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by

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A thesis submitted in conformity with the requirements for the degree of Master of Arts
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The New Reproductive and Genetic Technologies:  

Abstract

This thesis analyzes The Globe and Mail newspaper coverage from 1978 - 1997 regarding the new reproductive and genetic technologies of in-vitro fertilization (IVF), pre-conception agreements, and multiple births due to fertility drugs. Using content analysis, it was determined that the coverage is presented in particular ways. Coverage pertaining to females’ experiences is limited while coverage pertaining to males’ experiences, particularly those of male doctors and academics is vast. The new reproductive and genetic technologies are promoted through the language used to cover the stories, the orientations of the stories, the sources quoted, and the visuals. The technologies’ failures, possible consequences, and impact upon women are rarely covered in any detail. It is shown that feminist coverage within The Globe and Mail allows a wider range of stories to be told and gives voice to the groups of women silenced in the mainstream coverage.
ACKNOWLEDGMENTS

The writing of this thesis has been a journey which many people helped me to complete. My undergraduate professors first challenged my thinking, developed my academic writing, and made me brave enough to attempt a Masters degree. My graduate professors continued to challenge me and spark the desire and love of critiquing and questioning the everyday things I often took for granted, helping me to develop new perspectives on the world in which I live. Special thanks are extended to my thesis supervisor, Dr. Margrit Eichler, for all her time and assistance in the development and writing of my thesis. Little did I realize when I read Margrit’s writings in my undergraduate years that I would be so fortunate and honoured to have her as a professor and supervisor in my graduate years. Many thanks go to my second reader, Dr. Sandra Acker, who offered valuable feedback and editing suggestions throughout the writing process. The students with whom I shared my classes are also acknowledged and thanked for they taught me about the wide variety of opinions and knowledge that exists and that there are many different ways to approach and understand a subject. My family and especially my husband, Ken Foote, are warmly and lovingly thanked for believing in me and encouraging my return to post-secondary education. Thank you to all of you.
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INTRODUCTION

Education is a dynamic and integral process that humans experience throughout their lives. Learning can be achieved through both formal and informal means. The formal sense refers to the educational systems and institutions that we come into contact with for most of our childhood, adolescence, and early adulthood. For example, the kindergartens, grade schools, high schools, colleges, and universities are all formal educational institutions where humans learn some of the skills and knowledge required in order for them to be functioning adults. In the informal sense, we learn through our families, peers, and the various media whether they be magazines, television, radio, or newspapers.

This thesis focuses upon what one learns through the newspaper about reproductive technologies. When I was an undergraduate at Trent University, I became interested in the subject of reproductive technologies and this interest continued into my graduate years. As I learned more about the technologies, I was struck by a paradox. On the one hand, there has been a strong movement by women to gain greater control and autonomy over as well as information about their bodies. This struggle began in the late 1800s and early 1900s with women fighting for access into a male educational system of medicine that denied them access. It includes the long fight for legalized birth control which was finally granted in 1969 and the struggle for legal access to abortion. Abortion is available in Canada, but access to it remains inconsistent throughout the country. Added to these important struggles and victories was a growing demand by women to learn more about their bodies and to take issues of health into their own hands. One way that women have achieved this objective is through the creation of literature about their
bodies and their health issues. A groundbreaking publication concerning women’s health was the book *Our Bodies, Ourselves* which gave women detailed and valuable health information. In Canada, a journal named *Healthsharing* appeared, but it has since folded. Other feminist publications appeared such as *Ms. Magazine, Canadian Woman Studies, Herizons*, and in addition many mainstream magazines included information about women’s health and bodies.

Added to this growing body of literature that served to inform women and to give them an avenue through which to communicate to others about their knowledge and experiences was the demand for greater control over the process of childbirth. Women began to look to the past experiences of midwifery which had all but disappeared within Canada due to the growing influence of university trained doctors who were largely male. But women believed that greater autonomy over their bodies and childbirth was important and they began to pressure the political, educational, and medical systems so that we now have formally trained midwives who legally practice their skills within Ontario.

So where is the paradox? It exists in the fact that while women have been fighting for and winning more control, information, and autonomy over their bodies and childbirths, they are losing these gains when it comes to the experiences involving reproductive technologies. Through these technologies, the control and autonomy that women have won over their bodies is greatly reduced and placed within the hands of the formally trained medical doctors, scientists, and even lawyers. The reproductive technologies are extremely complex technologies that require the intervention of medical science into the private experiences of conception, gestation, and birth. Within these technologies, there are no midwives helping women to deliver their children in the comfort of their own homes. In addition, women are forced to surrender control
of their bodies' natural processes in order for medical science to manipulate their bodies with the goal of having children. So on the one hand, we have an area where women have fought hard, won, and regained a great deal of control, autonomy, and knowledge regarding their bodies, but on the other hand, we have another area where control, autonomy, and knowledge are lost to women and placed back within the mainstream medical system.

One of the main factors in women's struggles has been the need for information about their bodies, health, and reproductive processes. The reproductive technologies are intricately linked to these realms and in order for women and the general public to make informed decisions regarding these technologies, they need accurate information. The majority of Canadians do not have direct access to the reproductive technologies so they must rely on accounts by others to keep them informed about these technologies. Here enter the media and coverage of the reproductive technologies. Just what do the media tell the public about these technologies? That was the main question that interested me. It relates to how the public is educated about this subject. So, my thesis was conceived. It now had to be gestated and delivered, which proved to be a labourious process.

This thesis examines how a Canadian newspaper, *The Globe and Mail*, presents the reproductive technologies of in vitro fertilization (IVF), surrogacy, and multiple births due to fertility drugs to its reading public. Because the newspaper is considered to be Canada's national newspaper, I chose this particular publication but since I started my thesis, another national newspaper has appeared, the *National Post*. In order for the thesis reader to be familiar with the reproductive technologies, Chapter One consists of an overview of the technologies. As well, it includes discussions on issues related to the technologies. For example, some of the actual
medical processes that take place upon and within the bodies of women are discussed as well as the issue of so-called surrogacy, the inappropriateness of this terminology and the choice of the term "success" rates. It is through this chapter that the reader achieves a sense of what the technologies mean for women and the invasive nature of them. Even though the technologies are extremely complex, I have tried to present them in a coherent manner that both reflects this complexity but explains them in a manner that is fairly easy to understand. A word of caution: the full details could not be included due to length constraints and the degree of difficulty in the subject matter. Overall, the reader gets a sense of what is involved with the processes of IVF and surrogacy as well as a knowledge base with which to understand the issues, concerns, and questions raised throughout the rest of the thesis.

Chapter One also introduces the reader to the subject of the new reproductive and genetic technologies (NRGTs). This section examines the intersection of science, patriarchy, and capitalism and how each of these affects the development and application of the NRGTs. The assumption that science operates at an objective and value-free level is examined. The fact that science is based on and within patriarchal and racist values as well as operating within a capitalist framework means that the technologies are not value-free and that they impact upon and affect women in particular and troubling ways.

Chapter Two examines prior research relating to the media and in particular, newspapers regarding NRGT representation. I utilize sources from Canada as well as the United States, Australia, and other countries in order to present the reader with a varied understanding of the subject. Overall, I present my argument within a feminist perspective and the majority of my sources are feminist in nature. I believe that feminists have offered a valuable examination of
the reproductive technologies that cannot be ignored. They insist that the technologies are not benign and that they must be thoroughly analyzed in order to determine their value and their effects not just on individual women, but on women as a group and society. The chapter investigates both the promotional and propaganda aspects of the media's representation of the NRGTs. It concludes with the observation that the media's representation of the NRGTs is limited in its scope. Furthermore, the language utilized while discussing the reproductive technologies and women's bodies is also analyzed. For example, how women are dismembered into their individual body parts or how embryos and fetuses are bestowed personhood through the use of language is discussed. Chapter Two also explores the construction of the news. I introduce the concept of a patriarchal gender ideology that permeates the newspaper industry and interacts with the capitalist aspects of the medium. This ideology forms the framework from which I analyze the selected newspaper articles.

Chapter Three examines the methodology utilized in the thesis. My decisions and the reasons I made them are explained as well as the dilemmas I faced while writing the thesis. For instance, I often found that I had to "split" myself whenever I analyzed an article due to my own personal beliefs and feelings regarding the technologies and resultant processes. Furthermore, the various categories of analysis are identified and defined within this chapter. The chosen methodology of content analysis is examined and discussed.

Chapter Four presents and discusses the findings of my analysis. In the discussions, I utilize both quantitative and qualitative analyses and complement the comments with various quotations from the newspaper articles. In addition, I relate the analysis to the previous information revealed in the thesis' first two chapters. In this chapter, I not only analyze the text,
sources, and the sex of the articles' authors, I also examine the visual images that are present in a number of the newspaper articles. By studying these various aspects of the newspaper representations, I hope to provide a thorough and concrete understanding of how this particular newspaper presents the NRGTs to its reading public and the implications that these representations have for women.

Chapter Five is a detailed examination of five separate articles contained within the newspaper. This analysis is presented in order to give the reader a closer examination of particular articles and the issues that they raise. The articles are varied and represent the main areas of discussion within the thesis. For example, an article from 1978 covers the birth of the world’s first test-tube baby, Louise, who was born in Oldham, England, while the second article reports upon the issue of preconception arrangements. The third article is written from a feminist perspective and adds the voices of women who have undergone the technologies to the discussion. The fourth article details the circumstances in a multiple birth event arising out of the use of fertility drugs, while the final article examines a multiple birth through the process of IVF. The analysis links the particular articles to the discussions in the previous chapters.

The final chapter is my concluding chapter, which sums up the main findings of my thesis. As well, it presents the reader with some unanswered questions and further issues to explore and ponder over if one wished to continue on in this area of study.

The thesis is an exploration and examination into the newspaper coverage of the new reproductive and genetic technologies. By analyzing this subject, we learn about the technologies and how they are presented to the reading public. Although the public does not
absorb this information unquestionably, we still must look at the messages and their possible impacts upon women and society.
CHAPTER ONE

REPRODUCTIVE TECHNOLOGIES: AN OVERVIEW

Reproductive technologies are complex technologies that involve and raise many perplexing and diverse issues. This chapter is presented to give the reader a basic understanding of the new reproductive and genetic technologies (NRGTs) as well as to introduce some of the current issues involving these technologies and the driving forces behind the development of the NRGTs. Because the thesis examines the media coverage of in vitro fertilization (IVF) and surrogacy, this chapter will explore these two areas in greater detail than the other NRGTs.

Reproductive technologies consist of four main types which include fertility control (i.e. birth control methods, abortion), labour and delivery management (i.e. fetal monitors, epidurals, forceps), prenatal technologies (i.e. ultrasound, amniocentesis), and the “new” reproductive technologies consisting of conception technologies (i.e. in vitro fertilization, artificial insemination (AI), artificial insemination by donor (AID), surrogacy) (St. Peter et al., 1989:2-3). Many of these “new” reproductive technologies are “old” technologies. For instance, the first reported use of artificial insemination occurred in 1790 and the first recorded donor insemination happened in 1884, although under troubling circumstances (Kaplan & Tong, 1994: 224-225). In this case, the woman was inseminated by the doctor utilizing the sperm from a medical student without the woman’s or her husband’s knowledge or consent (Kaplan & Tong, 1994:225). For thousands of years, women have attempted to control their fertility and births with various methods of birth control, abortion, and midwifery practices. Ultrasound, fetal monitors, and amniocentesis have been utilized for a number of decades with ultrasound being introduced in
1957 (Mitchell, 1993:146). Of the above, in vitro fertilization is the truly "new" reproductive technology (St. Peter et al., 1989:3). However, IVF and its related technologies and procedures put a new technological twist on some of the older reproductive technologies such as AI and AID. In addition, they involve some new procedures such as embryo freezing and egg donation. With the new reproductive and genetic technologies comes a loss of control for women over their conceptions, gestations,.birthings, and their bodies as a whole considering the fact that primarily male doctors, scientists, and lawyers control the technology and access to it. Hence, where male relatives or the husband once exerted control over a woman's reproductive capabilities, now a greater variety of males exert more control over women's reproductive processes, bodies, and the creation of life, itself. Furthermore, the processes of reproduction are broken down into smaller and smaller steps as they become a series of distinct, but dependent and interconnected stages involving greater and greater use of technology, control, and manipulation from outside sources.

These technologies have begun to exhibit a profound effect upon women's conceptions of what it is to be a mother. Emerging from the technologies is the creation of a whole new set of "mothers." Eichler explains that with the advent of the NRGTs, there occurs a redefinition and expansion of the definitions or categories of "mother," whereas the three categories of "father" have not changed with the introduction of the technologies (Eichler, 1996:291-292). Therefore, women's relationship to motherhood and their conceptualizations of mothers, both presently and in the future, have changed dramatically. Three traditional forms of mothers existed before the technologies: 1) the genetic, gestational, and social mother, i.e. she kept the baby that she conceived, gestated, and gave birth to; 2) the genetic and gestational mother, but
not social mother because she gave up the child for adoption; and 3) the mother as neither genetic or gestational, but as a social mother because she is the stepmother or adoptive mother (Eichler, 1996:292). According to Eichler, with the introduction of the new reproductive technologies, we now have four new categories of mothers. These include egg donors or genetic mothers; social and gestational mothers; only gestational mothers as in the case of “surrogate” mothers who use another woman’s egg; and a social combined with a genetic mother who did not gestate the child (Eichler, 1996:292). For men, the three types of fathers have stayed the same and consist of the genetic and social father; the genetic father; and the social father such as an adoptive or step-father (Eichler, 1996:291).

As Eichler demonstrates, the discontinuous relationship of fathers or the male norm, has now been applied to females (1996:298-299). No longer does a woman necessarily experience conception, gestation, and delivery as a continuous relationship that involves the intellectual, the emotional, and the physical aspects of the self. The male’s experience of a discontinuous reproductive process where there is fertilization and then after nine months a baby is born, now can be experienced by a woman, but in other various ways. For example, fertilization may be discontinuous as it occurs within a petri dish in a laboratory, one woman may gestate the embryos of another woman and nine months later the first woman is given the babies to raise, or one woman may gestate another women’s embryos and keep the children for herself. In all these instances, women’s historically continuous reproductive processes have been re-invented and made to be discontinuous. Through the redefinition and expansion of the category “mother,” it is apparent that the NRGTs affect women in more complex ways than they affect men.
In Vitro Fertilization

In vitro fertilization (IVF) translates as “in glass” fertilization or the procedure is commonly referred to by many people as “test-tube” babies. The use of the term test-tube is inaccurate as the egg’s fertilization occurs either in a small, round petri dish or through some other procedures within the woman’s body itself. The fertilization does not occur within a test tube, nor is the baby gestated or birthed from a test tube, but from the woman’s body. The history of IVF began in the animal breeding industry where techniques were developed to create physically superior and more fertile animals for human use and consumption. The methods have been transferred to women as a solution for infertility. But IVF is not a cure for infertility, it merely circumvents the infertility and in some cases, a baby is produced. The woman or man is still infertile after the procedure. Vandelac introduces us to the term “industrialization of life,” where medicine has shifted from a “repairing” to a “manufacturing” focus which concurrently “changes both the role, the definition and the status of medicine” (1993:99, 107). Furthermore, IVF which was first applied to women with blocked fallopian tubes is now being used by healthy, fertile women when their partners are deemed to be infertile. Thus, the application of the technology has expanded greatly beyond its original usage. In Canada, infertility clinics have various guidelines for defining infertile people. Some clinics treat those who have been unable to conceive for only one year without using contraception while others wait to treat people who have been unable to conceive for a number of years (Royal Commission, 1993:554). It may often take a woman longer than a year to conceive a child, especially if she is older and utilized the birth control pill for a number of years. By accepting patients that are defined as “infertile”
after only one year of attempting to conceive, the clinics help to ensure that people utilize the technology.

**The Processes of IVF**

For this section, which will describe some of the actual technological processes of IVF, I have drawn largely upon Kaplan & Tong’s *Controlling Our Reproductive Destinies* (1994:256-266) and *Proceed With Care: Final Report of the Royal Commission on New Reproductive Technologies* (1993). In addition, information from a website by the University of Ottawa and the Ottawa Civic Hospital’s assisted reproductive technology program entitled “The Goal [Gift of a Life] Program” is utilized (University of Ottawa(a), 1998). With IVF, there are five main procedures or steps involved; each is interconnected and dependent upon the successful completion of the prior procedure. The steps can be broken down into the following and will be explained shortly: ovulation stimulation, collecting or harvesting of the eggs, collecting the sperm, fertilizing of the eggs and embryo incubating, and implanting of the embryo/zygote. But before any of the steps can be attempted, the woman or man must first be diagnosed as infertile according to the definition of infertility utilized by the individual clinic or hospital. Interestingly, once the person is diagnosed as infertile, the term becomes applied to the couple (Kaplan & Tong, 1994:188). Since infertility is extended to the couple and not confined to the individual, it becomes acceptable to submit healthy, fertile women to IVF treatments simply because they are considered to be a part of the “infertile” couple. The infertile diagnosis often involves lengthy tests and procedures which until recently were first performed upon the woman because of the stigma surrounding male infertility. Becoming accepted into an IVF program requires a number of criteria to be met, each of which are determined by the individual hospitals and
clinics. Often, IVF practitioners prefer to treat heterosexual couples believing that it is preferable for a child to be raised by both a man and a woman. Hence, lesbians may have difficulty accessing IVF treatments. Age restrictions are sometimes applied. For instance, women over 40 may not be admitted into the programs because of lower success rates for older women, but some practitioners have had pregnancies and deliveries with post-menopausal women. The costs of IVF are staggering and also become a factor for deciding who is able to utilize the technology. Thousands of dollars are spent in order to create a child through IVF. For example, most Canadian couples can expect to spend approximately $4000 or more for each IVF attempt (University of Ottawa(b), 1998:1-2). Different provinces and countries have varying cost coverages. In Ontario, some IVF treatments are covered by OHIP, but only for women with blocked fallopian tubes. Furthermore, added expenses such as drug costs, transportation, and accommodation costs if the couple travels a distance to seek treatment are not covered. It is interesting to note that at the University of Ottawa’s reproductive centre, fees can be paid for by cheque, credit cards, and through financing with a major Canadian bank. Furthermore, while undergoing IVF, many women must cease employment due to the physical, emotional, and time demands of the procedures. Often, only financially secure couples are eligible for IVF. Provided the woman or couple meet the eligibility requirements, the actual IVF treatment begins. The following describes some of the main processes of the IVF procedure, drawn from the three sources listed above:

Ovulation Stimulation:

In order to collect the eggs, the female must be superovulated by an “hormonal cocktail” which consists of GnRH (Gonadotropin-releasing hormones), agonists, and menotropins. The
GnRH agonists are employed to turn off the patients' natural hormonal cycles and triggers so that they do not interfere with the process of superovulation. The menotropin drugs stimulate the ovaries to produce eggs through the use of natural follicle stimulation hormones (FSHs) (University of Ottawa(a), 1998:2). The combination contains drugs such as clomiphene citrate (commonly known as Clomid), menopausal gonadotrophin (Pergonal), and human chorionic gonadotrophin (Pregnyl) whose safety and long term side effects upon the women or the children produced are not known (Raymond, 1992:23-24, 49-63). Women are given these hormonal cocktails in order to cause the ovaries to produce more than the naturally produced one egg per cycle. Having more eggs to fertilize supposedly increases the likelihood of a successful fertilization and outcome. The use of hormones allows the doctor to attempt to control the woman's ovulation, but daily blood tests or urine tests along with ultrasound testing are used to monitor for ovulation so that the eggs can be collected at the proper moment. Daily tests require the woman to make daily trips to the medical office. The hormones also affect the woman both physically and emotionally. In some cases, approximately 15 percent, the IVF process is halted due to inadequate egg development or because the woman ovulates before the retrieval can be accomplished (Royal Commission, 1993:509).

