people choosing an alternative birth approach is also embedded in a shared ecology of ideas around the issue of birth. The co-created definition of what constitutes an "alternative birth" has become the frame in which many mothers in this 'subculture' define their birth experiences. Once again the shared meaning systems come into play in understanding an individual birthing mother's experience.

Homebirth

In essence the homebirth movement reflects women's desire to assume active responsibility for their bodies, their lives and their birth experiences. Instead of showing a blind dependency on experts, passively allowing doctors to impose their authority on them, couples are informing themselves as much as possible and selecting birth attendants who will help them in their actions. These attendants are usually not only medically skilled, but also sensitive and aware of the emotional and psychological qualities of birth.

A homebirth has many advantages, including self-determination, no unnecessary medical intervention, as well as choice of labour and birth positions. The father can take an active role in the birth, rather than being 'allowed' to be present in the delivery room. If the family so chooses, the baby's siblings can share in the birth experience and immediately bond with the baby. The baby is welcomed into a loving environment where the birth is eased by soft light, gentle massage and reassurance. The baby can nurse immediately after the birth and can bond with both parents instead of being whisked away to be bathed, weighed, banded, and so forth. The mother has the advantage of having the total attention of her birth attendant, while she is surrounded and assisted by people who love her. A homebirth can thus be a significant contributor in strengthening family bonds.

A common misconception is that homebirth poses grave risks and dangers, while hospitals, with their immense arsenal of equipment and emergency procedures, provide the safest birth money can buy. However, as the homebirth movement matures and more studies are completed on maternal and infant outcome, the results demonstrate that prepared homebirths (with prenatal care and a skilled birth attendant) not only have a mortality rate as good as or better than hospital births, but have a much better record in terms of complications and damage to both the mother and her baby (Baldwin, 1986).

A mother describes her home birth experience:

> I had my child at home because I wanted to have complete control over the quality of my birth experience. I wanted rituals, fresh flowers, candles and loved ones surrounding me to share this dance of my womanhood. I couldn't imagine leaving my nest during labor and driving to the hospital when all my instincts grounded me to my own private space. I had danced throughout my pregnancy and had confidence that my body, mind and spirit were prepared to meet the challenge of labor and birth. Most important, I really believed that a homebirth would provide a safer environment for both me and my child...Mara Sabine Link was born on March 28, amidst flowers, candles and friends. My womanhood blossomed its fullest to meet this new being. Although a doctor was present, the choices were my own. The responsibility was my own. The quality of the experience was as I intended it to be – perfect (Baldwin, 1986, p.10).

A father shares his experience of his daughter's birth at home:

> This experience is the most precious that our family has shared. It binds us at a very deep, powerful and tender level. I was an active participant in the entire birth. I caught my daughter as she was born, cut the cord, and held her for the first hour of her life against my skin while my wife delivered the placenta. We were in an environment of our own choosing and making, softly lit, and filled with people we knew and loved. I cannot imagine a more intimate experience and connection with another person. My whole relationship with my daughter is firmly grounded in this experience (in Iowans for Birth Options, 2001).

Birthing Rooms

Many hospitals now offer their clients the option of a birthing room or the use of alternative birth centres. These facilities provide a home-like setting and atmosphere, with the added security of proximity to hospital equipment and facilities

in the event of complications. The birthing room is usually carpeted, with a double bed for the parents. Most of these rooms also have a stereo receiver, beanbag chairs, hanging plants, a rocking chair, a table, a private bathroom and shower, and in many cases a birthing pool as well. As many family and friends as desired can come to the delivery. A midwife or other birth attendant whom the parents have chosen attends the labouring mother. Birth centres are both revolutionising hospital births and providing a much more humane birth for many people who would never consider having their baby at home.

Some birthing centres, however, are only 'window-dressed' labour wards in the sense that they still present traditional technologic delivery techniques under the guise of a nicer setting. Alternative birth is, however, as much a philosophy as a setting. Michel Odent (in Carter & Duriez, 1986, p.182) recognised the futility of this 'cosmetic' approach: "...birth without violence is not a method, a technical modification which can be rapidly and easily assimilated by means of some indeterminate reform. It is a development in concepts, a revolution." With this in mind, Odent organised a team of like-minded staff to support his work. He developed a birth clinic in Pithiviers, France that truly adheres to an alternative birthing approach. The principle that women want a "labour that is a personal, intimate and a deeply creative experience...in which she can be herself" (Odent, 1984, p.xviii) is adhered to in this context. Odent (1986, p.xx) turned away from managed birth and male views of the experience, instead embracing the "striving, the creative pain, the mystery and the exaltation of natural birth" by providing an atmosphere that "encourages women to give in to the experience, to lose control, to forget all they learned – all the cultural images, all the behavioural patterns" (Odent, 1986, p.26). Other birthing centres worldwide also adhere to this approach and philosophy.