**Collecting The Eggs**

When it is determined that ovulation is imminent due to the swelling of at least three follicles, the woman is administered another drug called Human Chorionic Gonadotropin (HCG) in order to mature the eggs and trigger their release from the follicles. The collection of eggs is attempted approximately 32 - 34 hours after the administration of HCG by either laparoscopy and needles which requires general anaesthesia and all its risks or by needles guided by
ultrasound -- called transvaginal ultrasound retrieval. With the procedures, the woman must lie absolutely still, she may have to have a full bladder during the procedure, and there exists the possibility of other organs being punctured by the needles. In addition, the woman may be given a tranquilizer to relax her, an antibiotic to help prevent any infections, a local anesthetic to freeze the cervix, and pain medications. As each egg matures, the follicle bulges and each one of these bulges must be punctured, the escaping fluid sucked up and examined for eggs which are then washed and incubated for 4 to 8 hours until mature and ready for fertilization. During this step, there are instances when failure may occur. Ovulation may not be caught in time or be convenient for the doctor’s schedule, no eggs may be harvested, or the eggs may be deemed inferior. If any of the above procedures fail, then the routine must be started over again or the woman is discontinued from the program.

If the woman’s own eggs are not utilized, then donor eggs may be used. Some hospitals now ask women who are being sterilized to donate eggs for other women or research and the hospitals often provide financial incentives for this donating (Vandelac, 1993:110). Furthermore, in some countries, preparations are being made to have eggs taken from the ovaries of both female cadavers and female fetuses; essentially creating the opportunity for females that are no longer alive or that have never been born to have descendants (Vandelac, 1993:110). Should these practices come to pass, what will it mean for these children to be born from/to dead mothers and female fetuses? How will it affect their conceptualizations of themselves and their connections to their “mothers” and other relatives?
Collecting the Sperm

Sperm must be collected either from the woman’s male partner or donated sperm is utilized. Most often, collection involves the male masturbate close to the time when the eggs are ready to be fertilized. The stress of performing on demand or according to someone else’s schedule may make it difficult for the male to be successful. But once the semen is collected, no other physical demands are made upon the male whereas the female is almost constantly undergoing physical demands related to the IVF procedures. Donor sperm is usually frozen and inspected for diseases. The sperm is washed and placed within a medium which helps to separate the strongest and most mobile sperm which are then used for fertilization. Sex-selection of the sperm can also be achieved at this time since the male and female sperm are not identical. Hence, they can be separated if a specific sex is desired for the child. This procedure is referred to as pre-conceptional sex-selection which is different from the more common post-conceptional sex-selection techniques of ultrasound, amniocentesis, and chorionic villus sampling followed by abortion when the fetus is of the “wrong” sex (Thobani, 1993:139-140). Even though ultrasound, amniocentesis, and chorionic villus sampling were not developed for determining or choosing the sex of the child, these uses have emerged out of the technologies’ capabilities.

One fear surrounding IVF and sex-selection relates to the fact that in most societies, males are wanted and preferred over females, especially as the first-born; therefore, more males will be conceived or be chosen as the first-born child (Thobani, 1993; Rowland, 1989; Hoskins & Holmes, 1989). Once the sperm is prepared, fertilization can be attempted.
Fertilizing and Incubating the Eggs

For in vitro fertilization to occur, the eggs are taken from the incubator and placed in separate petri dishes to which high concentrations of sperm are added to the eggs approximately 4 - 12 hours after the egg retrieval. These are then put into an incubator once again to facilitate fertilization. An examination of each egg within 20 hours of insemination determines whether they have been fertilized. Sometimes, the sperm are not capable of penetrating the egg and in these cases, the sperm can be injected directly into the egg via a fine needle or the egg's outer layer, the zona, can be drilled to allow sperm to enter the egg. One question to be asked is whether sperm that are not capable of naturally penetrating and fertilizing the egg are acceptable reproductive matter.

Implanting the Embryos/Zygotes(s)

The terminology used can be confusing. Sometimes the reproductive matter is referred to as an embryo, a pre-embryo or a zygote. A zygote is defined as a fertilized egg up to two weeks after fertilization has occurred and an embryo is defined as "the developing entity from the third to the eighth week after fertilization" (Royal Commission, 1993:148). A new classification of embryo has developed known as the pre-implantation embryo or the pre-embryo. I will utilize the term embryo since it is commonly used, but the correct term is zygote since the eggs have been fertilized for less than two weeks. If fertilization occurs, then two days after this occurrence the embryo(s) are considered ready for implantation into the woman's body. Often, more than one embryo is introduced into the woman to create better odds that one will implant and develop into a fetus. The Royal Commission recommended that no more than three embryos, or as they correctly referred to these as zygotes, be implanted into the woman (Royal
Commission, 1993:530). However, at the University of Ottawa, age determines the number of zygotes (or embryos as they call them) transferred; no more than 3 for women under 35 and 4 transferred for women over 35 years of age (University of Ottawa(a), 1998:3). Furthermore, if more than 3 or 4 embryos exist, a decision regarding what to do with the "extras" must be made. Freezing the embryos is now an option which allows the embryos to be used at a later date. Hence, fraternal twins that were once created naturally in the woman's body when separate eggs were fertilized at the same time can now be created in a laboratory, gestated and birthed years apart. Implanting multiple embryos is one reason why IVF women often experience multiple births such as twins, triplets, and quadruplets. Approximately 24 percent of IVF births are multiple births in Australia and approximately 38 percent are multiple births in Canada which compares drastically to the natural rate of only one percent (Royal Commission, 1993: 527-528; Rowlands, 1992:64). Multiple births create additional stress, emotional, physical, and financial situations for the parents. Furthermore, multiple births often result in premature and low birth weight babies that create strains upon hospital resources, medical personnel, and the present and future health of the babies.

The embryos are placed into the woman’s uterus via a long catheter while the woman kneels forward and then extends herself into a lying position from which she cannot move for about 4 hours to help ensure implantation. The catheter may be inserted into the uterus through the cervix or a laparoscopy may be utilized for transfers into the fallopian tubes. The embryos must be placed into the woman when it is believed that her uterus is physically capable of accepting the embryos; therefore, more hormonal drugs are given to the woman in order to help control and predict when the uterus is receptive. The woman must now wait to find out if she
becomes pregnant. If she does not, then the entire cycle must be started over again or else she is dropped from the program.

There are variations to the above procedure. For example, the fertilized eggs may be introduced into the fallopian tubes instead of the uterus by a procedure known as zygote intrafallopian transfer (ZIFT). On the other hand, the egg and sperm may be introduced not in a petri dish, but into the woman’s fallopian tubes to allow a more natural fertilization to occur. This procedure is entitled gamete intrafallopian transfer (GIFT). The use of a laparoscope and incisions into either the woman’s abdomen or just below the navel are made for these procedures. With IVF, there exists a high risk of ectopic pregnancies which are dangerous to the woman’s health, future fertility, and life. In addition, the woman often continues to receive hormones and drugs even after the insemination has occurred (Rowlands, 1992:32). If the woman does become pregnant, caesarean sections are often used to deliver the baby or babies, especially when there are multiple babies (Royal Commission, 1993:528).

"Success" Rates

With any technology or medical procedure, it is important to know the success of the procedure. With IVF, this knowledge is difficult to obtain and determine as statistics are manipulated, standardized records are not kept, and the term "success" often encompasses more than the measure of live births. Some IVF doctors and clinics have reported success rates as high as 50 percent (Brownlee, 1996:151). But there is little uniformity in what the statistics are actually measuring. Success rates often include such things as ectopic pregnancies (which never come to term), pregnancies which do not result in live births due to miscarriages or spontaneous abortions, and even only "chemical changes" which may or may not indicate a pregnancy
Because clinics are competing against each other for patients, having higher success rates than their competitors makes them appear better qualified to handle the IVF procedures. This is one reason that clinics and hospitals use various and non-standardized criteria to measure their "success." Different sources for my research quoted various take-home baby rates for IVF: averages of 19 percent were reported by the American Society for Reproductive Medicine for women under 39 and only 6.6 percent for women over 40; in Britain, women with blocked fallopian tubes undergoing IVF experienced a 10 percent chance of delivering a baby; 8.5 percent of women undergoing IVF in Australia gave birth; and in Canada, patients have met with quoted success rates ranging from 10 to 26 percent (Brownlee, 1996:151; Royal Commission, 1993:520, 539; Rowland, 1992:46). In one study, it was found that as women underwent increased numbers of IVF attempts, their chances of success decreased from a high of 13 percent on the first attempt to a low of 4.3 percent on the fourth attempt (Kaplan quoted in Brownlee, 1996:152). As mentioned earlier, ectopic pregnancies and multiple birth rates are all higher in IVF programs than in the general population.

What is evident is that these "success" rates are indeed failure rates for the technology. Very few women after enduring the physically, emotionally, and financially damaging effects of IVF actually take home a baby. But clinics and doctors continue to quote these rates as successes. Language is a very powerful tool. If the term "failure" rate was utilized, there is the possibility that fewer women would subject themselves to this kind of treatment. The term "success rate" offers hope and an optimistic outcome to the women and men involved with IVF. In order for scientists, doctors, and clinics to continue their research, generate profits, and prestige, and to ensure that a steady supply of women enter into IVF programs, success rates
must be quoted and statistics will continue to be manipulated. Dr. Soules called the statistical manipulations a “marketing ploy” to help ensure an adequate number of patients for the maintenance of IVF programs (quoted in Rowlands, 1992:45). The rates given for success illustrate the fact that approximately 80 percent of the women that undergo IVF do not take home a baby after the procedures are over. With a failure rate of this magnitude, the technology of IVF is clearly still an experimental technology carried out upon and inside the bodies of women.

“Surrogacy”

As mentioned in the introduction, the terms “surrogacy” or “surrogate” are inappropriate, however, they have become the everyday terminology associated with agreements that enlist one woman to give birth to a child who then hands the child over to some other person or couple to raise. The term surrogate mother means substitute mother, but as Sherwin explains, the surrogate mother “is the birth mother, and she is, therefore, the biological mother of the child in question, having (usually) both conceived and gestated it in her body” (1993:183). The use of the term surrogate helps to conceptualize the reproductive role of women as “marginal and mechanical” as well as “interchangeable and peripheral” (Sherwin, 1993:184). Hence, it devalues the biological, emotional, and intellectual work and commitment that women do during conception, gestation, and delivery as well as their role in raising a child. Sherwin prefers to use the term “contractual pregnancy” because it centralizes women’s reproductive work and the relationships involved (1993:184).

Eichler also raises the problems involved with the terminology of surrogacy (1993:196-197). The use of “parental terms” such as mother or father are not appropriate nor is the use of the word “contractual” appropriate because the people involved often do not become mothers
or fathers and the term "contractual" leads one to believe that the agreements are legally enforceable when they may not be enforceable in a court of law (Eichler, 1993:196-197). I have adopted the terminology of "commissioned woman" as suggested by Eichler and "commissioning people" which may include the individual man or the man and his partner or wife.

These preconception agreements can vary greatly. A woman can agree to be artificially inseminated by the man, hence conception takes place within her utilizing her genetic egg and the man's sperm as was the case with American Mary Beth Whitehead in 1986. Alternatively, the man's partner may provide egg(s) through IVF and the egg(s) or embryo(s) is/are placed within the woman. In this case, both of the women may need to undergo hormonal treatment and invasive procedures for extracting the egg(s) and for the implanting of the egg(s) or embryo(s). Monetary compensation may or may not enter into the picture. If no money is involved, then the commissioned woman is usually a relative who agrees for altruistic reasons, but she may have experienced pressure from other family members to volunteer her body. For example, American Pat Anthony, 48 and already a grandmother, agreed to carry her daughter's eggs, become inseminated by her son-in-law, gestate and deliver the child. In this case, triplets were born. Hence, Anthony gave birth to her daughter's genetic children, her genetic grandchildren, and her own gestated children all at the same time. The ways in which these arrangements can skew generational lines is evident in this example. Rowlands believes that women who enter into these agreements are often said to be doing it for altruistic reasons, but she believes that they are being emotionally exploited (1992:172). Women are socialized, according to Rowland, "to realize themselves by fostering fulfilment in others" and that by calling them "altruistic... draws
on the stereotypical, self-denying definition of women expected within patriarchy" (1992:173).

Women are socialized to believe that their true role and mission in life is to be a mother.

Commissioning women can also involve monetary compensation and outside parties such as agencies who bring together the woman with the commissioning people, doctors, and lawyers. Rates of compensation range between $10 000 and $20 000 (Eichler, 1993:205). Most of the situations that I encountered in my research mentioned payments of $10 000 on the delivery of the child plus medical expenses and sometimes clothing expenses (for maternity clothes). What is evident is that the commissioned woman is being paid very little considering the entire process may take up to two years to complete. If one only counted the nine months of pregnancy, the rate of pay would only be $1.65/hour (for $10 000 compensation). The doctors, lawyers, and agencies are paid more for their time than the commissioned woman. Once money becomes involved, then the issue of a quality child or product is raised.

People paying for the baby, although they state that they are paying for the woman’s services of gestating the baby and not for the baby (Eichler, 1993:207), want a healthy baby and sometimes a baby of the “right” sex. To help ensure this quality and to control the woman, the woman may be subjected to surveillance, control, and monitoring of the pregnancy and her actions which are stated within and defined by the contract (Rowlands, 1992:159). For example, the woman is told that she may not smoke or drink alcoholic beverages, must abstain from sexual intercourse, may have to have ultrasounds, amniocentesis, or may have to abort the child if it is of the wrong sex or imperfect (Rowlands, 1992:159; Ince, 1989:105-106). In these arrangements, the woman and the fetus are treated as separate entities, the woman as merely a container and the fetus as needing protection from the actions of the woman-container (Eichler, 1993:206). One
danger of this increased control over the commissioned woman is that this type of control may eventually extend to all other pregnant women (Eichler, 1993:206). Women have experienced an increasing amount of surveillance, control, and monitoring of their pregnancies by both the medical system and judicial system over the past few decades as technology allows for greater monitoring and intervention while the judicial system has sometimes put the rights of the child above the rights of the pregnant woman (Mitchell, 1993; Bessner, 1993). These developments are a continuation of the medical control and appropriation of women’s bodies and pregnancies that began centuries ago even though women have recently begun to experience a degree of control through the re-introduction of female midwives and an increase in female doctors (Mitchinson, 1993; Ehrenreich & English, 1989).

Eichler (1993) and Sherwin (1993) both draw our attention to the exploitative nature of these arrangements. Sherwin explains that these arrangements are “more likely to support and reinforce deeply sexist, racist, classist and heterosexualist attitudes than to undermine them” (1993:190). Furthermore, Eichler carried out a case study of the surrogacy arrangements involving Canadians through an American agency run by lawyer Noel Keane and revealed the exploitative and discriminatory aspects of these arrangements. In her examination of the 30 cases involving Canadians which spanned from 1980-1987, Eichler found some disturbing information. In order to service the 28 commissioning men, 55 women were commissioned with only 13 “successful” pregnancies resulting (1993:200). Eichler draws our attention to the fact that it is the man who enters into the agreement and the agency searches for a woman to “bear a child for the man” (Eichler, 1993:197). The commissioning man’s wife must adopt the child since she is not genetically related to the child, but the child is considered the man’s child as it
is genetically related to him. In almost half the cases (47 percent), the man utilized the services and the bodies of more than one woman: eight men utilized two women each, two men used three women each, three men enlisted four women each, and one man alone utilized the services of six women (Eichler, 1993:198-200). These numbers indicate that often the procedure is not successful on the first attempt and extra attempts and extra women are commissioned. The numbers also indicate how many women are “used” in the quest to create a child.

In addition, Eichler’s research gives empirical evidence to who is commissioning whom; she describes the types of people involved in these arrangements. The study proves that there is not just gender exploitation of men using women’s bodies, but there is also exploitation linked to class, as measured in education and occupation. Both the commissioning men and their wives come from higher social classes than the commissioned women who were either housewives or from the “pink ghetto” (Eichler, 1993:202). The commissioned women’s husbands were predominately employed in occupations described as “blue collar” (Eichler, 1993:202). These two facts suggest that the primary reason for the commissioned women to enroll in these arrangements is monetary (Eichler, 1993:202-203). Even though, as stated earlier, many women are described to be entering into these arrangements for altruistic reasons, money appears to be the driving force. On the other hand, females that agree to help their relatives have a child do not undergo the process for monetary incentives. However, they may experience and be “highly vulnerable to family pressures” which may force the women into the arrangements (Eichler, 1993:208). The data do not show that women who are either financially well-off or in prestigious careers are willing to commit their bodies to be used for the purpose of conceiving, gestating, and birthing a child to be handed over to another couple. In terms of age, it appears
that an older generation is using and exploiting the bodies of a generation of younger women. The average age for the commissioning man was 42.9 years, for the commissioning man’s wife the average age was 41 years, whereas the average age for the commissioned woman was 26.7 years (Eichler, 1993:204). Eichler’s study confirms the fact that “in terms of class and gender the commissioned women are in an inferior socio-economic situation compared to the commissioning men” which therefore, makes the practice “one that reenforces existing patterns of inequality” (1993:204).

Making Babies

The above study emphasizes the fact that the male is predominantly the commissioning person in preconception agreements. The commissioning wife is there by reason of association with the man; she “acquires parenthood via marriage to him and adoption of the child” (Eichler, 1993: 209). Both IVF and surrogacy help to ensure men can have children that are genetically related to them. It is often assumed that it is the woman’s desire for children that is the driving force for these technologies and arrangements. And of course, many women do feel a real need or desire to have children. However, in a study conducted by Crowe, focusing on women’s motivations for participating in IVF programs, she found that the women did not place primary importance on the biological or genetic link to children, but that “social motherhood was more important to them than the transference of genetic traits involved in biological motherhood” (1987:87-88). However, for men, the opposite applied. The men placed the genetic relationship to children as the most important relationship and several of the women stated that husbands would prefer to have no children than to adopt children (Crowe, 1987:87-88). Therefore, one reason women enter into IVF or agree to commission other women is to allow their husbands the
opportunity for a genetically linked child. Unfortunately, Crowe does not reveal the number of participants in her study. We cannot generalize her results to all women in IVF, however she does draw our attention to the fact that it is not only women that may desire children, but men often desire genetically related children. Lasker and Borg concluded that since men “cannot carry, birth, or nurse a baby” nor are they the “major care-givers,” many men believe that their largest contribution to creating a child is through contributing their genes or genetic material (quoted in Rowlands, 1992:266). And Eichler concludes that the commissioning person’s eggs or sperm if utilized, their genetic material, ensures “parental status” whereas donated eggs, sperm, or uteri obtained from others are regarded as merely a “substitute” that does not ensure parental status (1993:211). Since commissioning men largely enter into preconception agreements or their wives undergo IVF with the intention of utilizing the male’s sperm to ensure genetic linkage and continuation, the male’s parental status is almost guaranteed.

Creating NRGTs

The new reproductive and genetic technologies were created and exist at the intersection of science, patriarchy, and capitalism. Each area influences how NRGTs are conceptualized, who they will be applied to, which NRGTs will be developed, how they affect those utilizing them, and who has access to the NRGTs.

Science is often assumed to be an objective and value-free endeavor constantly seeking knowledge and “truth.” As Mies explains, “science is no longer seen as part of the human and natural universe, but as above it” (1993:184). Science has been and is created by humans, and to a large extent by white, middle to upper class males who have values and prejudices, yet science is conceptualized as being divorced from those who study and create it as well as the
social relations in which science exists. Patriarchal values and aspects such as oppression, exploitation, hierarchies, superiority, and inferiority are a part of science. The sexist and racist past associated with science continues to influence it and the NRGTs (Mies, 1993). Francis Bacon, one of the founding fathers of science, called upon men to construct and use science “against the Nature of things, to storm and occupy her castles and her strongholds” and “to bind [Nature] to your service and make her your slave” (italics added, quoted in Rowlands, 1992:205). By equating Nature with female forces that needed to be controlled by science, and hence, by men, Bacon helped to maintain an ideology that subordinates and oppresses females and nature; constructing both females and nature as ‘others.’ Women and nature were not the only entities to be subordinated, blacks and other non-white races were also cast as the inferior ‘other’ and racism emerged with the rise of both science and capitalism (Mies, 1993:179). Prior to Bacon, Aristotle had constructed woman as inferior to man whose possibilities and destinies were tied to her biology (Code, 1993:22-23). According to Aristotle, “the male is by nature superior, and the female inferior; and the one rules, and the other is ruled; this principle, of necessity, extends to all mankind” (1977:51). If nature is female, then it is inferior and in need of being ruled and controlled, a role for which science emerged. Furthermore, male and female bodies were different and the male body became the norm from which the female body was seen to deviate (Mitchinson, 1993:393). This deviation allowed for medical intervention as there became an emphasis upon learning about and studying the female body and how it worked. In medicine, a part of science, any deviation from the male norm signaled illness and women’s supposedly weaker body was “prone to disease” (Mitchinson, 1993:393, 400). Hence, women’s bodies and their natural processes of menstruation, pregnancy, and menopause have been studied,
medicalized, and treatments developed to counteract natural processes. As Ehrenreich and English state,

Everything that seems uniquely female becomes a challenge to the rational scientific intellect. Woman’s body, with its autonomous rhythms and generative possibilities, appears to the masculinist vision as a ‘frontier,’ another part of the natural world to be explored and mined. A new science - gynecology - arose in the nineteenth century to study this strange territory and concluded that the female body is not only primitive, but deeply pathological. (1978:19)

NRGTs and infertility are no exception. Women’s bodies are the terrain upon which the NRGTs are developed, experimented, and utilized; it is not upon the bodies of males even though male infertility accounts for approximately 30 percent of the infertile couples and another 30 percent is unexplainable (Rowland, 1992:231).

Science is not value-free. Science has been used to subordinate, exploit, and to deem who is worthy of both life and reproducing. Eugenic campaigns in both North America and Europe were fueled by scientists, doctors, and reformers who used scientific methods and theories to attempt to achieve their goals of racially pure and physically and mentally superior races (McLaren, 1990). Presently, genetic technologies such as ultrasound, amniocentesis, and chorionic villus sampling are used to determine whether the fetus is physically fit and acceptable. But we must ask who decides which diseases and traits are or will be tested for in the future? Largely, it is the scientific and medical communities embedded within the social relations of the present day which develop and utilize these tests, hence ultimately they could lead to judgements upon who is worthy and who is not. The values intrinsic to science help to define what is and is not studied and possible. For example, female menstruation and hormonal changes are studied whereas male hormonal change is less studied (Rowland, 1992:202-203), there exists a blood
test for prostate cancer, but not for breast cancer, no birth control pills are available for men to use, yet they have been developed for women to use even though they are not 100 percent effective or devoid of dangerous side effects. The opportunity for companies to make profits from the NRGTs and the pharmaceuticals associated with the technology leads to another driving force and influence in the development of NRGTs, the capitalist interest.

However, before discussing capitalism, I wish to make a clarification: I do not believe that all science and technology is bad. Of course, there are very positive and beneficial aspects to science, technology, and medicine. For example, because of scientific and technological developments and inventions, people experience longer and better lives, the standard of living has been raised for many, people can instantaneously communicate around the world, numerous diseases have been wiped out or been placed under control, we can travel around the world at breath-taking speeds, and many women experience safer pregnancies and deliveries. However, we must be aware of and critical of how science, technology, and medicine are utilized and developed. We must question who has control of these instruments and who is controlled by them. We cannot blindly accept that science, technology, and medicine operate above the social relations that exist within our societies and our world. Racism, classism, sexism, and various other oppressions and dominations exist and we must be certain that the science, technology, and medicine that we practice and create does not maintain and reinforce these oppressive social relations. If they do, we must challenge them, question them, critique them, and hopefully transform them into instruments that benefit everybody while controlling and oppressing no one.

The commercial interests of those involved with creating, supplying, and delivering the services and products associated with the NRGTs are vast. Fertility drugs used to stimulate the
woman's ovaries and to allow the doctor control over the woman's natural processes and hormones are big business and generate large profits. One company, Ares-Serono Group, creates three-quarters of the sale of fertility drugs in Canada (Cameron, 1996:110). The Canadian fertility drug market equaled approximately $16 million dollars yet it constitutes only 3.2 percent of the total world fertility drug market (Cameron, 1996:110). Currently, an international research endeavour called the Human Genome Project is underway to map and sequence the approximately 50,000 to 100,000 genes in the human genome at a cost of $3 billion. This project will identify the genes and their purposes with the hope that one day they can be manipulated, if desired. With the mapping of the genome, this information would allow a company to develop tests for the market to identify and even manipulate particular traits and diseases. For instance, if the gene(s) responsible for a disease were discovered and a treatment to halt the development of the disease later in life were possible by testing and treatment during pregnancy or after birth, who would not be pressured to pay for this knowledge and ability to have a healthy child? Patents could be granted to companies. For instance, in 1985, the United States granted a patent on the culture, seed, and plant of a particular type of corn plant that developers had modified and hence, the patent office essentially granted ownership of a life form to a particular group of humans (Shiva, 1993:32). Shiva draws our attention to the fact that the antecedent work carried out for millennia by females and indigenous farmers is ignored or deemed worthless; only the work done in a scientific laboratory counts and determines who “owns” something (1993:32). In addition, an application for a patent on a naturally occurring female hormone has been made (Shiva, 1993:34). Once the human genome is mapped and sequenced, the potential for
developing patented products based upon life processes and to be used both pre- and post-conceptionally could be enormous.

Diagnostic testing such as ultrasound and amniocentesis are also an integral part of the marketplace. These tests are carried out upon women undergoing the reproductive technologies and women experiencing a natural reproductive process. They have become common and routine procedures carried out upon the woman and the fetus to help ensure the health of the child. Ultrasound testing generates millions of dollars each year. For example, ultrasound equipment sales are about $50 million annually and approximately $100 million is spent on ultrasound testing each year in Canada (Cameron, 1996:112-113).

Canada has a mixture of both private and public institutions offering NRGTs. The public institutions are based mainly in hospitals and many are affiliated with universities. On the other hand, some doctors have set up their own private practices in order to offer NRGTs to the public and to escape the bureaucracy of the public hospital system. Financial coverage is also a mixture of both public and private funding, but much of the private funding is subsidized by the public medical system (Cameron, 1996:111). Some of the costs associated with in vitro fertilization and surrogate arrangements were mentioned above. Cameron (1996) explains that the North American Free Trade Agreement (NAFTA) can have a profound effect upon the delivery of the NRGTs and the state's ability to control and regulate the NRGTs since the state will be hindered by the corporate rights guaranteed in the agreement. Market forces will drive these technologies and increasingly place them into the private market sector as opposed to the public sector. In addition, standards will be harmonized with the standards of the United States and possibly Mexico which will guarantee American access to Canadian markets (Cameron, 1996:121-123).
Furthermore, if the government wishes to move a product or service from the private market into the public market, then compensation must be paid to the foreign provider which will mean that all Canadians pay through their taxes into the coffers of American companies (Cameron, 1996:123). NAFTA has a great potential to increase the commercialization of the NRGTs in Canada.

This chapter has provided an introduction into some of the aspects of the new reproductive and genetic technologies. A limited introduction of the technological processes involved with in vitro fertilization were explained as well as a few of the basic aspects of conception arrangements. Some of the driving forces and influences of science, patriarchy, and capitalism in the area of the reproductive technologies were briefly explored. The purpose of the information contained in this chapter is to help the reader understand a few of the issues involved in the NRGTs and to give them a basic understanding for future chapters. As will be revealed, much of the information contained in this chapter is not evident in the mainstream press and newspaper coverage of the technologies under investigation. The media cover the NRGTs in their own particular manner which is both partial and limiting. The next chapter will explore some aspects of this newspaper coverage as well as examine prior research concerning the media’s coverage of NRGTs.
CHAPTER TWO

NEWSPAPER REPRESENTATION OF NRGTs

Canadians are living in an increasingly technologically complex world where scientific innovations are constantly changing the ways in which we work, play, communicate, and even reproduce. In order for people to understand and make decisions regarding these innovations and complicated technologies, information is required. With regards to the NRGTs, the majority of Canadians do not have direct access to them and therefore, they must rely upon various media such as television shows, news reports, newspapers, and magazines to obtain their information about these technologies. The media not only help to inform Canadians, but they also help them to form ideas, opinions, and beliefs (Martin, 1997:1-2). Hence, what Canadians know and think about the NRGTs is related to their representations within the media. However, people are not blank slates that absorb this information unquestioningly, but they mediate the content and information based upon their own social locations, identities, and ideological systems. Newspapers play an important role in the dissemination of information and in the prioritizing of news agendas. It has been shown in research that “newspapers initiate an agenda and television then pursues the chosen issues and reinforces them” (McPhail & McPhail, 1990:125). Examining how newspapers represent and report upon the NRGTs will help us to understand what information the public is given regarding these technologies. This chapter will review prior research pertaining to the media representation of NRGTs, the role of language, and the construction of “news” for which I will offer explanations in order to understand why NRGTs are represented in particular ways.
In searching for prior research, there were a limited number of sources directly concentrating on newspaper representation of NRGTs. This chapter will review the research I uncovered, but other readings sometimes mention the media’s coverage of NRGTs while discussing other issues and these sources are included in this section. The literature review draws upon research that is both Canadian and international in origin. The reason for utilizing a variety of sources is to allow the reader and myself the opportunity to compare the results of my own newspaper analysis with findings and conclusions from a diverse range of prior research.

Ana Regina Gomez dos Reis (1987) examined newspaper articles focusing on IVF in the Brazilian press from 1979-1985. The methodology of her analysis is not contained within the article so we have no way of knowing the details surrounding the research. In her article, the author arranges various quotations and extracts from the different newspapers according to their major themes. Unfortunately, she does not offer any systematic analysis or critique of the quotations as she states, “I have decided that an epistemological analysis of the contents of the articles is unnecessary. They are too obvious to merit further comment” (Gomez des Reis, 1987:120). I believe that she could have contributed to her readers’ understanding of the articles and their relationship to NRGTs if she had completed an analysis of the articles, but she chose not to undertake this task. Instead, she organized the quotations and extracts under the following headings which relate to their dominant themes: Importing the Ideology: An English Idea in the Brazilian Womb; A Scientific Fable; The Expropriation of Women’s Bodies: From the Rape of the Sabine Women to the Theft of the Ovule; The Show—There’s No Sin Below The Equator; The Death Of Zenaide; The Controversy; Cardinal Remembers Nazi Eugenic Methods; Business Is
Business, and The Other Side Of The Coin. By organizing the extracts in this manner, the author presents a limited picture of the IVF industry in Brazil from its importation from England and IVF’s scientific basis and validation to the exploitation and invasion of women’s bodies. The public’s opinion regarding the technologies is also revealed through the extracts as well as an understanding of how that opinion is formed through the presentation of the technologies in the newspapers. The headings and categories as well as the specific quotations illustrate how the newspapers covered IVF in Brazil and the dominant viewpoints in which they are presented in the Brazilian papers.

Looking at some specific examples from the article, we learn a number of things about IVF in Brazil. Under the “Importing The Ideology” heading, the quotations point to two main reasons for this technology entering Brazil. The first is the desire to be on equal terms with other countries who are seen as more medically advanced while the second reason is to help women become pregnant. Other reasons such as the desire to control the creation of life, gaining access to women’s bodies or the personal status and economic motivations of the individual doctors are not mentioned. In the section entitled “The Expropriation Of Women’s Bodies,” the IVF procedure is presented as painless, but the previous chapter of my thesis explains the processes involved which challenge the painless claim. The section also implies that the reason IVF fails is because women’s bodies abort the embryos rather than blaming the experimental nature of the technology, and finally, that the failure rates for the procedures are high yet the successes are presented in positive ways which downplay the negative failure rates. In “The Death Of Zenaide,” a woman who had been previously sterilized without her consent dies while undergoing the IVF process and yet, the IVF program in which she was one of the patients is
deemed to be a success. One must ask, "A success for whom?" Certainly not for Zenaide. The doctor does not take responsibility for the death, but instead is consoled by the fact that Zenaide died while trying to become pregnant. These few examples illustrate a limited and partial picture of the conditions and values under which IVF is carried out and reported upon in the newspapers in Brazil. Even though the research is limited, it helps to create a partial understanding of Brazil's media coverage. The author of the article would have done a great service to her readers if she had teased out the main points and situated them within a feminist or critical examination of IVF as well as relate to the reader some details of her methodology.

Media representations of the new reproductive technologies often pivot around the notion of progress or future promises, according to Raymond (1993). In her book, *Women As Wombs: Reproductive Technologies and The Battle Over Women's Freedom* (1993), Raymond discusses the media, science, and how the new reproductive technologies are marketed through the coverage that they receive in newspapers and journals. Raymond drew upon the work contained in Dorothy Nelkin's book, *Selling Science: How The Press Covers Science and Technology* (1987). To illustrate some of her points, Raymond quotes directly from various print media which range from popular press publications such as *Vogue Australia* and *People Magazine*, to newspapers such as the *Los Angeles Times, Sydney Morning Herald*, and the *Washington Post* as well as the scientific journal the *New England Journal of Medicine* in addition to other sources from Australia and the United States. Nelkin examined in general how science and technology are covered by the press and Raymond uses these general insights to examine specifically the coverage of new reproductive technologies. Overall, the technologies are covered within a promotional/propaganda framework. The promotional framework is developed by Nelkin in her
book. The propaganda framework utilized is the theoretical work of Noam Chomsky and Edward Herman (Raymond, 1993:109-110). These frameworks conceptualize the technologies as generally progressive (promotional) while the relationship between the sources of technological information and the media forces journalists and reporters to rely on those that have an interest in promoting the technologies (propaganda) (Raymond, 1993:109-110).

In order to further understand the promotional/propaganda model, I will elaborate the research conveyed in the above sources. The ways in which the technologies are represented in many articles are usually with the viewpoint that the technologies will improve the world. They are represented as positive and beneficial with enthusiastic claims regarding the technologies’ potential (Raymond, 1993:110-111). Any risks that the technologies may pose are often represented as future risks or in abstract terms that are not to be currently worried about or dealt with in the present, according to Raymond. Critical reporting or in-depth analyses of the technologies are few in number in the media coverage (Raymond, 1993:113). Both Raymond and Nelkin explain that many of the scientists and institutions in which the technologies are developed control the information that is available to reporters. Since the journalists require stories to sell newspapers, and the researchers and scientists require the media to inform the public of the latest advances and to contribute to the acceptance of the technologies, journalists are often dependent on experts who have vested interests in the development and acceptance of the technologies (Raymond, 1993:125-126). Furthermore, when the newspapers use these individuals as sources, they help create them as reputable experts for the reading public (Raymond, 1993:126). Since science is conceptualized as being objective and neutral, the biases of these experts are ignored (Raymond, 1993:125). Nelkin explains that the technologies are
seen as "solutions" to a wide range of problems, but that they have also been understood as possible "problems and threats" and therefore, the media have also discussed their "moral and social implications" (1995:45). Furthermore, science is presented as "above the sphere of normal human understanding, and therefore beyond our control," with coverage that is often "promotional and uncritical" (Nelkin, 1995:162). Raymond states that frequently the language utilized in the media stories parallels the language used in the materials to promote the technologies by the infertility clinics and businesses; hence, happy and satisfied customers are quoted while the disappointed and angry are often given little coverage or presented as isolated, individual cases (1993:113-114). In Chapter One, it was revealed that the majority of women involved with the new reproductive technologies do not experience a pregnancy nor do they give birth to a child while undergoing the procedures. Yet, these women who constitute the majority are not allowed to tell their stories in the mainstream press.

What is missing, according to Raymond, is a coverage of the historical context for the technologies in which past technological failures and abuses are highlighted such as breast implants, DES, and certain birth control methods. Instead, the media are used by the pharmaceutical companies to equate female bodily functions and problems with pathologies which their drugs and the technologies can fix or cure (Raymond, 1993:119). What is not highlighted is the fact that medical procedures and drugs can cause problems for which further technologies and drugs are offered as solutions. For instance, infertility can be caused by natural circumstances such as menstrual or ovulation problems. As well, environmental causes such as workplace hazards, industrial toxins, and pollutants in the natural environment are beginning to be investigated. In addition, fertility problems can be linked to sexually transmitted diseases
(STDs) such as chlamydia, gonorrhea, and the manifestation of pelvic inflammatory disease caused by STDs. But infertility and sterility can also be iatrogenically or doctor/treatment induced by such things as intrauterine devices (IUDs), birth control medications, sterilizations with or without the patient's consent, and Diethylstilbestrol (DES), a drug given to women (from the 1940s to 1971), in order to prevent miscarriages. Daughters of women who were prescribed DES can experience fertility problems as well as develop cancer. Hence, infertility problems that might not have occurred naturally are now treated by the same medical and scientific systems which caused the infertility in the first place.