Midwives

It is generally recognised that midwives have been with us since Biblical times, and that midwifery is the oldest female occupation (Marland, 1993). The word 'midwife' is derived from the old English 'with woman' (Kaufman, 1993) and presents a stark contrast in meaning from the term 'obstetrician' that is derived from the Latin 'to stand before' (Hewison, 1993). In this regard Kaufman (1993) claims

that the word midwife implicitly means that the midwife is not only physically present, but psychologically and emotionally present as well.

It is very difficult in a technological society's fragmented health care system to establish practices that treat pregnancy as a whole. One solution to the problems stemming from this fragmentation is to use the services a midwife offers. A midwife usually sees the woman throughout her pregnancy, stays with her during her entire labour and delivery, and provides emotional support as well as help with childcare in the first postpartum months. This kind of care ensures continuity of care to the pregnant woman and her family.

Page (1993) claims that a midwife is in an excellent position to create a balance between competent and effective clinical care, and sensitivity to the significance of birth as a life event. In this sense it is not surprising that midwifery is considered to be an art as well as a science (Halldorsdottir & Karlsdottir, 1996a). A midwife can create a safe and supportive milieu in which the individual birthing mother can discover for herself what it means to give birth. The woman may need some help, but the help for the most part is in the form of teaching her how to do it for herself. Nancy Miller, a contemporary midwife, describes her role in the birthing process in the following striking statement:

> I see myself going in and being a helper, being an attendant. Sometimes I play with the kids, or I do some cooking. Sometimes I sit with the woman. Sometimes I help the husband assist the woman. Some families need more help than others, but it is easy to go in and see where you are needed and how you can fill that role (in Rothman, 1981, p.179).

Another midwife describes her goal as "...when I leave that family feels they birthed it. I was there and I helped, but they did it...so that in their whole recollection of the experience I will be very minimal" (in Rothman, 1981, p.180).

Doulas

A doula is a woman experienced in birth who provides emotional, physical and informational support to the mother during labour and birth. A doula differs from a midwife in that she is usually a layperson, while a midwife is a registered nurse who attends the birthing mother in a professional capacity. The word doula is derived from Greek and literally means 'woman's servant' (Niven, 1992). A doula usually meets with the birthing couple once or twice before the birth and discusses with them their expectations and ideas about the birth of their child. The doula supplements information learned in antenatal classes and corrects misinformation gleaned from the personal birth experiences from friends and relatives. Following the prenatal meetings, the doula is on 24-hour call – often for two weeks before and after the due date. During early labour, the doula and birthing mother stay in touch. When the mother feels the need for additional support, the doula will come to the mother's home or meet her at the hospital or birthing centre. She will help the mother relax during contractions and suggest ways to cope. The doula is also responsive to the needs of the father and respects his level of involvement. A doula can thus be a strong link in the chain of support that new parents need to have a satisfying and joyous birthing experience.

Research into the effectiveness of doula-support shows definite benefits. A combined analysis of research results from six randomly controlled trials show that a doula's presence is associated with reductions in caesarean births, length of labour, epidural use and pitocin use (Klaus, Kennel & Klaus, 1993). Research also shows significant long-term benefits of improved breastfeeding, decreased postpartum depression and more positive maternal assessments of the baby's health (Lynch & Holliday, 1998). A mother describes her experience with a doula:

> When our brand-new baby, William, was placed on my breast shortly after his birth, it was hard to believe I really had anything to feed him. He didn't catch on right away, either. Having our doula there was a wonderful reassurance that there was nothing strange about us both being unsure how to get started. She suggested letting my husband hold

William for a while and when I put William back to my breast, he caught right on (in Lynch & Holliday, 1998, p.4).

A couple summed up their doula experience with this thought: "For us, a doula is an essential part of a natural childbirth. She is a competent and knowledgeable caregiver who personifies care during the birthing process" (in Lynch & Holliday, 1998, p.6).

Active Birth

In an active birth, a woman is free to express herself in a congenial environment and, if let to her own devices, will spontaneously choose various body positions to improve comfort, to minimise pain and to enhance the descent and delivery of her baby. Contrary to the medicalised role of being a passive recipient, the birthing mother assumes a dominant and responsible role and participates actively in the birth of her baby. The term 'active birth' therefore inherently challenges the dominant passive, patient-orientated maternity care system in technologically managed birth.

Hofmeyr and Sonnendecker (1985) define active birth as the adoption of a natural, upright or crouching birth position that is the safest, most enjoyable, most economical and sensible way for the majority of women to give birth. There is no disruption of the normal physiology of labour, no interference with the hormonal balance, while post-natal depression and problems with breastfeeding are less likely.