Raymond explains that science has become technologically and publicity driven where commercial interests and possible products are the driving forces (1993:128-129). As a result, technology and scientists have become “antiscience” in the sense that critical scientific inquiry and analyses have been abandoned to a large extent (Raymond, 1993:129). Science becomes equated with technology and hence, it creates “needs” for which it offers products for those that are willing and able to purchase them (Raymond, 1993:136). In the case of iatrogenic infertility, science creates the problem of infertility with one hand while offering solutions to this problem with the other hand. The “need” for reproductive technologies is furthered by the patriarchal ideology that all women must have children in order to be truly fulfilled and to be “real” women. The social and personal pressures to mother which are placed upon women can be great, especially when intentionally childfree women are frequently presented or described as selfish, uncaring career women. Females are socialized from a very early age to be nurturing caregivers who experience self-fulfillment when tending to the needs of others. The inevitability of mothering is rarely questioned, but women who chose not to mother find their decision
frequently questioned. The assumption that all women should mother creates a force whereby if a woman or couple is deemed to be unable to naturally have children, she or they will be encouraged to investigate and utilize the reproductive technologies to help achieve the goal of true womanhood. In addition, a discourse of individual rights and liberties is used to help endorse the technologies and their availability (Raymond, 1993:124). So an argument of individuals’ rights to procreate is used in order to gain access to the technologies and to keep them as an active field of research and innovations. Against the marketing of the reproductive technologies, critics are seen as old fashioned and not experts; feminists are dismissed as biased and not technologically or scientifically knowledgeable and therefore, not to be taken seriously (Raymond, 1993:125). Instead of critically examining the reproductive technologies in-depth or helping the general public to critically analyze the NRGTs, the media help to create the need for them, their acceptance, and their perpetuation. It is important for the reading public to question what they read and to ask where is the information coming from, who are the sources and conveyors of the information, and who has an interest in the technologies’ development?

The new reproductive technology of IVF is an extremely invasive medical procedure carried out upon and within the bodies of women. In Chapter One, some of the processes involved were briefly explained. The reality of the IVF program, the invasive effects of IVF in terms of the emotional, physical, and psychological aspects are rarely discussed in the news media, especially in any explicit details (Williams, 1989:20). Instead, the media prefer to portray the positive sides of the technologies by quoting “success” rates in place of failure rates, by giving brief descriptions of the IVF procedures, by providing the reading public with pictures of babies and smiling parents, and by transmitting comments from happy parents and medical
personnel (Williams, 1989:20). The newspapers report on crimes, wars, and horrific atrocities committed the world over, complete with graphic photographs, yet a realistic portrayal of the assaults committed against the women undergoing IVF are nowhere to be found. By keeping the general public uninformed about the harsh facts of the procedures, the media help to create the impression that these babies are created with little effort or effect upon the bodies and minds of women. The stories and voices of the women are not heard among the isolated celebratory news articles, especially those stories from women who do not end up with a child. The omission helps make the reproductive technologies more acceptable and less open to serious debates and questions. People wishing to understand the full impact of the technology upon the lives of women must turn to feminist publications such as the Williams article (1989) quoted above or the book *Infertility: Women Speak Out About Their Experiences of Reproductive Medicine* by Renate Klein (1989), among others.

Basen (1993) also mentions the role of the media in connection to the NRGTs and concurs with the above conclusions. For the most part, the media, while reporting on many of the latest advances in the NRGT field, provide only superficial coverage of the technologies (Basen, 1993:28). Despite the fact that there are complex issues and questions to be addressed in relation to the technologies, these issues “are seldom discussed in the mainstream media” (Basen, 1993:28). In-depth coverage is not the norm, but instead “fragmented” coverage of the technologies and related issues are common (Basen, 1993:30). Vandelac briefly mentions how the media forgo “intelligent questions” and instead, often cover stories in a “sports-event model of reporting, complete with ‘adversaries’ pitted against one another” (1993:111). This type of coverage, even though it may prove interesting and provocative to some readers, constructs the
arguments in a winner-loser fashion. One example of media coverage with an adversarial approach was the coverage involving the National Action Committee on the Status of Women (NAC) in conjunction with the NRGTs and the Royal Commission on New Reproductive Technologies. While presenting NAC's position, the media slanted the coverage as the "feminists" against the "infertile" (Massey, 1993:246). In her Master's thesis on NAC's representation in *The Toronto Star* from 1983-1997, Weiser (1998) concluded that NAC's portrayal was limited in particular ways.

After examining the coverage in *The Toronto Star*, Weiser ascertained that one of the ways in which NAC was portrayed revolved around the belief that NAC does not represent the majority of Canadian women, but instead represents the minority (1998:52-53). In the newspaper, NAC was portrayed as an organization that only serves to represent the interests of "feminists" even though it is concerned with reproductive issues and reproductive control for all women. Furthermore, NAC includes many women's organizations which are definitely mainstream. The reports then situate "the feminists" against "the infertile." In addition, Weiser reveals that the racial and internal conflicts within the organization which constrain the organization's ability to focus on and fight for larger social issues was focused upon in much of the media reporting (1998:55-56). Weiser also determined that media coverage showed NAC was believed to use "irrational, unnecessary, or undesirable attitudes and behaviours in their efforts to fight for women's rights" (1998:57). These representations of NAC shown to us by Weiser demonstrate that the newspaper coverage of NAC in *The Toronto Star* is partial and limited. Accounts focus on problems and conflicts instead of highlighting and praising NAC for its contributions to Canadian women's lives and its role in making Canadians more aware of
relevant issues. Weiser illustrates to us that newspaper stories are created in particular ways and that there are "processes of assembly, organization, and interpretation that select and highlight what aspects of the account[s] are to be made visible to us" (1998:83). These accounts come together to form a "reality" that is known to us and presented to us as "objective" and hence, a specific and limited reality of NAC is created. All that NAC is, was, and can be in the future is ignored in order to present to the reader a particular way in which NAC is, has been, and will be. Weiser's examination of NAC in The Toronto Star forces us to be cognizant of the fact that newspapers present and frame their stories in ways that only reveal limited and partial realities and information. With respect to the NRGTs, partially uncovering what this reality is and what are its implications are two of my thesis' goals.

The Language Used When Dealing With NRGTs

When we read articles pertaining to the NRGTs in newspapers, journals, academic publications, and popular mainstream publications or hear accounts on the television, the language utilized to convey the stories and messages help to construct the reality of NRGTs for the general public. Language is not a neutral medium through which we transmit our ideas, but language shapes the world in which we live. Saussure theorized that meaning is not "reflected by language," but that "meaning is produced within language" (Weedon, 1987:23). Poststructuralists envision language as "truly social and a site of political struggle" where there are "competing discourses, competing ways of giving meaning to the world" (Weedon, 1987:23); therefore the language and subsequent meanings that are utilized and constructed in disseminating NRGT information to the general public through the media have personal, social, and political consequences. As Rowland explains, "language and naming are very powerful in
shaping the attitudes of a society” (1992:231). Feminists worked hard to change sexist language and they continue to challenge sexist words and terminology because feminists realize that the ways in which something is conveyed through language contributes to shaping people’s reality. A few common examples are useful to illustrate this idea. The use of the words chairman or man as a generic term for both men and women, the distinction between Miss and Mrs, or the use of the term girl when referring to adult women all create a reality where males are the norm and women are defined by their relationships to males, where women are cast as the ‘other’ or infanticized. Through the insistence of feminists, these words have been changed to reflect better the reality of the world in which we live; chairman becomes chair, man becomes people or humankind, Mrs is often replaced by Ms, and girl becomes woman. When reading non-feminist accounts of NRGTs, one becomes aware of a new set of language phrases that have become commonplace and that work equally to construct a particular reality surrounding the NRGTs. Rowland refers to this language, the language of the reproductive technologies as “reprospeak” (1992:231).

The language of reprospeak that conveys to us a constructed reality of NRGTs accomplishes a number of consequences. This language creates a context in which the technologies are acceptable, conceptualizes women as defective, illustrates a desire for control over women and their reproductive abilities, and finally, disembodies and dismembers women and their bodies (Rowland, 1992:230). In Chapter One, I mentioned a few examples of the above. For instance, quoting success rates instead of failure rates helps to construct the technologies as more acceptable to the general public. This is further achieved by concentrating on the positive stories, using promotional language, and ignoring the vast majority of failures and
their stories. In addition, by using simplified terms and phrases to describe the procedures, such as “an egg is taken from the woman, sperm from the man, an embryo is created and reimplanted in the woman,” ignores the physical and emotional hardships and pressures put upon the woman (Rowland, 1992:233). Furthermore, I mentioned that the term “infertile” is extended onto the couple and not just restricted to the individual. Hence, even if the woman has a healthy, fertile body, she becomes “infertile” by reason of association with an infertile partner and therefore, it becomes acceptable to submit her to infertility treatment and the harsh procedures of IVF. The equating of both fertility and sterility as “diseases” by the World Health Organization constructs them as purely biological and not social or historical and hence, available to be treated by medical personnel and science (Mies, 1993:188-189). Medical intervention becomes routine and expected when the biological malfunctions.

In the previous chapter, the inappropriateness of the term surrogate was discussed. This term is not the only term that is used to devalue women’s roles and work in reproduction, but others also help to devalue and dismember women into body parts that can be “rented” or interchanged with other women’s body parts. Women are reduced to their individual body parts when terms such as “temporary use of normally functioning uteri” (Eichler, 1993:193), “surrogate uteruses,” “incubators,” and “women as ‘for sale’” are utilized to refer to their role in reproduction and gestation or when a judge refers to surrogates as “alternative reproduction vehicles” (Rowland, 1992:237, 239). The phrase “test-tube baby” which was mentioned earlier disregards women and conceptualizes the baby as being created, gestated, and delivered from a test tube when it is not. Rowland explains that when women are reduced to individual body parts, this “dismemberment increases women’s alienation from their bodies and from
motherhood, signifying their loss of control of themselves as whole people” (1992:236). Gains that women have made regarding control over their own bodies and reproduction thus become tentative and threatened. In addition, some women begin to internalize this dismemberment and begin to see themselves and other women as containers, “suitcases” or “as a ‘postie’ just delivering the mail” as illustrated by the fact that some women described themselves with the above terms (Rowland, 1992:238-239). As women become dismembered and lose their sense of personhood by language that either negates or devalues them, the embryos and fetuses become personified and personalized as they are “orphaned,” “die” or become the “patient” (Rowland, 1992:240-243). In addition, the use of another reproductive technology such as ultrasound and the discourses of medical personnel reinforce the fetus as a separate entity from the woman and in need of protection from her (Mitchell, 1993). But just as the embryo becomes personified, it is also depersonalized if the conditions warrant it. For instance, the creation of the pre-embryo where before there was just the embryo which soon became the “fertilized egg” has allowed scientists and medical personnel to further experiment upon these as it is seen to be more acceptable than experimenting upon an embryo (Rowland, 1992:232-233).

Through language, women are equated with Nature and hence, are subordinated to men who are conceptualized to be equated with culture; women become the ‘other,’ and available to be dominated and controlled. In the previous chapter, I explored this conceptualization of women and nature, but here, I will provide a few language examples that illustrate the point. Women’s eggs are “harvested” or a practitioner performing laparoscopy is “a miner panning for human gold” (Rowland, 1992:234). Julie Murphy introduces us to the terms egg farming and egg farmers that developed out of the mind set where “patriarchal scientists who sustain the field
of reproductive research by developing the stereotype of women as egg farms" exists (1989:69). Hence, women become a natural resource that is ripe for control and exploitation. Women and their reproductive powers are seen as the last frontier to be dominated or as Shiva explains “capital now has to look for new colonies to invade and exploit for its further cumulation. These new colonies are, in my mind, the interior spaces of the bodies of women, plants and animals” (1993:30). Just as past empires and explorers searched the globe for land, people, and resources to conquer and colonize, so do some of the present-day doctors, scientists, and capitalists search and explore women’s bodies in order to expropriate their reproductive matter and powers to eventually control them.

Conducting The News

The preceding sections of this chapter help to illustrate the fact that newspaper coverage and the creation of “news” are socially created endeavours. North American newspapers are created, written, and marketed by individuals working within capitalist institutions that are socially and historically situated. The review of Weiser’s research reveals that newspaper coverage is limited and partial; it is framed in particular ways and does not represent the entire reality of the situation. The newspaper industry is a highly complex enterprise and I can in no way adequately explain it in a few pages. Instead, I am going to explore two major factors that influence the construction of news and newspapers, especially with regards to the NRGTs. These two major concepts forming the basis of my theoretical framework are capitalism and patriarchy which lead to particular consequences for the reporting of NRGTs and women.

The production of news is an ideological exercise. Stuart Hall explains that “the choice of this moment of an event as against that, of this person rather than that, of this angle rather
than any other, . . . is a highly ideological procedure” (quoted in Graydon, 1995:154, italics in original). The identification of this ideological process leads me to the discussion by Marx in *The German Ideology* regarding class, ideology, and ruling ideas. As Marx expounds, “the ideas of the ruling class are in every epoch the ruling ideas: i.e., the class which is the ruling *material* force of society, is at the same time its ruling *intellectual* force” and he continues to further explain that “[the ruling class] among other things rule also as thinkers, as producers of ideas, and regulate the production and distribution of the ideas of their age: thus their ideas are the ruling ideas of the epoch” (1978:172-173, italics in original). For Marx, the ruling class was the class that controlled and owned the means of production. This idea pertaining to ruling ideas and ideologies is useful to us, but it must be expanded to include a ruling gender ideology. This ruling gender ideology is a patriarchal gender ideology that promulgates male domination and superiority over females; the needs, concerns, and ideas of females are subordinated, deemed inferior, and marginalized. Hartmann defines patriarchy as

a set of social relations between men, which have a material base, and which, though hierarchical, establish or create interdependence and solidarity among men that enable them to dominate women. Though patriarchy is hierarchical and men of different classes, races, or ethnic groups have different places in the patriarchy, they also are united in their shared relationship of dominance over their women; they are dependent on each other to maintain that dominance (1984:177).

The material base of this dominance largely rests upon male control over female labour power, female sexuality, female reproductive abilities, and females’ limited access to resources (Hartmann, 1984:177-178). The patriarchal gender ideology transcends class and race boundaries. The connection between capitalism and patriarchy was defined by Hartmann when she explained that both concepts must be examined when theorizing about women’s oppression
because in North America and many other countries, there exists a patriarchal capitalist society (1984). Patriarchy reinforces capitalism and capitalism reinforces patriarchy, but the destruction of one does not necessarily lead to the destruction of the other (Hartmann, 1984). However, there exist other competing ideologies such as socialism and feminism which challenge patriarchal and capitalist ideologies, but the extent to which these opposing ideologies are given legitimate and equal representation is related to the strength and perseverance of patriarchal capitalism within a society. The intertwining of capitalism and patriarchy are important concepts in understanding the construction of news.

From a capitalist viewpoint, the newspaper industry is one in which individuals from various classes come together to work in a capitalist marketplace (Martin, 1997:97) in order to create a product for sale. Delivering the news is not the only objective of newspaper owners: profits are also a goal. Increased concentration of newspaper ownership has occurred during the 20th Century. In 1992, just 13 of the 108 Canadian dailies in circulation were independents (Kesterton & Bird, 1995:43). Recently, Torstar, the owners of The Toronto Star, put forth a bid of $748 million to purchase the newspaper holdings of Sun Media Corporation, which includes The Toronto Sun. This purchase or takeover would give Torstar 16 dailies or 26 percent of total Canadian circulation compared to Hollinger-Southam who currently own 57 dailies or almost 42 percent of total Canadian daily circulation (Whittington, 1998:A1). After negotiations and the entrance of another communications conglomerate, Torstar purchased four of the Sun’s newspapers and Quebecor purchased Sun Media. Following these transactions, the Canadian newspaper industry looks like this in terms of ownership: Hollinger-Southam owns 57 daily newspapers (40.7% share of total circulation), Quebecor-Sun Media own 15 daily newspapers
(21.6% share of total circulation), Torstar owns 5 daily newspapers (14.2% share of total circulation), Thomson owns 7 daily newspapers (10.7% share of total circulation), and the other 21 daily newspapers constitute the remaining 13 percent share of the newspaper industry’s total circulation (Ferguson, 1998:D1). Kesterton and Bird raise concerns regarding concentration of media ownership as “the newspaper[s] will likely reflect the views of the establishment” (1995:43). These views are most likely to be white, middle-upper class male views. Beauchamp also realizes that the “monopolization of media industries by a small group of capitalists” leads to a situation where “control of the media is concentrated in a small network of institutions under male dominance” where women have little power (Martin, 1997:100). Alternative views are given little coverage in mainstream newspapers and to receive feminist, women-centred news and articles, women are forced to create their own publications such as Herizons, Ms., and Canadian Woman Studies Journal to name a few.

Massey explains that due to finances and a lack of time, most reporters must concentrate on issues by presenting “one or two opposing views around a particular issue” so that they fit into “reliable story pegs” (1993:246). But there is more than this that explains the newspaper and media coverage of NRGTs. Here enters the ruling patriarchal gender ideology. Martin explains that “the news world is male-dominated” (1997:239). Some ways in which this dominance manifests itself, according to Mackie, are that female reporters are in a minority, news production is mainly controlled by male businessmen (for example editors, owners, reporters), news makers are considered male, women and their issues are rarely considered to be news makers, news focuses on the needs and concerns of males while relegating women’s issues to other sections of the paper (for example women’s section, life or home section), and women’s news issues may
be presented "from a male perspective" (Martin, 1997:240). The result of these factors is to create a news system that prioritizes the male and marginalizes the female; a patriarchal ideology.

News coverage often focuses on male concerns or interests such as wars, fights, violence, political conflicts, and "sensational event[s]," often in a superficial manner (Beauchamp in Martin, 1997:242-243). This helps to explain the "adversarial" type coverage in the above example involving NAC where the feminists were portrayed as being against the infertile women. In addition, some males are often considered to be more focused on the public sphere of career, sports, politics, and business so that coverage of these issues are prioritized. I hypothesize that issues such as the NRGTs may be covered in the perspectives dealing with economics, politics, or science, but how the technologies affect women will not be covered in detail; nor will women's stories be told or heard. Furthermore, I predict that only stories which reinforce patriarchal ideas will be allowed to be told in the mainstream press to any great degree. It will be interesting to determine if the particular angle which focuses on the experiences and voices of women is ignored or marginalized in regards to NRGT coverage since "women's reality continues to be absent from the news" (Saint-Jean in Martin, 1997:241). Furthermore, Beauchamp questions the principle surrounding objectivity in the news (Martin, 1997:247). The myth of objectivity has been challenged by feminists in other areas such as in the development and practice of science and technology. Feminists have demonstrated that this creation of knowledge is not value-free and objective, but that it is underscored by patriarchal values and biases. If the press is not objective, then neither is it impartial as it is founded on a patriarchal subjectivity which is biased because "it is based on the values of power, money and competition,
it provokes a disequilibrium in the news to the advantage of the elite” (Beauchamp in Martin, 1997:248). In the place of objectivity, Beauchamp champions the principle of equality which encompasses the varied and multiple aspects of an issue or problem being represented and including equal coverage for males and females as well as those that are the dominated and the dominators (in Martin, 1997:248). In NRGT coverage, this would force the many stories of unsuccessful IVF attempts to be told as well as the impact of the technologies upon the bodies, minds, and lives of women. In addition, the language utilized in the telling of the stories would also change.

Capitalism creates hierarchies such as the editors, the owners of newspapers, and the reporters, but Marxism cannot explain “who will fill which places” and Hartmann suggests that for this understanding we need to understand patriarchy as defined above (1984:180). Males will dominate the positions in the hierarchies which hold power, prestige, and access to productive, economic, and natural resources. Within the “hierarchy of patriarchy, all men, whatever their rank in the patriarchy, are bought off by being able to control at least some women” (Hartmann, 1984:177). Therefore, many, but not all, males dominate to a large extent in the home and workplace; this dominance is achieved economically, intellectually, politically, physically, and ideologically over females to some extent. Patriarchy helps to explain why, according to MediaWatch, “on average, female reporters and columnists comprise 29.5 percent of those shaping the print news and only 18.75 percent of those whose activities are considered newsworthy or whose opinions are considered worth soliciting” (Graydon, 1995:155). Furthermore, linking patriarchy to news creation helps to explain the fact that “the definition of news, and the criteria governing the selection process... are all determined by men” (Graydon,
1995:154). In a limited survey of the editorial pages listing the key players of the newspapers *The Toronto Star* and *The Globe and Mail*, I found that females constitute a minority among the directors, presidents, vice presidents, editors, and publishers that were identified. For example, in *The Toronto Star*, there were 18 males and only 5 females among the group listed above and for *The Globe and Mail* there were 22 males and 7 females. But more than the number of women must change in order for the newspapers to equally reflect the ideas, hopes, dreams, needs, and concerns of females as well as males; there needs to be a transformation in the patriarchal capitalist ideology that governs and influences nearly every aspect of our society.

Through this chapter, I have attempted to illustrate that newspaper coverage of the NRGTs is constructed by individuals working within an institution and society which are to a great extent capitalist and patriarchally situated, socially and historically. These two ideologies work together in order to create newspaper coverage that is limited and partial in its coverage of the NRGTs. Because capitalist and patriarchal interests are prioritized, the news that highlights and equally represents female knowledge, needs, and concerns is lacking or marginalized. Furthermore, the language and coverage that are frequently utilized in the newspapers serves to negate female experiences and bodies while it validates male superiority and capitalist desire for the continuation of the technologies. The next chapter will explain the methodology utilized to examine and analyze the newspaper articles selected for my thesis. The subsequent chapters will present my findings pertaining to the newspaper coverage of NRGTs and these findings will be compared to the information reviewed within this chapter.
CHAPTER THREE

METHODOLOGY: CONTENT ANALYSIS

Content analysis involves analyzing cultural objects such as books, newspaper articles, movies, music, advertisements et cetera. It can be accomplished in a quantitative or qualitative manner or a combination of both. Two characteristics of cultural objects are that the objects have not been created in order to be studied, hence, "they possess a naturalistic 'found' quality" and they are nonreactive or noninteractive as they are not influenced by the researcher observing and asking them questions (Newman, 1994:262; Reinharz, 1992:147). The methodology is popular with feminist, critical, and interpretive researchers (Newman, 1994:262). Cultural artifacts are interesting to study as they not only are influential in shaping norms, but they are also reflective of a culture's norms (Reinharz, 1992:151). By analyzing newspaper articles regarding NRGTs, we will be able to learn how the technologies are conceptualized and presented to the public by the newspaper industry.

The data for my thesis are newspaper articles contained in the Canadian newspaper, The Globe and Mail. I have chosen this paper because of its large circulation and on the basis that the paper is considered to be a national newspaper. It will be interesting to determine how the newspaper presents the NRGTs to its respective reading public. The articles under consideration are both short and long articles, editorials, letters to the editors, and one paragraph "blurbs." Since I am particularly concerned with representations of women, I focus upon the technologies involving in vitro fertilization (IVF) and the newspaper articles that relate to this procedure as well as articles covering preconception agreements and multiple births through fertility drugs.
I decided not to cover the technologies that relate specifically to plants and animals as my main focus is on the experiences of women and examining the presence or absence of their voices in relation to the NRGTs even though techniques or experiments upon plants and animals may one day become experiments upon the bodies of women. Genetic testing is being carried out on extra corporeal embryos and on fetuses within women's bodies. For example, sex selection of embryos can be achieved through testing to determine whether the embryo will be male or female. In addition, genetic tests on fetuses allow the parents to learn whether the child will have Down's Syndrome. The future of genetic testing may grow enormously once the human genome is mapped in its entirety. In this thesis, I do not select articles specific to genetic technologies such as the Human Genome Project, but some of the articles, while discussing NRGTs do raise issues of genetic screening and manipulation. Therefore, the genetic component of my thesis emerges out of these articles and not out of articles written specifically pertaining to genetics. IVF relies on extensive invasion into women's bodies and is an extremely technical procedure. Limiting the kind of technology that I cover in the thesis serves to help confine the scope of the project and make it more manageable. I did not want to find myself trying to cope with a subject that is too large and difficult to analyze given my time constraints and limited skills in quantitative and qualitative analysis. The thesis is a learning experience for me not only in terms of the results, but also in terms of the process.

With respect to time coverage, I cover the technology for a twenty year time span. This time span places the beginning of the coverage in the year 1978, from the time when the first “test tube” baby was born up until the end of 1997. The span allows me to examine whether the focus of the newspaper articles shifted over time, whether the coverage of the NRGTs has
changed, and whether the representations of women have changed in the past two decades. I knew that I would not be able to collect articles from every month over the past twenty years due to time and financial constraints. For my thesis proposal, I conducted a subset analysis of some newspaper articles. I utilized the month of February for *The Globe and Mail* because it contained the most articles according to the keyword list I created for the reproductive technologies. In addition, I added a few articles from July 1978 when Louise Brown, the first "test tube" baby was born. The final thesis includes articles from the months of February, April, August, and October in addition to July 1978 because these months produced the most numerous articles under the keyword search that I carried out. The keywords I used for the search were: IVF, in vitro, test tube, test tube baby, reproductive, reproductive technologies, surrogacy, surrogate, eggs, human eggs, embryo, frozen embryo, multiple births, and miracle babies/births.

At the University of Toronto, the database called the CBCA Canadian Index dated back as far as 1982. In order to search for articles between the years of 1978-1981, I utilized the Canadian News Index. This index is not on a database, but it is in hard-copy format and contained in reference books. There is a limitation to the index as only articles and editorials deemed to be influential and important by the creators of the index are included within the index; therefore, not all articles relating to my topic may be included. Further, the articles’ titles are listed under particular subject headings which are also limited in their scope. For example, for the particular years that I searched the index, the term "reproductive technology" was not a subject heading and "artificial insemination" only appeared in one year of the index. Instead, I had to peruse such subject headings as: Birth, Children, Medicine and Health Research, Genetics, Drugs, Research, Families, Science and Technology, and Women. In the end, I developed a list
of numerous newspaper articles to utilize for my thesis. Then, I proceeded to the microfilm and performed a manual search for the articles I had uncovered in my database and index searches.

This thesis involves both a qualitative and quantitative content analysis on the newspaper articles, however, the quantitative analysis will be secondary to the qualitative analysis. In defining my methodological approach, I was influenced by Margrit Eichler's *Reproductive Technologies and Education* course which I completed in the winter of 1998. The course was taught within a feminist framework. In the class, we read and discussed various writings on NRGTs according to the following viewpoints, as constructed by Eichler: the individual, social, legal, scientific, economic, genetic, disability, ethical, familial, spiritual, and feminist viewpoints. The approach created a wide-ranging and systematic method in which to read, analyze, and understand the various articles. The categories used in this thesis developed out of this approach. The various viewpoints will be defined in a later section of this chapter entitled *Categories of Analysis*.

As mentioned above, I conducted a small subset analysis for my thesis proposal which helped to develop and define the categories utilized in my thesis. In the beginning, I thought that I could classify each article according to one or two of the categories or viewpoints. However, while developing and performing the classification system in the subset analysis, it became apparent that this approach was limiting. Reducing an article to one or two viewpoints failed to illustrate the depth and range of the issues that were covered in each of the articles. Instead, I have opted to show each of the issues that are raised or mentioned in the articles. By classifying the articles in this manner, the reader receives a more elaborate picture of the newspaper coverage of NRGTs and I do not have to worry about omitting information while trying to reduce
an article into one or two viewpoints. In addition to the classification system, I pay attention to the presence or absence of women's voices, experiences, and perspectives as well as to how they are represented in the articles. These will be elaborated upon in the qualitative discussion of the articles.

Both quantitative and qualitative data and results will be utilized. Hence, I keep track of the number of articles and the number of articles under each respective category. With the data, I determine the number and percentages of the various categories to conclude which are the most frequent, least frequent, and/or non-occurring. There may be pictures or illustrations accompanying the newspaper articles that relate to the article's contents. These images will be analyzed to determine who/what are in the pictures, what is focused upon, what is backgrounded, et cetera. By examining the imagery, we will be able to determine some of the messages that the visuals relate to the readers.

Another area of my analysis will be the identification of the various sources that the journalists utilize while writing their articles. Some of the sources are not identified by the writers, so I am limited to only the sources that they name. But I think that it will be beneficial to examine who it is that the journalists believe it is important to quote, paraphrase, and identify in their articles. These sources help to create an aura of expertise around the technologies. Of particular interest to me is whether the sources are male or female and the locations or occupations of the people cited. Considering that these technologies affect women so profoundly and in such intimate ways, it will be interesting to learn if women are a large source from which the journalists receive information and if the journalists believe it is important to name women
as their sources. I believe that learning who speaks for whom and about what issues will be an interesting part of the analysis.

In addition, I chose five articles from the newspaper and performed a more substantial, qualitative content analysis upon each article. The articles were chosen because they each exhibited a different aspect of the technology or the way in which they are presented to the reader. The first article covers the announcement of the first "test-tube" baby born in England and it was selected because the article was one of the first published in this newspaper dealing with the momentous event. The second article examines the issue of preconception arrangements and in particular, it covers an interesting segment of the Whitehead/Stern event that occurred in 1987. The third article is written with a feminist orientation and was selected because it displays many of the characteristics associated with feminist coverage of the technologies. The fourth article examines the issue of multiple births due to fertility drug treatments. The final article tells about a multiple birth event through the procedure of IVF and was selected because it can be compared to the first IVF article selected. It is hoped that by examining these various articles in more detail that the reader will get a better understanding of how the particular stories are constructed and told to the newspaper readers. This analysis is contained in the fifth chapter of the thesis.

**Categories of Analysis**

The newspaper articles were analyzed according to the categories listed below. As stated earlier, the categories emerged out of the graduate course *Reproductive Technologies and Education*. As well as the title of each category, I have included a description of some of the criteria involved in classifying each article under their respective categories. These descriptions
allow the reader not only to acquire a deeper understanding of the variables, but it permits the reader to re-analyze the articles and replicate the study or apply them to other newspaper articles.

During my examination of the articles in my subset analysis, I was haunted by the issue of reliability and by the question, “Would others get the same results as I have?” By elaborating upon the categories, I am closer to the goal of answering the above question with a yes. The categories of analysis used to code the articles are as follows:

**Micro:**
The micro category includes coverage that examines or mentions NRGTs at the individual level of analysis. For instance, the technologies are examined in individual cases such as how they affect an individual woman, man, child, or couple, et cetera.

**Macro:**
The macro category includes coverage of the NRGTs on a wider societal level. For example, the technologies are examined on various levels such as how they affect women, men, children, classes, races, societal policies or funding, et cetera.

**Technological:**
The technological category includes coverage that mentions or examines the technological, scientific, or mechanical procedures of the NRGTs. For example, descriptions of the actual IVF procedure are included in this category.

**Legal:**
The legal category includes coverage of the technologies that examines or mentions their legal or jurisprudence aspects such as the legality of contracts, legal rights, public policies and laws, et cetera.

**Economic:**
The economic category includes coverage of the NRGTs that examines the economic or financial aspects of the technology. For example, the costs of the procedures to individuals and society, pharmaceutical costs, effects on health care and hospital resources, and the market forces of the technologies, et cetera.
Genetic: The genetic category includes coverage that examines or mentions the genetic aspects of the technologies such as prenatal testing, genetic testing for sex selection, genetic linkages, termination of pregnancies due to genetic factors, eugenic concerns, mapping of the human genome, genetic engineering, and biological reductionism, et cetera.

Ethical: The ethical category includes coverage that examines or mentions the technologies on a deeper ethical or moral level such as the rightness or wrongness of the NRGTs, future uses of the technologies while examining ethical concerns, et cetera.

Spiritual: The spiritual category includes coverage of the technologies that examines religious concerns pertaining to the technologies, religious explanations of the technologies, et cetera.

Discriminatory: The discriminatory category includes coverage of the technologies that mentions or examines current or future possible biases regarding the technologies such as class exploitation, racial discriminations, gender inequities, and discriminations based on age, religion, sexuality, marital status, et cetera.

Familial: The familial category includes coverage of the technologies that examines or mentions the effects of the technologies on notions of families, parenthood, concerns of the mother, father, or child, and changing family forms, et cetera.

Feminist: The feminist category includes coverage of the technologies from a feminist perspective that includes the voices, experiences, concerns of women, and coverage that increases women's knowledge, power, and autonomy over their bodies and the technologies. There are many degrees and varieties of feminism and this definition allows a wide range of feminist beliefs to be incorporated. The authors do not necessarily have to identify themselves as feminist to be included in the feminist category.
Overall Orientations

In addition to the above categories, I classify each of the newspaper articles in regards to their overall orientation. The three orientations utilized are: positive, negative, and neutral. In order to determine which orientation was strongest, I classified each of the paragraphs in the articles, the headline, bylines, any photographs or images accompanying the articles, and the captions under these images. After classifying each of the above, I added up the number of positive, negative, and neutral variables and whichever was greatest, that orientation was determined to represent the article’s overall orientation. Therefore, positive, negative, and neutral overall orientations can and usually do include aspects of the other orientations. For example, an article classified as exhibiting a positive orientation may also have paragraphs that include negative or neutral comments.

Positive: The positive category includes news coverage and images, the balance of which present the NRGTs in a positive, optimistic or beneficial manner, as well as news that could be classified as “good” news. For example, the use of the term “success rate” (even if it is low) would be classified as a positive presentation as opposed to the term “failure rate” which would be classified as negative.

Negative: The negative category includes news coverage and images, the balance of which present the NRGTs in a negative, pessimistic or critical manner, as well as news that could be considered as “bad” news. For example, the term “failure rate” as explained above would be included here as well as references related to “master races,” Nazism, et cetera.

Neutral: The neutral category includes news coverage and images, the balance of which, present the NRGTs in a neutral, impartial or indifferent manner. For example, descriptions of people’s occupations, statistics such as age, marital status, et cetera.
Completing the orientation section of the analysis was a difficult endeavour for me because of my own beliefs and critical approach to the reproductive technologies. In many instances, I had to "step outside of myself" to categorize the texts and images. For example, an announcement regarding the birth of a child to a woman past menopause, who in essence gave birth to her grandchildren could be presented as positive news and presented in an optimistic manner though I personally view this event as negative. I classified it as positive in this case. The success rates are classified as positive even though they are extremely low and I view them as experimental failure rates. These two examples help illustrate the dilemmas I faced and the "splitting" of myself that was necessary to classify the articles. In addition to these categories employed to code the articles, I am also looking at the various sources that the journalists utilized and identified while writing their articles.

**Sources**

"Sources" in the articles refer to people that have been quoted in the news coverage either directly or through the use of paraphrasing. Unfortunately, not all of the sources in an article are revealed so I am limited to identifying only those whom the journalists have named. Sources can also include authors of reports, judges' legal decisions, and spokespersons for hospitals or organizations that are quoted or paraphrased in the article. The different types of sources are only counted once for each article. For example, if a person is quoted four times in an article, the source is only counted once. But the person may be quoted in another article and counted again. The reasons I decided on this avenue are three-fold. First, I was primarily interested in both who was sourced and their sex. Second, I believed that keeping track of how many times everyone spoke throughout the twenty years would be too daunting a task, considering there
ended up being over 300 sourced entries. And finally, I knew that I would be paying attention to and examining the comments of the female sources in more detail which would eventually roughly reveal the depths to which they commented upon the NRGTs.

The different types of sources that I came across in the newspaper articles are listed below. How the journalist chose to identify her or his sources is how I must classify them, but sometimes they can overlap. For instance, a practicing doctor can also be an academic, but if the doctor is identified primarily as a practicing physician then the doctor is coded as a doctor. On the other hand, if the doctor is identified as a professor, then the doctor is coded as an academic.

**Doctors:**

These include doctors involved with medical procedures and as explained above, are practicing physicians, IVF doctors, and may include medical doctors who are directors of infertility clinics.

**Academics:**

These include professors and individuals identified as working out of educational or medical institutions. For example, a professor of law may be a lawyer, but if they are identified as a professor then they are classified under academic. These can also include researchers of reports and scientists.

**Judges/Lawyers:**

These include judges and lawyers practicing law or actively sitting on the bench.

**Clients of IVF/Fertility Programs:**

These include women and men involved in the IVF procedure in order to create, gestate, and keep the child. It also includes those using fertility drugs in order to conceive. Even though the woman may be the primary person involved with the procedures, any partner is included by reason of association with the woman. These people can include both past, present, and future IVF/fertility drug users. They do not include women that have been commissioned or that have agreed to gestate an embryo in order to give up the child upon delivery to another person (see below) nor does the category include people that have asked another woman to carry their
embryo to term or who will take possession of the resulting child (see below).

**Relatives of IVF/Fertility Programs’ Clients:**

This category includes relatives, friends, and other close people associated with the person who is involved with the IVF or fertility program. These could include sisters, brothers, mothers et cetera.

**Commissioned Woman:**

These include women that have been contracted or that have agreed to gestate an embryo to term in order to give the resulting child to another person or couple in the past, present or at a future date.

**Commissioning People:**

These include the person or couple to whom the gestating birth mother has agreed to relinquish the child. These people can include past, present, and future people involved in “surrogacy” arrangements.

**Commissioned/ing Relatives:**

These people include relatives or friends that are connected to the commissioned woman and those that are relatives or friends of the commissioning people. For example, the husband of the commissioned woman would be included here.

**Government:**

These include people employed by the various levels and departments of the government. Judges and lawyers employed by the government are included under the judges/lawyer category, unless they are identified by a government title such as health minister, attorney general, et cetera.