Janet Balaskas (1988) proposes that active birth involves an attitude of mind as well as an attitude or position of body. Birthing actively usually implies that the birthing woman will stand, walk, sit, kneel, squat and assume any upright position in the early part or first stage of labour. As the woman approaches the second stage of labour, she will use natural expulsive positions such as squatting, sitting or kneeling either upright or on her hands and knees.

Research (in Balaskas, 1988; Robertson, 1988) reports the following advantages when the mother is upright and moving about during the birth process:

- The intensity of uterine contractions is greater and more frequent.
- The dilation of the cervix is greater.
- The birthing woman experiences more complete relaxation between contractions.
- The pressure of the resting phase between contractions is consistently higher.
- The first and second stages of labour are shorter.
- The birthing woman experiences greater comfort, less stress and pain and so requires less analgesics.
- The newborn's condition is improved.

There are many reasons why the upright position during labour holds so many advantages for both the labouring woman and her baby. Some of the reasons include the pull of gravity that assists uterine contractions and bearing down efforts by adding pressure; the drive angle of the uterus is less when the body is upright, so demanding less effort for the uterus; the increased pressure of the abdominal wall and the diaphragm on the uterus increases the resting phase pressure on the uterus; the entrance of the baby's head to the inlet of the mother's pelvis is easier and the head's direct application to the mother's cervix is assisted; and there is improved placental circulation giving a better oxygen supply to the foetus (Balaskas, 1988).

A mother giving birth to her second child describes her experience of an active birth:

> I found a lot of advantages in giving birth this way...I felt much more in control, as if I knew what I was doing. The contractions were much easier to cope with, despite the sickness, shaking and feeling faint, because of the gradual build-up. I enjoyed the freedom of movement, being able to position myself for relief and rarely lying on my back, and kneeling forward seemed to relieve the pressure and give me less back discomfort. Pushing in the second stage seemed much easier. The solid base of the floor made it easier to push hard – much easier than pushing against the midwife – and I am convinced that gravity helped also...I found this birth

a very satisfying experience...I felt in control most of the time and always directly involved in all the proceedings (in Kitzinger, 1987, p.128).

Water Birth

The idea of creating an aquatic environment for birth was pioneered by the Soviet researcher and swimming instructor, Igor Tjarkovsky in Moscow in the 1960s (Balaskas & Gordon, 1990). Leboyer's work, from which Tjarkovsky is said to have gained inspiration, is considered to be the wellspring for the philosophy of water birth. Michel Odent is generally considered to be the pioneer of water birth in the West. Water labour and birth has to a great extent become Odent's trademark. This was, however, not his intention. When Odent first introduced a water pool into the maternity unit at the hospital in Pithiviers in France, he was primarily looking for a way to help mothers to cope with pain and to avoid intervention. Odent observed that the majority of mothers chose to leave the pool for the actual birth. He emphasised that the pool was offered to facilitate labour and not with any conscious intention to encourage birth under water. Sometimes, however, birth spontaneously occurred in the pool and Odent realised that there were no special risks attached either to labour or birth under water (Odent, 1984). Water birth has since become an established way of labouring worldwide and it has been estimated that more than 10000 women in Britain alone have laboured or given birth in water (Balaskas, 1996).

When a woman births in a pool of water, her sense of privacy is increased. She has her own small space in which she can relax and surrender to the involuntary contractions that open her womb and expel the baby. She is helped and protected by the water and has more control over her body, greater freedom to move and less possibility of being disturbed or distracted. The relief from pain and greater privacy are two compelling factors that attract modern women to the use of water for birth. The use of water for labour and birth is understandably popular amongst women giving birth at home where it is usually easier to arrange a birthing pool. Many hospitals and active birth units are, however, keen to provide these facilities as well. The presence of a water pool in a hospital provides many women a refuge from intrusive sounds, lighting and other disturbances, while allowing the security of

obstetric back up should a problem arise. In a sense water birth, like homebirth, has become symbolic of the non-orthodox, non-obstetric approach to birth.

Many positive effects of water immersion in labour and/or birth have been documented (eg, Balaskas, 1996; Eldering & Selke, 1996; Garland, 1996). Some of these benefits include the following:

- Water minimises pain so effectively that for most women other pain control methods are no longer needed. Some people call water birth an 'aquadural'.
- Water facilitates a dysfunctional labour as it is found to be an effective way to stimulate dilation of the cervix when the mother has difficulty progressing.
- Water facilitates the second stage of labour. Water softens the vagina, vulva and perineum, leading to fewer injuries to these tissues.
- Immersion in water helps relieve anxiety, promotes relaxation, and helps women focus inward as labour advances.
- The mother has much greater ease and freedom to move spontaneously and to change position to assist the descent of the baby.
- When anxiety is causing high blood pressure, immersion in water often helps lower it.
- The buoyant effect makes water an excellent helper for disabled or obese women.
- The humid atmosphere helps asthma sufferers.
- The reduction in abdominal pressure increases safety for women who have had a previous caesarean section.
- The support of water enhances the mother's ability to rest more deeply between contractions.
- There may be less risk of foetal distress as there is an increased oxygen and blood supply.