**Organizations:**

The category includes sources from any organizations and companies.
Hospitals: These include sources from hospitals and clinics such as spokespersons speaking on behalf of a hospital or clinic.

Religious: These include religious individuals, religious organizations, and church officials. Professors of religion are classified as academics.

Others: These include sources that do not fit into any of the above categories.

Each source is further classified as female or male. This identification is achieved through the use of first names or the pronouns she or he. If a name could be used by both sexes and there is no qualifying she or he, then the person is placed in the “Unknown” category. In earlier news coverage, there was a tendency to refer to females with a male generic term. For example, some articles refer to female spokespersons as spokesmen and later use the pronoun she when referring to the spokesperson. Hence, unless the name clearly indicates a female or there is a qualifying she or he, spokespersons are listed under the “Unknown” category.

Sex of Article’s Author(s):

The last classification category that I employ in the analysis is the sex of the article’s authors. The sex of the author is stated as “F” for female, “M” for male, or a combination of both if more than one author of different sexes wrote the article. In addition, the “Unknown” category is present (see above for explanation). Finally, frequently articles are printed without acknowledging the author(s) of the article. In this instance, they are not placed into the “Unknown” category, but they are identified as “N” which is used to signify that no author(s) is/are acknowledged.

In describing my methodology in the above sections, I attempt to provide the reader with a thorough understanding of my procedures and processes in analyzing the newspaper articles for the thesis. The remaining chapters of the thesis are the concrete results of the application of the above methodology.
CHAPTER FOUR

EXAMINING THE ARTICLES: WHAT STORIES DO THEY TELL?

Newspaper coverage of the new reproductive and genetic technologies is presented in a particular manner and limited in its scope. Throughout this chapter, there will be a blending of both the quantitative and qualitative analyses performed on the newspaper articles so that we can determine the particulars of the coverage. In addition, I have included quotations from the various articles in order to illustrate the points under consideration. A summary table of the classifications and their respective totals is presented below. At the end of the chapter, I have placed the detailed tables from which I draw my analyses and the data which form the basis of my discussions pertaining to the newspaper coverage of the NRGTs.

Table 1
Summary Table of the Categories of Analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of Articles</th>
<th>Category</th>
<th>No. of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only Micro</td>
<td>45</td>
<td>Genetic</td>
<td>30</td>
</tr>
<tr>
<td>Only Macro</td>
<td>10</td>
<td>Ethical</td>
<td>31</td>
</tr>
<tr>
<td>Micro &amp; Macro</td>
<td>27</td>
<td>Spiritual</td>
<td>9</td>
</tr>
<tr>
<td>Technological</td>
<td>52</td>
<td>Discriminatory</td>
<td>18</td>
</tr>
<tr>
<td>Legal</td>
<td>40</td>
<td>Familial</td>
<td>31</td>
</tr>
<tr>
<td>Economic</td>
<td>50</td>
<td>Feminist</td>
<td>24</td>
</tr>
</tbody>
</table>

N (number of articles) = 82

Levels of Analysis

When reading and analyzing the newspaper articles, level of analysis was noted in two categories, the micro and the macro levels. Briefly, the micro level includes newspaper coverage
at the individual level such as discussions and coverage pertaining to a specific woman, man, child or couple. On the other hand, the macro level includes coverage or analysis at the social level which incorporates coverage pertaining to classes, races, social policies or public funding et cetera. My analysis of *The Globe and Mail* newspaper articles reveals a tendency to report upon the NRGTs at the micro or individual level. Specifically, 45 of the 82 articles (55%) have coverage that only includes the micro level of analysis. Rebick, the past president of the National Action Committee on The Status of Women (NAC), explains that while the NRGTs may help some individual infertile women to have children, we must be aware of the impact that the technologies have on *all* women (1993:89). When one considers the fact that the NRGTs are changing the ways in which humans reproduce and thus, the NRGTs impact not just upon the individual level, but they influence the collective level, a deeper and wider analysis must be performed upon these technologies. When newspaper coverage situates itself at the individual level, possible impacts and consequences on the society or collectivity are not adequately revealed or discussed. Instead, the NRGTs are presented in the newspapers and understood as affecting only those who have difficulties reproducing and not affecting all people through such areas and issues as funding, consequences for hospital resources, changing definitions and conceptualizations of mothers, or questions of control for women over their bodies and reproductive roles and powers.

A very small number of the articles, 10 out of the 82 articles (12%) examined or mentioned the NRGTs only at the macro level. Often, these articles mentioned economic, ethical, legal or technological issues such as the costs of the procedures to taxpayers, legal issues pertaining to surrogacy or pre-conception arrangements, ethical considerations, and eugenic
concerns. A blending of both the micro and macro level of coverage was presented in 27 of the 82 articles (33%). A greater tendency to examine the macro level might be expected in Canada than was actually found in the review of articles since Canada exhibits a social consciousness that is concerned with providing for the welfare of the individual and collective through social programs and publically funded institutions. Many health care treatments and procedures are covered under public health plans in this country. Even if the specific IVF procedures are not covered under provincial medical plans, some associated procedures are covered. For instance, if the woman undergoes a caesarean section and gives birth to low weight babies which is often the case with IVF, the care of both the mother and child is covered and the hospital personnel and other resources are funded by the taxpayers. In Canada, there exists a public health care system, social programs, and a social safety net designed to help the citizens lead better and more stable lives which demonstrate the social consciousness of many Canadians. The analysis reveals that there is an attempt to examine and understand the NRGTs at both the individual and social levels of analysis. However, the micro level is prioritized and more frequently occurring than the macro level of analysis to a large degree.

**Categories of Analysis**

The technological category is one of the most frequently occurring categories in the analysis. A total of 52 (63%) of the articles examine or mention the technological aspects of the NRGTs. One would expect that with this amount of coverage, readers would be very informed about the actual procedures related to the NRGTs. However, this is not the case. As Rowlands (1992) and Williams (1989) suggested and what was also evident in my own findings was the fact that the procedures performed upon women's bodies are explained in a very superficial
manner. Rarely are the dramatic physical, emotional, and mental aspects of the NRGTs explained or presented to the readers. Usually, any such coverage occurred within a feminist discussion of the NRGTs. As explained in an earlier chapter, the procedures are complex and physically intrusive to women. But over and over again, the technologies and procedures are explained in simplistic terms that do not reveal the reality that exists in IVF. A few examples pulled directly from the newspaper articles will illustrate this point. One reporter writes that “Two British specialists implanted an egg from Mrs. A. into her womb four days after it had been fertilized in a test tube by her husband’s sperm” (10/07/78:10) and another one writes “Multiple births are not an uncommon result of test-tube pregnancies, in which eggs are removed from the mother, fertilized with the husband’s sperm and then reimplemented” (Sarick, 8/2/88: A11) and finally, a newspaper article explains “The woman, Arlette Schewitzer of Aberdeen, S.D., was implanted early this year with eggs that had been removed from her daughter and fertilized with her daughter’s husband’s sperm” (6/8/91b:A9). Contrast these with one of the longest descriptions which occurred within a feminist newspaper article by Pappert and reported that

The woman is given large doses of hormones to increase egg production from the one egg normally produced each month to half a dozen or more. More eggs are required because the procedure has a very small chance of success if only one is used. When ultrasound imaging indicates that the egg follicles are about to release the eggs, additional hormones are given to facilitate their release and they are removed. The eggs are fertilized in a lab dish with the spouse’s sperm, and they are reimplemented several days later, usually four or five at a time to increase the chance for a successful pregnancy (Pappert, 6/2/88:A2).

Even though this article contains one of the longest descriptions, it still does not fully describe or reveal the procedures and the effects and impacts they have upon the women. In the vast
majority of the articles and through their simplistic technological descriptions, the women and their bodies all but disappear. It is as if the procedures have been disembodied; they do not take place upon and within the bodies of women. Detailed accounts of the procedures and techniques could not be given in every article as they are complex and there is only a limited amount of space for the articles, but the procedures utilized in IVF must be better explained and situated around women and their bodies to fully understand their impact. Here is where the patriarchal gender ideology presented in an earlier chapter comes into play. Beauchamp explained that newspaper coverage of issues and events will be situated in areas that concern and interest males (Martin, 1997:242-243). As a result, we get coverage of the technologies that ignores women and their experiences of the technologies. Furthermore, legal and economic issues surrounding the NRGTs are prioritized. For instance, legal issues are discussed in 40 articles (49%) and economic issues in 50 articles (61%). These were sometimes covered at the macro level as explained above, but the individual level of these issues was also featured. In the case of contractual arrangements, legal issues were often examined as to how they applied to the individual, specific cases. In particular, the cases of Mary Beth Whitehead and the Sterns as well as Anna Johnson and the Culverts were the news makers and focused upon. In these two events, Mary Beth Whitehead and Anna Johnson were women who were contracted by other couples, the Sterns and the Culverts, respectively, in order to bear them a child. Both Whitehead and Johnson changed their minds and in the courtrooms of America, they fought for custody of the children born from their bodies. Here, the newspaper coverage had the sports-like or conflictual model described by Massey (1993:246). The contracted women were pitted against the contracting couples in a winner-loser fashion not only in the courtrooms, but also in the
newspaper coverage of their cases. It is not to say that the economic or legal issues as they pertain to individuals are not important, but that their coverage must expand to include the experiences and voices of the women as well as how these issues impact upon all of us.

An interesting development regarding the technological category occurs over the twenty year period. In the first ten years of coverage spanning from 1978 to the end of 1987, 32 of the 52 articles (62%) present some technological information, while in the next decade of coverage, only 20 articles (38%) report on technological aspects of the NRGTs. Even though most of the coverage of the past twenty years is simplistic and incomplete, the coverage in technological terms becomes less frequent in the more recent past. This is puzzling considering the fact that the technology and procedures involved in the NRGTs are constantly changing with new innovations that are introduced. Current or up-to-date information is required for the readers in order to allow them to make adequate judgements on the NRGTs, but this is not happening. Do the reporters assume that the technologies are understood and accepted practices and therefore, the technological aspects do not have to be explained and elaborated upon? Perhaps, it is assumed that the term “test-tube baby” is so commonplace and understood that explanations are not warranted. This practice does a disservice to the reading public as they do not learn the nature of the reproductive technologies and therefore, they cannot adequately question and critique the NRGTs.

The developments on the genetic side are not greatly explored in relation to the NRGTs through the newspaper coverage. One reason for this might be the fact that I did not specifically choose articles oriented to genetics, instead I opted to utilize IVF and preconception arrangement articles. However, the potential to combine genetic technology with the NRGTs is vast and it
is currently occurring on a limited scale. It seems that almost daily, we learn about advances in genetic testing, engineering, manipulation and explorations. For example, one hears about discoveries and searches for breast cancer genes, alcoholism genes, Alzheimer genes as well as genetic testing for Down's Syndrome, to name a few genetic linkages. The entire human genome is presently being mapped through the cooperation of different nations around the world. Lippman developed the term geneticization to characterize this growing tendency and reliance upon the genetic. She defines geneticization as

The ongoing process that includes the ever-growing tendencies to name things that distinguish one person from another as genetic in origin, to reduce differences between individuals to their DNA codes and to define most disorders, behaviors and physiological variations as at least partly genetic in origin. It involves the use of genetic tools to look for differences between people and the application of genetic interventions and services to resolve multiple health and social problems (1993:40).

Earlier, I mentioned that sex-selection now occurs both pre-conceptionally and post-conceptionally. Humans are getting closer and closer to the day when our offspring will be intentionally designed instead of naturally created. But who will decide which traits and characteristics will be allowed and which ones will not be acceptable? Those that control the technologies are those that will have the potential to make the decisions. If the control is not shared equally among a very diverse group of people then the likely situation to develop would be that affluent, white males in the scientific, medical, and pharmaceutical professions would make the decisions regarding who is worthy of life and who is not worthy. Currently, Down's syndrome is tested for through amniocentesis and sometimes fetuses with this gene are aborted. Goudry draws our attention to the fact that "in the context of medical interventions in human reproduction, eugenic thinking is pervasive; that is, the focus is on the production of 'perfect
babies” with the goal that disabilities will be eliminated whereas the majority of disabilities are not genetic in origin (1993:155, 157-158). This thinking drives us to believe that the “solution” for disabled people is through biological causes and means instead of social causes and means (Goudry, 1993:158). As amniocentesis and ultrasound have become routine practices in the care of pregnant women, will genetic testing also become routine with women having little power and control to say no to the tests?

The ethical questions and dilemmas that the NRGTs raise are vast and complex. Do we allow these technologies? Who should control them? If, one day, eggs are taken from aborted female fetuses, what will it mean for someone to be born from a female that was never born herself? Do we allow genetic testing and if so, for what will we test? How are the actual definitions and conceptualizations of what it means to be human changing through these technologies? Does the ability to do something require that it be done? These are only a small sample of the immense ethical questions that arise through and because of the reproductive technologies. And yet, only 31 (38%) of the articles examined touched on any ethical issues. Superficial coverage of the NRGTs is common while the deeper ethical questions go largely unasked and unanswered. For the most part, any ethical questions are not dealt with in a thorough manner, instead they are simplistically answered or left hanging. What becomes evident in the newspapers is exactly what Raymond suggested; possible problems or risks are not examined and their causes are put off for someone else to worry about in the future (1993:110).

One of the least frequently occurring categories is the spiritual category with only 9 of the 82 articles (11%) touching on this subject. The argument stipulated that since God made
humans capable of creating the technologies then the technologies should be utilized. For example, one couple stated that “the procedure [IVF] is of ‘the highest morality, the work of the Lord to help us have our own children’” (17/07/78b:11) and one Catholic church organization saw the birth of the first test-tube baby as “a pro-life expression of love. Science can support the loving and natural ambition of the couple to produce new life” even though “different cases posed a variety of problems” (27/07/78a:2). The views of the Church or religious opinions were presented to the readers, but these were sketchy and short. For example, one article explained that “Roman Catholic leaders have criticized all forms of artificial [sic] insemination but many Protestant, Jewish and Moslem leaders endorsed the laboratory-induced conception so long as both husband and wife were parents of the child” (28/07/78:2). Or the views of the Church were more simply stated in one article, “Roman Catholic leaders oppose the new technique, as well as the test-tube baby program in general” (11/02/82:T8). The Vatican’s response to the NRGTs is large and complex as found in its publication Instruction On Respect For Human Life In Its Origin And On The Dignity Of Procreation. Replies To Certain Questions Of The Day (1987). The views contained within that publication originate out of a patriarchal, male-dominated, and hierarchical religious organization.

In the recent past, there has been a growing interest in the area of female spirituality and Goddesses. In particular, women are attempting to reclaim a lost spirituality and belief system in which their place and reproductive powers were more centralized and celebrated. How will this emerging spirituality relate to these technologies? Will the technologies be aligned with or situated in opposition to the Maiden, Mother, Crone trilogy of female spirituality? Female religious understandings of these technologies, whether they be of the mainstream beliefs or of
the Goddess and female spirituality orientation, have yet to be reported upon in the mainstream newspaper.

The possible discriminatory aspects of the NRGTs are rarely discussed in the articles. Only 18 of the 82 articles (22%) mentioned how the reproductive technologies can lead to discriminatory practices. Interestingly, of these 18 articles, 13 articles (72%) were situated within a feminist framework. Of particular importance were the discriminatory practices involved with preconception arrangements which involved the exploitation of poorer women’s bodies by wealthier, upper class couples. In Chapter One, I discussed this discriminatory practice when reviewing Eichler’s research. In addition, access to the reproductive technologies was largely available to white, heterosexual couples which meant leaving poorer, single or homosexual persons without adequate access. As Landsberg mentions in one article “normally, they select only married, middle-class, young women as IVF patients” (15/08/87:A2). In another article, she explains that

Surrogates are poor women who rent their bodies to rich women who cannot, or will not, undergo pregnancy. It is ludicrous to talk of the women’s rights to use their bodies as they please when they are, like prostitutes, so clearly without social and economic choices. We do not, after all, permit the sale of body organs (04/04/87:A2).

An interesting concern for a child regarding later discrimination due to the fact that she was conceived in a laboratory was related in a different article originating from Calcutta, India. It mentioned that the child’s laboratory conception “might jeopardize the baby’s future marriage prospects in the conservative Hindu society” (06/10/78:12). Often, the concerns of the child or children in these arrangements are not mentioned and it is interesting that the concern raised here
stems from the structure of the society. Hence it is the society and not the technology that is the problem for the child and her future.

A further discriminatory aspect is mentioned which derives from the technologies. This discrimination arises from the fact that pregnant women lose control over their bodies during pregnancy, especially if they have signed a preconception arrangement. The women are discriminated against and exploited by the commissioning people as the commissioned women are often directed or told how to act and what medical procedures they must undergo. For example, the women may be told that they cannot engage in sexual intercourse, drink any alcohol, smoke cigarettes and be ordered to exercise, undergo amniocentesis and ultrasounds. Their sense of self-autonomy and control is under attack. For instance, Lipovenko writes,

‘Don’t underestimate the male drive for the perfect son and heir,’ Ms. Morrison said. ‘If a pregnant woman was perceived to be disobeying her husband’s or her doctor’s orders that relate to having that perfect healthy baby ... we’re getting into some pretty strange waters, which are in danger of depriving pregnant women of the right not to be detained against their will or assaulted with forced medical treatment’ (01/08/87:D2).

Regarding access, custody, or visitation rights of commissioned women, it was also evident that they were discriminated against because they had signed agreements which were not necessarily legally binding and their contribution was deemed to be less valuable. As will be discussed in the following chapter, commissioned women’s biological contributions such as their eggs, wombs, and entire physical being are not valued in the same way as the commissioning people’s biological contribution, especially in regards to the commissioned male’s sperm. This aspect was also explored in an earlier chapter when I examined Eichler’s research (1993).
Genetic discrimination also occurs when the "wrong" sex is aborted or the genetic testing reveals a disability such as Down's Syndrome and the fetus is aborted as a result. These genetic possibilities were classified and discussed under the genetic category earlier in this chapter. Our attention must be drawn to the fact that it is a form of discrimination when something is valued less than something else because of its inherent traits or characteristics. For the most part, if the discriminatory aspects were mentioned or listed in an article, they were not discussed in any great detail. Merely drawing attention to the possible discriminations and problems was deemed sufficient, but any sustained or substantial discussions of the implications for women and their reproductive rights, autonomy, and futures were not explored in the articles.