Janet Balaskas (1988, p.9) describes her own water birth experience:

> Towards evening, labour started in earnest. Typical of a fourth birth, contractions were very intense and painful from the outset. Like most women, I could hardly wait to enter the calm pool in the darkened corner of the room. Once I did, the effect was transformative. My cumbersome body became light and movement from one position to another was easy. It was a tremendous relief to let go of the need to carry my weight. The intense pain at the peak of contractions was still there, but it was much easier to get through them. Most of all, the change of consciousness was remarkable. My mind stopped thinking – I was in a timeless ocean – completely surrendered to the rhythms of labour.

Music and Birth

The therapeutic use of music is a relatively new course of study, but its qualities were already understood in ancient times. Pythagoras, best known for his work in mathematics, believed that the whole universe comprised of sounds (vibrations) and numbers (McClellan, 1988). Pythagoras used music as a healing aid, proposing that it had purifying properties. He preferred string instruments because they seem to affect the body more positively, inducing a feeling of harmony. This theory is extremely useful to labouring women who preferably should be in harmony with their bodies for labour to progress synchronously. The therapeutic use of music to manage pain and anxiety during birth is an exciting alternative to the use of anaesthetics in a medicalised birth. Music has many beneficial effects on the body such as the reduction of stress, lowering of blood pressure, and the induction of states of relaxation and feelings of well-being (Campbell, 1992). These effects of music may also benefit the labouring woman.

The following extracts (Whitmore, 1997, p.56) beautifully illustrate a mother's experience with music while giving birth:

> Part of the birth's success, I'm sure, was because I learned to relax and let go by using music to focus my energies...During childbirth, music took me out of my 'head', or conscious self, and put me in a dreamy state...Labour was puttering along when a friend of mine arrived with a

tape of Hebrew prayer music, the 'Kodoish, Kodoish, Kodoish Adonai Tsebayoth'. I listened to a seamless piece that gently repeated the prayer over and over with lovely, moving strings in the background. It was extremely holy and inspirational music that evoked a powerful feeling of spirituality in me. While listening to this music, an incredible change came over me, and the whole quality of the labour became more intense and down-to-business. I could feel the baby coming closer and closer with each surge and peak of the music. It was absolutely amazing. I felt renewed, invigorated and empowered...Samantha's birth was a healing and learning experience for me.

Underlying Principles

In essence the shift in the alternative childbirth approach entails a different epistemology that questions and ultimately rejects the idea that the body is a machine and the mind somehow different from it. It also proclaims the responsibility of the individual for his or her own health, life, birth and death and places science and technology at the service of the individual as he or she works to fulfil that responsibility. While the medical model of childbirth displays a mind-body dualism, the alternative birth approach presents an integrated or holistic approach. A midwife working within this model states: "Since body and mind are one, sometimes you can fix the mind by working on the body, and you can fix the body by working on the mind" (in Gaskin, 1990, p.323).

Along with superb statistics (eg, Baldwin, 1986; Rothman, 1981), the common string in these alternative birth approaches is the ability to gift a pregnant woman with confidence – in herself, her own strength, her baby's strength, her attendants and their loving support of her. The aura of fear and mystery encouraged by conventional obstetrics is replaced with knowledge and certainty. On every level – physiological, emotional and spiritual – the positive attitude towards birth yields relaxed, confident, satisfied and empowered women. These women create their own birth rituals that celebrate the trustworthiness of their own bodies, the beauty, strength and power of womanhood, and the integrity and closeness of their family units.

The alternative birth philosophy regards childbirth as a natural phenomenon in which a myriad of factors are orchestrated in a finely balanced way. Proponents of this philosophy believe that a spontaneous delivery by a healthy and self-confident woman cannot be improved upon, and that the job of maternity services is to enhance the woman's birth experience. This they claim can best be achieved by encouraging her autonomy, providing moral support and eschewing all meddling (in Gaskin, 1990).

The following table (Table 5.1) illustrates some of the principal differences between the technological- and alternative (holistic) birthing approaches (Davis-Floyd, 1994; Rothman, 1981).

TECHNOLOGICAL MODEL	HOLISTIC MODEL
1 Medical management of birth is organised around a search for pathology.	1 Management of birth as an essentially normal and healthy process.
2 The doctor is responsible for the management of the birth.	2 The mother is responsible for her own birth and makes her own decisions.
3 The body is viewed as a machine.	3 The body is an organism, intimately interconnected with the mind and environment.
4 Technology is better than untrustworthy nature.	4 Nature is best and can be trusted. Technology should support, not interfere.
5 Pain is bad. Not to have to feel pain in labour is a modern women's intrinsic right.	5 Pain is an integral part of the labour process. To eliminate it interferes with the systemic whole.
6 Medical knowledge is authoritative.	6 Intuition and inner knowing are authoritative.
7 As long as a woman's mind is aware, she is an active participant in birth.	7 A woman gives birth with her whole being.

Table 5.1. Technological and holistic birthing models

The Role of Language in the Alternative Approach

The way in which people language their experiences within a given culture reflects their inherent thinking about their world (underlying epistemology or world-view). This was discussed in Chapters 3 and 4. The same principle is also evident in the alternative birth culture. New metaphors and terms for the birthing process have been developed in the alternative birth approaches that clearly reflect a contrasting value system. This is particularly evident in the work of Martin (1987) who employs terms such as 'birthing' and places birthing in the context of a 'river of life' where birth is a 'concentrated life force' in the totality of a woman's experience. Similarly she introduces new metaphors such as the 'dance' and the 'journey' of labour and birth to challenge the dominant machine metaphor of medicine.

Another example of the use of language to challenge the dominant discourse of childbirth is demonstrated by Kitzinger (1988). She uses imagery and emotive words to mount her attack on medicalised or institutionalised birth. Women are likened to 'cattle' being 'herded 'into hospitals. They lie on delivery tables like 'fish' about to be 'filleted'. They suffer the crude assault of routine episiotomy, which is a form of 'female mutilation'. This clearly highlights how powerful language can be. Through deliberately avoiding terms such as 'surgical intervention' and the safety of 'hospital care' that possess their own positive connotations, she presents a picture that is unsettling and hostile to the women it purports to help (Hewison, 1993). As Spender (1980) so fittingly comments, those who have the power to name the world are in a position to influence 'reality'. The work of Martin (1987) and Kitzinger (1988) represents attempts to reconceptualise birth in a manner that challenges the existing dominant medicalised names and adequately incorporates the meanings they perceive it has for women.

Davis-Floyd (1994) describes how women opting for alternative birth approaches use rich images to describe their pregnancy, labour and birth that reflect a more humanised, personalised and natural approach to the process of procreation. These women voice their pregnancy and birth experiences as creative mysteries and view themselves as joyous dancers in the rhythms and harmonies of life. They talk of labour as a river, as the ebb and flow of ocean waves and as ripened fruit falling in its

own good time. Many women search for myths from indigenous cultures that honour the deep, dark and bloody secrets of birth (Parvati-Baker, 1992).

These examples illustrate how the alternative birth movement has evolved its own unique ecology of ideas around birth. The meaning women ascribe to their alternative birthing experiences is defined or framed in a shared language system. Again it becomes clear how crucial a role language plays in the construction of a shared view of reality held by speakers of a common language (as was discussed in Chapter 4).

Recommendations for Care

There is currently a worldwide movement towards increasing awareness of childbirth practices. *The Mother-Friendly Childbirth Initiative* (in VandeVusse, 1999) is one such a movement that highlights inappropriate use of routine technology and supports women's access to information and autonomy during birth. The World Health Organisation (1999) also developed a substantial report in which practitioners are discouraged to intervene routinely. These and other groups generally assert that normal birth is best left without interference. Instead of practitioner application of control through procedures and technology, these groups recommend that caregivers offer encouragement, support and loving care. Some of the recommendations mentioned in the literature (eg, Kitzinger, 1987; Leifer, 1980; Rothman, 1981) are the following:

- Restrict highly technical or artificial obstetrical interventions to high risk or complicated pregnancies and births.
- Whenever intervention takes place it should follow a discussion and be a shared decision between a fully informed woman and those helping her.
- Establish a relationship of mutual participation between the birthing mother and her caregivers as they work together toward a common goal.
- Eliminate medical routines that serve to dehumanise childbirth and have not demonstrated to serve legitimate medical functions, such as

enemas, shaving of the perineum, restriction of the woman's movements et cetera.

- Ensure the presence of at least one supportive person for the labouring mother.
- Develop a range of safe birth facilities that allow a woman to choose a birth environment that best suits her medical and psychological needs.
- Develop a model of care that is based on service that supports the natural process of birth and responds to women's needs.

Eichholz (1980) proposes that if the course of birth services is to take a new direction towards humanistic birth, a couple of things would have to happen. First, women will have to decide that they want humanistic childbirth. Without the consumer, the medical profession would not have the opportunity to sell their technology. Second, the medical profession will have to be open to new ways of trying to come to terms with the uniqueness of each birth experience. Further, childbirth must be viewed as neither a disease nor illness. However, change in birth practices will only occur when a change in the social, political and ideological systems in which birth practices are grounded occurs. The technologically managed birth consists of a consensual, culturally sanctioned system of practices that are rooted in the western culture's definition of birth as a medical event. Real change would thus only occur when the ecology of ideas changes in which birth practices are embedded.