The familial category includes the notion of changing family forms as well as concerns of the mother, father, child, couple, etc. Of the 82 articles under review, 31 articles (38%) examined or mentioned the above criteria. Most frequently, the changing family forms discussed were only brief snippets about the new types of relations created within families through the use of the reproductive technologies. For example, eggs fertilized at the same time while one was implanted and the others were frozen and utilized at a later date created fraternal twins born years apart. Normally, fraternal twins are conceived at the same time by two different eggs being fertilized and they are born at the same time. In the case of the American woman who gestated her daughter’s embryos and gave birth to her own grandchildren, another variation of changing family forms and a crossing of generational lines was exhibited. The newspaper article relating to this case stated that "she will be the first American to bear her own grandchildren, according to medical ethicists" and then it goes on to state that "when you start splitting up the components of motherhood which are usually tightly bound - social, gestational, genetic - then we get
confused about which moral and social values go with which aspects of motherhood” (06/08/91b:A9). Any deeper analysis is left up to the reader as the article does not delve deeper into the ethical issues of such a case. The effects of these technologies upon the resulting children’s sense of self and their relationships within the family have not been researched or explored. We simply do not know how these technologies affect the children’s conceptualizations of themselves. Will it be harmful, positive, or neutral? Only time and research will tell. Largely, the changing family forms are not questioned or critiqued; they are merely stated as a consequence of the technologies. For example, one article stated that the father “considered 18-month-old Amy and day-old Elizabeth Mary fraternal twins because they resulted from eggs fertilized at the same time. But Dr. Steptoe said they are not twins because they came from separate eggs and were born after separate pregnancies” (24/04/87:A1). How the technology has changed women’s relationships to reproduction, how their continuous relationship has become a discontinuous one that mimics the male model as explained by Eichler and related by me in an earlier chapter is not explored in the newspaper articles.

One of the concerns elicited by one newspaper article was whether or not children born from donated sperm should be told that the social father is not their biological father (Gibb-Clark, 28/08/86:A7). For the most part, this concern has not been expressed in the case of donated eggs. The supply of available sperm for reproductive procedures is feared to decrease if the principle of complete anonymity is abandoned (Gibb-Clark, 28/08/86:A7). A second reason for not disclosing the truth stems from the fact that the parent may fear a degree of rejection when the child is told and if the child wishes to seek out her or his biological relative. The third reason for not disclosing the truth derives from the fact that the social father must
openly admit that he was not able to fertilize the egg for some reason and his sense of manhood may be wounded. In regards to disclosure, the concerns of all must be listened to and a fair and workable compromise that addresses the needs of the donor, social parent, and child or children must be arrived at. Currently in Ontario, adopted children are allowed access to the records which identify their genetic parents if all parties have agreed upon the disclosure. For children born from donated sperm or eggs, their sense of identity may be altered when they learn the truth and their attempt to reclaim their identity through the disclosure of information should be facilitated. The Royal Commission recommended that in the case of donor insemination, further information could be available, but only in a manner which does not identify the donor and only for cases of “pressing medical need” which therefore, allows access to the information in only exceptional cases (1993:442). With egg donations, the Commission recommended that any identifying information not be given to anyone, except again, in exceptional cases or circumstances (1993:590). With these recommendations, the needs and wishes of the adult donors are given priority over the potential needs and wishes of the resulting children. A fairer solution needs to be enacted.

A few articles examined the stresses and strains of multiple births that often result through the use of IVF and fertility drugs. These articles examined the present concerns of the parents immediately or closely after the births such as baby supplies, child care support, financial needs and drains, and the lack of space in the household. Overall, the parents had concerns, yet they were presented as happy and optimistic. For example, one father of quintuplets explains “there are hectic times . . . but we try to enjoy every moment we can” (08/02/88d:A11). And a mother of quadruplets expresses “I’m so happy. . . They’re just beautiful. The babies cover up
the pain” (10/08/92:A8). Unfortunately, follow-up reports a number of years later were not
evident, therefore, the full impact of the multiple births upon the mother, father, children,
relatives, and friends is not known. A few hospitals and clinics attempted to arrange donations
and company sponsorships for the parents, but what support and help did they give after this?
One report quoted a doctor as saying “The mother’s getting quite concerned . . . It’s starting to
hit home that there are five babies. We assured them we would do our best to help them”
(Sarick, 08/02/88c:A11). The application of the technology created particular circumstances
such as multiple births that continue to place demands and stresses upon the parents for at least
sixteen to eighteen years, if not for a lifetime. How do/did the parents cope? What are the
children’s experiences of being a child in a multiple family? Is this type of family fair to the
parents and the children? How do the parents feel about raising a multiple family years later?
These are a few questions that the newspaper articles do not address, yet they would add a deeper
understanding to the reproductive technologies and their impact upon people.

A feminist coverage of the NRGTs occurred in 24 of the 82 articles (29%). This amount
constitutes less than one third of the articles. The feminist articles were written by both males
and females with 14 articles (58%) written by females, 7 articles (29%) written by males, and
3 articles (13%) with no authors acknowledged. As stated in the methodology section of the
thesis, it is possible for a male author to have a feminist viewpoint of the technologies as long
as the coverage increases and/or includes the voices, experiences, and concerns of women in
order to increase women’s power, knowledge, and autonomy over their bodies and the
technologies. It is interesting to note that all of the feminist coverage is either of a negative or
neutral overall orientation. Often, the feminist coverage of the NRGTs critically examines the
technologies and includes the voices of women who have experienced the NRGTs without a successful outcome and frequently, the voices of women who do not have favourable comments to make regarding the technologies. The feminist coverage also included the voices and opinions of women who were in favour of the technologies yet, these were a minority in the coverage.

Sources will be discussed later on, but there is one comment I wish to make regarding the feminist coverage and sources. Out of the 93 total female sources for all the newspaper articles under investigation, 52 female sources (56%) were cited in the 24 feminist articles which constituted only 29 percent of the total newspaper articles. It is clear that the voices, opinions, and experiences of women are an important component in the feminist coverage regarding the NRGTs. The female sources ranged from the professional and academic to those women who had direct access and experience with the technologies and their procedures.

Of the 24 authors who displayed a feminist orientation, 21 (88%) are identified as either male (7 or 29%) or female (14 or 58%). This amount strongly contrasts with the number of authors who are identified in the total 82 articles under review. Here, 49% are not identified and 51% are identified. I believe that it is important to identify the article’s author. Leaving the author’s identity unacknowledged helps to create an aura of objectivity and the sense that the article and its orientations and opinions are somehow above that of everyday humans. Unidentified authors and their articles help to create the illusion of an objective and neutral science and technology. In order to substantiate the fact that newspapers and their news articles, hence “the news,” are socially constructed by people, the authors’ identities should be acknowledged and revealed to the readers. Articles written by women and identified as such in comparison to articles written by males or by authors who are not acknowledged may be put
under extra criticism and believed to be just the opinion of this one woman. Research carried out by Goldberg revealed just this tendency. In his research, he utilized identical articles in two sets of booklets, only changing the authors’ names. In one booklet, he attributed the articles to males (i.e. John T. McKay) and in the other booklet with the identical articles, he attributed them to females (i.e. Joan T. McKay). Goldberg then had female students rate the articles for their “value, competence, persuasiveness, writing style, and so forth” (Bem and Bem, 1970:90). The results of the experiment were troubling. It was determined that the students gave “significantly lower ratings when it [the article] was attributed to a female author than when it was attributed to a male author” (Bem and Bem, 1970:90). The same experiment was repeated informally by another set of researchers where they gave the articles to male students, but the results were similar (Bem and Bem, 1970:90). These two experiments reveal that the sex of the author influences the reader’s perception of the article. Unfortunately, I was unable to locate a recent replication of this study as the results of the Goldberg study may no longer hold true. However, they could be applicable to the earlier articles examined in this thesis. Later in this chapter when we examine the issue of sources, a more detailed examination relating to males and authority is undertaken.

Feminists believe that the reproductive technologies must be examined, understood, and analyzed for not just how they relate to individual women, but how they relate to women as a group. In addition, it is imperative to examine the intersection of the technologies and women within the dimensions of class, race, sexual orientation, etc. With regards to micro and macro levels of analysis, the findings were interesting. Pertaining to the 24 feminist articles, 7 articles (29%) included only a micro level of analysis while the remaining 17 articles (71%) included
some level of macro analysis (5 articles had only a macro level and 12 articles had both a macro and a micro level of analysis). As explained earlier, there was a general tendency to examine or cover the NRGTs at the individual level. For the feminist coverage, the level of analysis was deeper and included more analysis at the social level. The coverage did not portray the technology as benign or neutral. Feminist coverage often revealed the dismal “success” rates, it examined more fully the actual procedures involved in IVF and the effects upon the bodies of women, it examined the loss of control for women during the procedures and their pregnancies, it included the voices of women who had not had a child through the use of the technologies and it examined the discriminatory aspects of the reproductive technologies. The coverage also included the voices of women who were in favour of the NRGTs. Overall, the feminist coverage, even though it was a minority coverage, examined and analyzed the technologies on a wide level that included the voices, concerns, and experiences of women. I will elaborate more on feminist coverage in the next chapter as one feminist article will be examined in detail.

In closing this section, there is one other issue that I wish to comment upon. The reproductive technologies were originally applied to women with blocked fallopian tubes in order to help them conceive children. In the beginning, they were utilized only by such patients. Over time, the technologies expanded and changed so that they were applied to a larger group of people; healthy, fertile women are now using reproductive technologies because their male partners are experiencing fertility problems. What other medical procedure involves submitting a healthy person to invasive and life-threatening medical intervention and leaves the person with the medical problem untreated and not cured? With kidney and bone marrow donations, healthy individuals are operated upon, but so is the ailing person in the hopes of helping them to become
healthier and frequently, they are cured. It was interesting to note that while reading the articles and observing the reasons given in the articles for the usage of the reproductive technologies, I did not come across any articles on particular individuals that expressed the infertility problem as male related. A few articles mentioned male fertility problems in general terms. Some articles explained the reasons for using the technologies in terms of female related infertility problems such as blocked fallopian tubes or previous tubal ligations, but no articles stated that the males had fertility problems such as low sperm counts or low sperm motility. Vague reasons such as to help couples have children or not wanting to adopt a child were given. In some instances, no reason is given for the IVF treatment and these occurrences lead me to speculate that perhaps the problem was associated with the males’ fertility. Not acknowledging that the procedures are performed upon healthy, fertile women just because the male has a fertility problem situates the reproductive technologies as being created and utilized only because females have fertility problems. The technologies are then regarded as helping infertile women to have children and not infertile men to have children. Infertile women are conceptualized as the primary reason that the technologies exist; they do not exist for male infertility problems when in reality, they do.

**Articles’ Authors & Orientations**

In the discussion relating to the feminist newspaper coverage, I briefly commented upon the sex of the articles’ authors. Of the total 82 articles examined here, 25 articles (30%) were written by females, 17 articles (21%) were written by males, 39 articles (48%) had no author acknowledged, and one author’s sex could not be determined (1%). It is an interesting phenomenon that almost half of the articles did not identify an author for the written piece.
Instead, a newspaper wire service was often identified. This practice aids in creating the news as objective and neutral. The articles had to be created by someone, somewhere, but instead of acknowledging these articles as human creations, the articles appear to have been created out of thin air; without authors and therefore, above criticism.

Thirty percent of the articles were written by women. This percentage roughly corresponds to the proportion of female reporters and columnists reported by MediaWatch in the print news as explained in Chapter Two. Males constituted 21 percent of the reporters acknowledged. Perhaps this is due to the nature of the articles and the subject matter. The subject is intimately linked to women’s bodies and reproduction and it may be more fitting for women to report on and for newspapers to acknowledge them as the reporters of a subject that might be considered to be a “woman’s issue.” We cannot know the sex of the 39 unidentified authors. If the figures for MediaWatch hold true, then most of the unidentified authors would turn out to be male authors, but we cannot conclude this with certainty.

The newspaper articles’ orientations were divided into three possible categories: positive, negative, and neutral. As noted in the methodology chapter, an article with one overall orientation could and often did include aspects of the other orientations. After coding each paragraph, headline, byline, paragraph heading, photo, and caption for orientations, a determination was made on the overall orientation based on the predominant orientation revealed by the coding. For the twenty years of articles under consideration, 37 articles (45%) were classified as displaying a negative orientation, 28 articles (34%) were classified as demonstrating a positive orientation, and 17 articles (21%) were classified as exhibiting a neutral orientation. Raymond expressed that the coverage of the reproductive technologies in the media are slanted
towards the positive and beneficial aspects (1993:110-111), but this tendency was not widely substantiated in this review of *The Globe and Mail* articles. However, in the first decade of coverage, from 1978 until the end of 1987, there was a slight tendency to have a positive and neutral orientation in the articles. In fact, 16 (57%) of the 28 articles displaying a positive orientation were written during this time period. In addition, 10 (59%) of the 17 articles presenting a neutral orientation were found in this particular decade.

The articles' orientations can also be examined in relation to the sex of the articles' authors. It is interesting to compare which sex wrote regarding the NRGTs in which orientation. In order to facilitate this comparison, the table below was created. By examining this table, it can be determined that of the identified authors, the highest percentage of negatively oriented articles were written by female reporters and columnists. However, both sexes had a tendency to write negative articles with women more likely than men to be either positive or negative and less likely to be neutral, but the differences are small. And as stated earlier, many of these female writers displayed a feminist coverage of the NRGTs. The articles which did not acknowledge the authors displayed the highest number of positive orientations in the articles under review. Male authors exhibited the highest number of neutrally oriented articles.

Table 2
Article Orientation Combined With Author's Sex

<table>
<thead>
<tr>
<th>Sex of Author</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>6 (24%)</td>
<td>13 (52%)</td>
<td>6 (24%)</td>
<td>25</td>
</tr>
<tr>
<td>Male</td>
<td>3 (18%)</td>
<td>8 (47%)</td>
<td>6 (35%)</td>
<td>17</td>
</tr>
<tr>
<td>Unacknowledged</td>
<td>18 (46%)</td>
<td>16 (41%)</td>
<td>5 (13%)</td>
<td>39</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (100%)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

N=82
Sources

Sources in newspaper articles perform a number of functions. First, sources provide information to the reporter who then relays this information or a simplified, condensed version of it to the readers. Second, sources provide a human touch to the stories. Third, sources provide an element of authority over the subject matter related to the readers. This is especially true of sources that have first-hand experiences of the news events or if the sources are located within positions of authority and expertise, such as doctors, academics, judges, law enforcement officials, etc. Sources are an intricate and important element in the construction of newspaper articles and the news. While analyzing the NRGT articles, tracking the sources utilized in the articles according to their type and their sex was an important and interesting part of my research. Would women constitute the majority of the sources? Which women would be allowed to speak and what would the women be saying? One would expect female sources to outnumber or at least roughly equal the number of male sources since it is the bodies of women on which the NRGTs are used. But according to my examination of the articles, I conclude that this is not the case. The total number of sources utilized in the articles was 321 of which 182 (57%) were male sources, 93 (29%) were female sources, and 46 (14%) were unknown or unidentified sources. The male sources virtually outnumber the female sources by a margin of two to one. Within the articles covered, it appears that the voices, concerns, opinions, and experiences of women are not as important as those of men. As I noted earlier in the review of the feminist articles, over half (56%) of the female sources appeared in the 24 articles with feminist coverage which constituted only 29 percent of the newspaper articles in total. The other 41 (44%) female sources are scattered among the remaining 58 articles. Seeking out and including the voices of
women is not a priority for most of the journalists covering the reproductive technologies under examination in this thesis. Below is a summary table of the sources and a more detailed table can be found at the end of this chapter.

Table 3
Summary Table of Sources

<table>
<thead>
<tr>
<th>Type of Source</th>
<th>Male</th>
<th>Female</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>64</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Academics</td>
<td>36</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Judges/Lawyers</td>
<td>28</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Clients of IVF/Fertility Programs</td>
<td>9</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>Commissioned Woman</td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Commissioning People</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Commissioned/ing Relatives</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Government</td>
<td>13</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Organizations</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Hospitals</td>
<td>0</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Religious</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>10</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>182</td>
<td>93</td>
<td>46</td>
</tr>
</tbody>
</table>

We must ask ourselves why women constitute such a small proportion of the sources utilized in the newspaper articles and in this section, I will put forth a number of reasons to explain this phenomenon. As I discussed earlier, in the Goldberg research, we learned that in the past, the written works and words of female writers were not taken as seriously as those created by males. Including the written words of female sources may de-legitimize what the
reporter is trying to convey; quoting from female sources may add very little weight and authority to the reporter's message. Goldberg illustrated that a few decades ago, the words of males counted more strongly than the words of females. Dorothy Smith elaborates on male authority when she explains that

When we speak of authority we are speaking of what makes what one person says count. Men are invested with authority as individuals not because they have as individuals special competencies or expertise but because as men they appear as representative of the power and authority of the institutionalized structures which govern the society (1991:245).

Males are bestowed authority and expertise by virtue of them being male in a society where "to a large extent, men appropriate the positions that govern, administer, and manage our society" (Smith, 1991:233) which relates back to the concepts of capitalism, patriarchy, and a patriarchal gender ideology that was elaborated upon in the second chapter of the thesis. When choosing sources, reporters may consciously and/or unconsciously believe that quoting male sources will add more credibility, authority, and expertise than quoting female sources.

Another component to consider when explaining the paucity of female sources is the location of the sources that are quoted or paraphrased. The top three categories for the male sources are doctors: 64, academics: 36, and judges/lawyers: 28, whereas the female sources for doctors only number 2, the female academics number 13, and female judges/lawyers number 6. In these three categories alone, there are a total of 128 male sources compared to only 21 female sources. We must be aware that the pool from which to draw female sources is smaller in these professions than the pool from which to draw the male sources, especially considering the fact that the newspaper articles date back to 1978. Over the past few decades, women have made enormous gains in claiming post-secondary and graduate educations and then moving into
careers and professions that were largely “male” careers such as doctors, academics, lawyers, and judges. The following table, derived from data contained within Armstrong and Armstrong’s *The Double Ghetto*, illustrates the growth of female representation in a few select and related occupations in the years 1971, 1981, and 1991 (1994:38). The years 1981 and 1991 occur within the twenty year time span from which the newspaper articles were selected; therefore, they give an indication of the overall size of the pool available from which to draw female sources. The year 1971 falls outside of the newspaper articles under examination, but it is a useful reference to examine the percentage change of females in the occupations for the twenty year time period.

Table 4
Female Workers in Related Occupations
(Female % of occupation)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University Teachers</td>
<td>16.7</td>
<td>24.6</td>
<td>29.6</td>
</tr>
<tr>
<td>Physicians and Surgeons</td>
<td>10.2</td>
<td>17.1</td>
<td>28.3</td>
</tr>
<tr>
<td>Lawyers and Notaries</td>
<td>4.8</td>
<td>15.1</td>
<td>29.1</td>
</tr>
</tbody>
</table>

As mentioned earlier, Raymond describes the promotional/propaganda model of reporting on the NRGTs (1993:109-110). The propaganda model is the thesis of Chomsky and Herman which they use to explain the media’s reliance on expert sources who have “vested interests in the technologies as experts who elaborate and define the issues for the public” (Raymond, 1993:110). When examining the male sources utilized, this propaganda model becomes evident. The largest number of male sources are doctors and the second largest number of male sources are academics. Most of the doctors cited are directly involved in the NRGTs and many of the academics are scientists who are also involved with the science, creation, and continuation of the
reproductive technologies. Many of these sources are not unbiased, but are sources that have a vested interest in the technologies and their perpetuation. For the most part, the reading public is receiving a one-sided account of the NRGTs through the use of these particular male sources. These male sources also aid in constructing the news as male dominated where male voices, ideas, concerns, and experiences are prioritized over the female.