Conclusion

This chapter presented an overview of the development of alternatives for the medical management of birth in technological societies. Some of the main alternative approaches were discussed. It is clear from the discussion that the domain of birth is currently displaying what some have called a dramatic 'paradigm shift' (Ferguson, 1987). Those at the forefront of this tremendous effort at conceptual change are seeking to replace the technological model of reality with a holistic model based on systems theory and ecology that focuses on the interconnectedness of all things and the interdependence of systems. This way of thinking places science, technology, as

well as institutions at the service of nature, families and individuals, while patriarchy is eliminated in favour of equality of the sexes. This expanded view offered by the 'new' epistemology may in time replace the technological model as the dominant model of reality. If it does, one of the first indications will probably be dramatic change in birth practices.

The final chapter is an overview of the study, as well as a discussion of the strengths and limitations of the study.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

Introduction

In this concluding chapter a general overview of the study will be provided whereafter an evaluation of the study will follow in terms of its strengths and limitations. The implications of the study to the field of psychotherapy will be briefly discussed, followed by suggestions for future research.

Overview of the Study

This study aimed at providing a holistic understanding of a woman's subjective experience of giving birth. In reaching this research aim, the literature on the experiential world of a birthing woman was explored, especially as it pertains to how birth is valued in western technological society. The decontextualised management of the birthing process was discussed with pertinent examples to illustrate the impact on women's experience thereof. It was shown how the linear and reductionistic management of birth in the biomedical model might lead to unsatisfactory birthing experiences in which many mothers feel dehumanised and disqualified.

A contrasting epistemology to the inherent Newtonian epistemology of western society was presented in Chapter 3. The theoretical foundation of the study was based on this alternative ecosystemic epistemology. The development of ecosystemic epistemology was briefly outlined after which pertinent concepts from second-order cybernetics were discussed. The social construction of birth was outlined and the role of language and culture in the understanding of women's birthing experiences were explored.

Chapter 4 fulfilled another research aim by exploring the literature on the birthing mother's experiences. The literature overview was critically presented from

an ecosystemic epistemology. In this framework, the literature on the birthing mother and her experiences were evaluated from a contextual and holistic perspective. The meanings ascribed to birth and how shared meaning systems impact the experience and understanding thereof were also explored. The role of language and culture in the ecology of ideas around birth were discussed and illustrated. A reconceptualisation of the birthing experience was then proposed in which the meaning systems around birth were pivotal.

An overview of some of the main alternative approaches to birth was given in Chapter 5, as well as an explanation of how and why this alternative movement developed. The inherent epistemology of this approach to birth was contrasted with the Newtonian epistemology inherent to the biomedical management of birth. Lastly, recommendations for the care of birthing women by the medical profession were made.

Evaluation of the Study

Strengths of the Study

This study was founded on a holistic and unifying ecosystemic epistemology. As such, it adopted what Auerswald (1987, p.325) describes as a "radically different way of thinking" in contrast to the conventional narrow and reductionistic conceptual frameworks underpinning most of the research done on a woman's birthing experience. Therefore, one of the strengths of this study relates to the stated epistemology as it provides a holistic understanding of a woman's experience when she gives birth. The study included the contextual factors surrounding the mother's experience of birth, as well as the social and cultural embeddedness of the birthing experience.

Consistent with a constructivist epistemology, this study did not claim to have found *the* 'truth' about a woman's experience of birth. Rather, truth was considered to be heuristic (Auerswald, 1987). The numerous studies and theories discussed in the literature review provide additional perspectives on a woman's birthing experience, and this study thus adds to the existing body of knowledge, though from a

different perspective. The available literature on the topic is enriched by another perspective, which presents a contextualised conceptualisation of the birthing experience.

Capra (1983) states that to understand and to deal effectively with pain, it must be viewed in its wider context. In this sense the study contributes to the understanding of birth pain as the context in which the experience is embedded was explored. The meaning of birth pain as ascribed by those interacting around the issue was discussed, as well as the impact of the shared ecology of ideas on the experience.

Shortcomings of the Study

The biggest limitation of the study also relates to its stated epistemology. An ecosystemic approach to the birthing experience does not give a clear-cut definition of what a woman's birthing experience consists of, nor does it give the certainty of a fixed and 'objective' truth. Thus, the researcher cannot present her reconceptualisation of the birthing experience as the ultimate theory substituting all other theories. At most, it can only be said that the birthing experience might be viewed in the way it was conceptualised. In fact, the whole ecosystemic approach is recognised as a point of view, as a way of thinking (Fourie, 1998). It is never true or false and cannot be proved to be either. If the study were therefore to be weighed from a Newtonian point of view, this could be considered to be a serious limitation. However, if the study were appraised from a post-modern or constructivist perspective, it would be accepted that the perspectives reflected in the study add to the multiverses of reality on a woman's birthing experience.

Another limitation relates to the dissertation being of limited scope. Birth processes in eastern and developing countries develop along lines very different to those in western society. To deal with such a large range of cultural practices was, however, not possible in a study of this extent. But it is interesting to note that changes in western society are already having a profound effect on these cultures (Carter & Duriez, 1986). Women who have previously preferred their ancient traditions of child birthing are more and more abandoning them in favour of hospital births.

As this conceptual study was mostly theoretical, the author did not attempt to ground the proposals in the practice of psychotherapy. This can be considered to be a shortcoming of the study, especially as the usefulness and validity of the ideas proposed were not implemented in psychotherapy, while the thesis was done from a clinical psychological orientation. This was largely due to the limitations inherent to a dissertation of this extent. However, brief suggestions for ecosystemic psychotherapy will now be provided.

Implications for Psychotherapy

A woman's birthing experience may be the cause of considerable psychological discomfort. Psychotherapists such as Madsen (1994) and Mauger (2000) report that many women are so distressed about their birthing experiences that they express the need for psychotherapy. Madsen (1994) compellingly describes the development of posttraumatic stress disorder after traumatic birthing experiences. While some authors only report the need for psychotherapy after a traumatic birthing experience, authors such as DiMatteo et al. (1993) reveal that anything short of a quiet, demure, spontaneous, unassisted vaginal delivery leave some women feeling inadequate, as if they somehow fail themselves and their significant others. Some women set unrealistic standards for themselves that are not feasibly attainable, and feel devastated when these expectations are not met. The significance of how an experience is languaged is central in understanding how a woman voices her birth experience as was explained in Chapter 4. The mother's unique ecology of ideas, attributions and meanings are central in how she would define and interpret her giving birth and not the actual happenings themselves. Thus, what would constitute a 'traumatic birth' for one woman would not necessarily be the case for another woman.

As women often need to talk about their labours, ponder over it, and make sense of the experience, it is not surprising that they would seek the help of a psychotherapist in order to facilitate the process of integration and emotional healing. Ecosystemic therapy rests on the same principles as was discussed in Chapter 3 and the ecosystemic therapist would conceptualise his or her therapy in terms of the following guidelines.

The Role of Language

As was discussed throughout the study, ecosystemic and constructivist thinking emphasise the role of language in the context of social interaction. It is through language that people both assimilate and influence their worlds as it is expressed in cultural norms and values. It is in the process of languaging that people perceive, make meaning, and thus create 'reality'. And it is by means of language that client and therapist share stories in an ongoing reciprocal conversation. Therapy from an ecosystemic perspective is thus a collaborative process in which the participants co-create a new context in which old, problem saturated stories are deconstructed and new, solution-focused stories are authored through mutual interaction and feedback (Becvar & Becvar, 1988).

Problem-determined System

The object of treatment within an ecosystemic approach is the whole problem-determined system and not only an individual person or the presenting problem. All the individuals who actively communicate about something that is a problem for them define a problem-determined system, regardless of whether their ideas, beliefs, perceptions and experiences about the issue and its solutions concur (Anderson et al., 1986; Anderson & Goolishian, 1987; Loos & Epstein, 1989). The problem-determined system is not a predetermined social structure, but rather "an observer-dependent construction about those persons in active communication about what is being called a problem" (Loos & Epstein, 1989, p.158).

Once the participants of a specific problem-determined system believe either that the problem no longer exists or that it is no longer troublesome, the problem-determined system dissolves. Therefore, just as a problem is created in language, it also dissipates in language as new meanings about it are co-constructed (Anderson & Goolishian, 1987; Loos & Epstein, 1989). Thus, the whole situation in which certain behaviour or experiences are defined as problematic is the focus of therapy. In terms of the current study, the mother as well as other people who voice her experience as problematic, become the focus of therapy, whether they are actually present in therapy or not.

Ecology of Ideas

The ecosystemic therapist focuses his or her treatment on the ecology of ideas in the system. When the mother enters therapy, she does so with her own unique ecology of ideas around her 'traumatic' birthing experience. Through a process of dialogue, the concretised ecology of ideas about the traumatic experience evolves and shifts in meaning emerge which enable new avenues for the dissipation of the problem to be explored. The aim of the psychotherapist is thus to engender a conversational context through which the participants collaborate to co-construct the meaning system of what is defined as a problem (Hoffman, 1985; Loos & Epstein, 1989). As the mother is considered to be an autonomous system, direct, linear influence is not possible. The therapist does not treat or change the client, but rather is part of the new therapeutic system in which everyone is an expert and no one has the 'truth' (Becvar & Becvar, 1988). The therapist assumes the role of a choreographer of context instead of a change agent and can only perturb the system of which he or she is essentially a part.

Non-blaming Therapy

In accordance with the ideas of structure determinism and autonomy, nobody is blamed for the existing problem because it is believed that people can only do what they are capable of doing in order to conserve the autonomy of the system (Anderson et al., 1986; Dell, 1985; Efran & Lukens, 1985). To blame someone for the problem would thus reflect Newtonian thinking in terms of the assumption that one person can linearly influence another. The ecosystemic therapist would rather steer away from seeking the 'cause' for the trauma, and would focus his perturbations on the meanings ascribed to the birthing trauma or problem.

Ecosystemic Techniques

Techniques used by an ecosystemic therapist have only one aim – to serve as vehicles that carry certain meanings in an effort to create a new 'reality'. Techniques thus only assist in the co-evolution of a particular ecology of ideas and has no inherent power in themselves to 'cure' a problem. Ecosystemic therapy, therefore, do

not claim any technique as its own, rather, techniques from various orientations can be utilised as long as it presents 'meaningful noise' or fits with the client's world-view.

Psychotherapy Example

An example will illustrate some of the principles of ecosystemic therapy:

If a couple enters therapy and presents the wife as having postnatal depression after an emergency caesarean, it can be conceptualised that the central theme around which the problem is understood is 'postnatal depression'. Both the husband and his wife (and others) have ideas about why and how the wife exhibits her depression. Although they may have different ideas about the problem, all the ideas are nevertheless centred on the definition of postnatal depression. If the therapist were to intervene by stating that the woman is not depressed, he or she would be perturbing the system with this new idea. However, it is possible that the family will only meet this blunt perturbation with resistance. They might try and convince the therapist of the reality of her condition or leave therapy because of the therapist's 'incompetence'. They might thus not accept this new ecology of ideas if it does not fit with their world-view.

However, the therapist can initially accept the couple's definition of the problem and then subtly question the label of 'postnatal depression' by asking the couple for their thoughts on the development and diagnosis of the problem. In this process, the therapist can eventually speculate whether the woman is really suffering from postnatal depression or whether she might not be experiencing 'disappointment' or 'normal adjustment related problems'. The therapist can even frame the woman's struggle as an accomplishment as other women less resilient than she would have developed depression symptoms, while she only displays adjustment problems. In reframing the woman's experience in this way, the ecology of ideas around the problem can possibly change from the theme of 'postnatal depression' to the theme of 'normal adjustment". This new co-created 'reality' might make more behaviour options available for the husband and wife, as well as others interacting in the problem-determined system. The constructions co-created by the members of this

therapeutic system can thus present a solution for the problem. This simply means that the new ecology of ideas happens to 'fit' with the ideas and meaning systems of its members. It further implies that consensus was co-created and not that the therapist found the 'right' answer (Elkaim, 1990).

Recommendations for Future Research

Although it is believed that this study has made a positive contribution towards the existing body of knowledge on a woman's birthing experience, some recommendations can be made for future research.

The literature on a woman's experience of birth is mainly done from perspectives adhering to a realist epistemology in which contextual factors and researcher values are largely excluded. As such it is recommended that further research on a woman's birthing experience be carried out from an ecosystemic or constructivist perspective in which contextual factors are included and in which researcher values are explicated. This would facilitate the development of a more holistic and comprehensive understanding of the birth experience, and close the gap between studies based on a realist versus a constructivist methodology.

It is further suggested that the recursive patterns of interaction between the birthing mother and those attending her during her labour and birth be investigated. It is believed that qualitative research that focus on the attributions of meaning of both the birthing mother and those she interacts with during her labour will facilitate the evolution of new consensual domains based on greater mutual understanding and collaboration. This will be especially valuable in hospitalised births where doctors tend not to treat their patients as whole persons and in which the birthing mother is very often negated. The experience of pain as a partially constructed reality might also be a very useful avenue to explore. The way in which the experience of pain is voiced by both the birthing mother and those she interacts with should be researched in order to find alternative ways of co-constructing the pain experience in such a way as to facilitate coping with it.

As no literature reflecting the experience of birth in the South African context was found, it is proposed that future research focus on the unique ecology of ideas in this context. It might be interesting to explore how birthing mothers from very diverse cultures in a country displaying both westernised and traditional values on birth express their experiences. The unique ecology of ideas in this context should provide rich qualitative material in understanding South African mothers' birthing experiences.

Conclusion

"To adopt a holistic and ecological concept of health in theory and practice, will require not only a radical conceptual shift in medical science but also a major public re-education" (Capra, 1983, p.165). It is the author's wish that this conceptual study with its focus on a holistic understanding of the mother's birthing experience will provide valuable information that will hopefully make a small contribution towards the conceptual shift and public re-education Capra (1983) calls for.

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