When considering the female sources, the highest number occurred in the category, “Clients of IVF/Fertility Programs.” Here, 22 female sources (6.9% of the total sources) were quoted or paraphrased. These sources included women that were satisfied with the reproductive technologies and those that were dissatisfied. However, the dissatisfied quotations occurred in articles with feminist elements. A few examples of quotations from women who were satisfied with their NRGT treatment illustrate the nature of these and the messages that are relayed to the readers. One woman whose embryos were destroyed in the laboratory told the reading public that “I’d like to let them [women with blocked fallopian tubes] know that if they want to have children, there is a safe procedure for them” (17/07/78b:11). These words of advice do not reveal the risks and hardships associated with the procedures. One woman was quoted thanking her doctors for the gift of the child, “Thank you for my baby. Thank you” (19/04/80:16). In this example, the doctors get all the credit and the hard work, both physically and mentally, that the woman contributed to the creation of the child is not acknowledged.

As we have seen in the first chapter, the reproductive technology of IVF is a very invasive and physically demanding procedure. Yet, this is rarely mentioned or presented to the reader. One woman, Mrs. D’Angelo is quoted as saying “I’m so happy. They’re [quadruplets] just beautiful. The babies cover up the pain” (10/08/92:A8). And when the technology results in
women giving birth to multiple babies, the stresses and strains of the babies are glossed over. One woman of quintuplets stated that “her five children will be ‘lots of hard work, but a lot of fun’” (25/04/88:A12) and another woman explained that “their 4-month-old quintuplets are worth every minute of the brutal schedules they demand” (08/02/88:A11). It appears that when the women are allowed to speak in the articles, they are only allowed to speak of certain aspects of the procedures and of particular feelings. Through these quotations, the reproductive technologies are being explicitly and implicitly promoted through both the women’s comments and through what the reporters and editors allow to be transmitted to the reading public. It is interesting to note that these quotations are taken from articles that do not have a feminist element to them. The feminist articles reveal a different aspect to the technologies and allow the women to speak of different aspects regarding the technologies.

Through the quotations used in the feminist articles, it appears that there is a high level of frustration, feelings of inadequacy, and a sense of being used by doctors. Women that were dissatisfied with the technologies were quoted as well as women that were satisfied and wished the technologies to be available for women. One reporter explained “infertile women told us that day they were so pathetically grateful to be ‘chosen,’ to ‘qualify,’ that they never questioned the methods or the ultimate results. They were eager guinea pigs” (15/08/87:A2). Another woman from Sweden described

The ‘grotesque, almost humorous’ atmosphere in the group of women going through IVF with her: the two-year waiting period; then the daily injections; the daily blood, urine and hormone tests in hospitals; the hormonally induced hot flashes, depressions, weight gains and mood swings; surgery under a general anesthetic to remove the eggs; a further agonized wait to see if an egg would be successfully fertilized. . . she told us, all too convincingly, about the women’s sheepish passivity as the doctors playfully scolded them for not producing enough
eggs or ovulating at the ‘wrong’ moment, and the women’s infantile eagerness to be ‘good,’ to please, co-operate and be rewarded with a baby (15/08/87:A2).

The desperation of the women undergoing IVF was also revealed through the sources in the feminist articles. One woman stated “Still, the technology exists. I could never have forgiven myself if I had said ‘no’ to it, just in case it worked,” but for this woman, it did not (15/08/87). And another woman explained, “the process gets us addicted to hope” and she begged with feminists at the conference “to understand the vulnerability of the infertile, and to fight for counselling and support groups” (15/08/87:A2). A woman who suffered a burst cyst and was considered too old for an IVF program at 39 said, “I don’t remember thinking anything, feeling anything. I was just empty inside. . . We still want a child very badly, and if it means going back into IVF we will find a way to do it” (06/02/88:A14).

One article illustrated the feelings of infertile women through quoting a number of infertile women. “Infertility can have a devastating impact on your self-image and esteem. You suffer guilt, anger, frustration, shame and depression. We are disempowered. We have lost control over our ability to procreate, which is fundamental to our existence as women” explained Jamie Cameron, an IVF patient without a successful outcome (30/10/90:A4). Another woman explained how she felt after an unsuccessful attempt, “Even the first unsuccessful attempt brought some joy. . . for the first time, I knew I could make life. I think that joy outweighed all the grief when it didn’t work” (30/10/90:A4). One woman who gave birth explained, “these women (NAC and other groups) don’t understand what it’s like to go through (infertility). It becomes an obsession, and they shouldn’t be telling us what we can and can’t do” (30/10/90:A4).
women undergoing IVF treatments as well as a greater understanding of the technology and its impact upon the lives of women. These are not all happy stories, yet the women are allowed to speak of their various experiences and concerns as well as voice their opinions regarding the technologies.

When one considers that the reproductive technologies touch and impact upon the lives of not just those women and men who are directly undergoing the procedures, one would think that sources close to and/or related to these people would be included. How do mothers, fathers, sisters, brothers, and friends feel about their relatives and friends undergoing the procedures and bringing home multiple babies? These people are largely absent from the newspaper coverage. It is as if the technologies touch no one else but the women and men directly involved. There were only three sources cited who were in some form of relationship to the commissioned women and the category I decided to create for the relatives of IVF clients and fertility programs went unused. The tendency to focus only on the couple involved must be overcome if we are to fully understand how the reproductive technologies are impacting, influencing, and changing how we reproduce and our conceptualizations of ourselves and reproduction as well as family relations and further social structures. Allowing the wide range of people involved and affected by the technologies to speak about their experiences, thoughts, and concerns will permit us to understand where human reproduction is heading and the consequences for men, women, children, and society.

Female academic sources constituted thirteen of the 93 female sources (14%). These academics included a sociologist, a professor of law and medicine, an ethics professor, a philosophy professor, and an academic research assistant. According to the sources, there are
three main areas that the female academics discuss and only three of these women are quoted or paraphrased to any great length. The three women are all authors: two completed a report and one woman wrote a book about the NRGTs. It is from their pieces of literary work that most of their quotes or paraphrasing is taken. These two written works are concerned with how the reproductive technologies impact not just individual women, but women as a collectivity. For example, one woman’s work is paraphrased as she warns that “the increased availability of reproductive capacities could lead to worldwide traffic in women’s bodies as breeding vehicles. . . or as mere sources for embryos, ova and fetal [t]issue” (Byrne, 26/02/94:C19). The other academic women collaborated on a report examining the issue of surrogacy involving individual cases to explore how some people, mainly low-income women, are being exploited by other people, mainly older, middle to upper class couples (Lipovenko, 10/02/89:A1).

The second area of quotations derive from the individual cases regarding the preconception contracts of Mary Beth Whitehead and Anna Johnson. These two women were commissioned by other couples to bear them a child, but Mary Beth and Anna changed their minds and fought for, and lost, custody of the children born to them. Here, the academics are quoted in reference to the individual cases and the individual women involved. For instance, Mary Beth Whitehead is described by the female academic who specializes in “how women cope with losses of spouses and children” as “she [Mary Beth Whitehead] realized she made a bad mistake. . . Her body and her psyche and emotions objected. . .She’s grieving, she’s bereft, she’s against the wall” (26/02/87:A15). Expanding upon the coverage from the individual level to the collective level is not attempted in these articles. Instead, the women who posed as surrogates are presented as individual women who regretted their decisions and the issue of
preconception arrangements is not examined as to how it affects or could potentially affect all women and their conceptualizations and experiences of mothering.

The third area that the academic women comment upon pertain to law and ethics. Such issues include fetal law, legal rights to procreate, the need for a national examination of the NRG Ts, and the definitions of embryo and personhood. Overall, the female academics constitute only a small percentage (4%) of the total sources and only about a quarter of the total academics cited in the articles.

**Visual Imagery**

When one picks up the newspaper to read a story, one is not only confronted with text, but images also adorn the daily newspaper. Someone once stated that “A picture is worth a thousand words” referring to the fact that images transmit messages through their visual presence. Images are a powerful medium. Furthermore, some people may not read the news story, but merely examine the visual images that are included in the pages of the newspaper. The NRG T articles under examination were also accompanied by photos and images. To be precise, 24 of the 82 articles (29%) included photographs or images along with the textual stories. These 24 articles had a total of 45 visual images. Upon examining these images, I divided them into three categories which included, Medical/Scientific Images, Baby-Related Images, and Miscellaneous Images. Each of these categories will be discussed so that we may understand the visual images and some of the messages that they convey to the reader. As I analyzed the images for this thesis and became aware of how messages were being conveyed both explicitly and implicitly through the imagery, I came to believe that one could actually write an entire thesis about the images that accompany these NRG T articles. Because the images were viewed through
the use of microfilm, I could not measure the size of the images as I did not have the actual newspaper sheets and therefore, I cannot relate to the reader how much space the pictures and images constituted in relation to the entire newspaper page.

The imagery is not only classified into the three categories described above, but I also determined if the images were positive, negative, or neutral oriented. The technique utilized was similar for the classifying of the newspaper articles' orientations. I would examine each image and decide which orientation was most strongly displayed through the imagery according to the following criteria:

Positive: This category includes images that appear to be confirming and favouring the reproductive technologies. For example, pictures which include people smiling, parents happily holding their child or babies sleeping peacefully would be classified as positive.

Negative: This category includes images which appear to present the reproductive technologies in a disapproving or pessimistic manner. For example, pictures which include unhappy people, crying babies or disturbing images would be classified as negative.

Neutral: This category includes images which appear to present the NRGTs in an unbiased or impartial manner. For example, images which include visuals of medical instruments or biological matter as well as head-shots of columnists or the people cited in the articles would be classified as neutral.

Medical/Scientific Images

The photos and images contained within this category include subjects such as medical personnel, medical and/or scientific equipment, and biological material including eggs, sperm, embryos, and fetuses. By classifying the images under positive, negative or neutral classifications, it was determined that there were nine neutral images, one positive image, and three negative images for a total of 13 photos or images.
In this category, there were six photos of medical personnel. These were all male IVF doctors. Four of the photos consisted of head-shots of the doctors. Two of the photos included male IVF doctors and medical equipment. One of these photos included a close-up of the male doctors performing laparoscopy on a woman's abdomen. The rest of the woman's body is not in the photograph. The other photo is of a male IVF doctor smiling in front of a piece of medical equipment utilized in the IVF procedure. These photographs reinforce the fact that the medical personnel in charge of IVF is male; they control the equipment, manipulate the equipment, and perform the procedures upon the bodies of women, hence they control and manipulate women's bodies. Even if female personnel work during the procedures or work in the laboratories, they are not evident in the photographs; it is represented as a male dominated and male controlled endeavour. Furthermore, even though the procedures would not exist without women and they are performed upon women, they are not included in any of these images, except as one disembodied abdomen.

The medical/scientific category also included four photos of magnified eggs, dividing eggs, embryos, and spermatozoa penetrating an egg. It is through these images that we see the very basic components of life; unseen for thousands of years and now splashed across newspaper pages in the late twentieth century. These images, decontextualized from the bodies in which they exist, allow us to see biological material as separate entities, images available only due to technology, and under human control. The image of the egg being penetrated by the spermatozoon illustrate and reinforce the notion that the male is the active force in fertilization and reproduction upon the passive female and therefore, adult males manipulating female bodies
and female biological matter such as eggs are just a further extension of this active sperm penetrating an inactive female egg.

Three other images are included within this category. They consist of three drawings of a fetus within a test tube. These images scream “test tube baby” and falsely give the impression that the fetus is created and even gestated within a test tube. The female body and its role in procreation and childbearing is negated and obliterated. The fetus, disembodied from its female nurturer and life-giving source, is instead created as a separate entity and therefore, deserving of protection from the female body which grows and nurtures the fetus. One related consequence of the splitting of the fetus from the female body in which it grows is illustrated in the growing occurrence of a loss of pregnant women’s rights while pregnant and giving birth (Bessner, 1993; Mitchell, 1993).

**Baby-Related Images**

The second category for classifying the images is the “Baby-Related Images” grouping which include such visuals as babies, parents, commissioned women, commissioning people, and one fetal image. In total, there were 17 images placed within this category of which 14 (82%) were positively oriented and three were negatively oriented. It appears that baby related images in the newspaper are overwhelmingly positive and therefore, promotional of the technologies. These images help to sell newspapers as well.

Twelve of the photos or visuals specifically included a baby within it. Sometimes, the baby was shot by itself and at other times, the baby was being held by happy, smiling parents or by the male doctors. In the vast majority of these images, the babies were the focus of the photographs. The adults were either smiling happily at each other or happily and lovingly at the
baby. The babies in the images were not crying or fussing, but were either quiet, smiling or sleeping. Of course there are very happy times with babies, but there are also unhappy, frustrating, and stressful times that one can have with babies, especially if one is caring for multiple babies. But these images are nowhere to be found in the newspaper articles. Again, the images can be classified as both promotional and propaganda for the technologies.

Four of the photos centred around the case of commissioned woman Mary Beth Whitehead and the commissioning couple, the Stems. These photos are interesting in the story that they relate to the readers. One photo is of the commissioning couple, together, smiling and very happy. They look like the perfect couple. Off to the side is an inset photo of Mr. Stem holding up the child and he is looking up lovingly at the child. Another photo, in a related article on another day, has Mr. Stem holding the child closely. The child is clearly Stern's child, both biologically (his sperm was used) and symbolically. Furthermore, he holds her and protects her. The commissioning woman, his wife, does not hold the child because it is not her genetic child (her egg was not used); it is only her child by reason of association with the father. Through these images, the notion that the child belongs to the commissioning couple and primarily to the father is reinforced. In another photo, the commissioned woman, Mary Beth Whitehead, does not hold the child, happily or lovingly. The only photo of her is a close-up, head-shot in which she appears distraught. The woman is clearly not considered to be the mother of the child, nor is she considered primary or important to the child even though she is the genetic and gestational mother of the baby (her egg was used). Furthermore, there are no photographs of her with her husband, laughing, smiling or looking adoringly at each other. The use of photos and visual imagery in these stories surrounding the case clearly define who the child should belong to and
does belong to. The use of certain images and the absence of other images construct the boundaries for a certain and particular reality to the surrogacy case being reported upon.

In another photo along with a different article and storyline, one couple stare unhappily at the camera. These are the faces of the people for whom the reproductive technologies have failed. The photo’s lighting is dark as if sinister forces have conspired against the couple and their wishes for a child. Considering the fact that so few couples go home with a baby through the reproductive technologies, one would expect many more photos of dissatisfied people, but this is the only couple shown in all the visuals that did not have a child. So even though the chances of having a child are very small, the visual images through their focus upon happy couples and babies construct the opposite reality; unhappy couples are the minority and happy, satisfied couples and smiling babies are the majority.

The last image to be discussed is a drawing of a fetus behind bars. People locked up behind bars are either criminals or placed under protection. Since a fetus is not a criminal, the reader is left to conclude that the fetus requires protection. The disembodied fetus is once again situated as a separate entity, without its life-giving female body in which it grows, requiring the protection of the state. The fetus also appears very human-like and almost child-like. The umbilical cord wraps itself around the bars and drifts off into the corner, attached not to a woman’s body, but to the bars of the state’s apparatus which protects it. However, it is ironic that the fetus is shown alone behind bars as it is the pregnant woman who is singled out and confined, if not in a prison, then in a hospital and forced to undergo procedures which the state or commissioning couple and their doctors deem to be in the best interests of the child such as amniocentesis or a caesarean birth.
Through the use of the visual images in this section, it is apparent that limited and particular realities surrounding the NRGTs are presented to the readers. As stated earlier, the vast majority of the images displayed along with the newspaper articles are positively oriented and therefore promote the technologies as solutions to infertility.

**Miscellaneous Images**

This category includes photos and images that did not qualify to be classified within the other two categories. These images included photos of the columnists, panel speakers, and lawyers. Overall, there were 15 total images of which 13 were neutrally oriented, and two were positively oriented. Four of the photos were head-shots of a particular columnist, Michele Landsberg to be precise. The newspapers make it a practice to place a photograph of the particular columnist with her or his article. Among the selected articles, Landsberg was the only writer who was identified through the use of a photograph because she was a columnist. The convention of placing the columnist’s photo along with the text helps to humanize the newspaper articles. The reader can immediately identify the words, opinions, and stories with this particular person. The panel speakers who were photographed were quoted in a newspaper article. These photos help to contextualize the comments and relate them to particular individuals.

Eight other photos spread over a two day article consisted of eight head-shots of the panelists that were discussing the NRGTs in a round table discussion. Again, the photos help the reader to identify the text and opinions with particular persons. The other photo accompanying one of these articles included a shot of the guest speakers sitting around the table with the mediator/reporter off to one side of the table, talking while all the others listened to and
looked at him. This man is the managing editor of *The Globe and Mail* and from this photo, it appears that he is in charge of the discussion.

The other two photographs included two female lawyers who were commenting upon fetal rights. One of the lawyers, in the larger photo, is a lawyer for the Metro Toronto Children’s Aid Society (TCAS) and she is standing in front of the TCAS office. The other female lawyer’s photo is inset into this larger photo and consists of only a head-shot. Placing the first female lawyer in front of the TCAS offices reinforces the belief that the fetus needs protection and helps to equate the fetus with child-like status even though the text states that the fetus is not considered a person (Lipovenko, 01/08/87:D1,D2).

The images presented to the newspaper readers and discussed in the above three sections construct a particular reality regarding the NRGTs. Happy, smiling couples and babies are the norm while unhappy and disappointed couples are a rarity which goes against the known odds. The fetus is presented as a separate entity requiring protection. The medical personnel in charge of and in control of the reproductive technologies are males. The commissioning couples, especially the fathers, are the rightful and true parents of the resulting child. Finally, the reality that women experience while undergoing the IVF procedures is not presented to the reading public; it is obliterated and ignored. There are no pictures of women suffering miscarriages, throwing up from the medications, or lying on the medical tables, legs spread apart, feet in stirrups and being penetrated by medical instruments at the hands of mainly male doctors. These images would be troubling images, they might offend the readers and yet, they would present the alternative reality of the NRGTs. Often, I pick up the newspaper only to see images of dead people, wounded and bleeding people on the streets and in war zones, in my own country and
in countries far away. It is permissible to display these images to the public, yet the images that would tell a different and more negative story about the reproductive technologies are not printed. When the kaleidoscope is turned slightly, a whole new world of images emerges and when the camera stops focusing upon the smiling, happy parents with their babies, one can almost make out, in the dark and distant corner, the sad and tearful eyes of the other women.
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**Totals** | 34 | 14 | 28 | 17 | 20 | 7 | 10 | 14 | 6 |

**Table #5 Classification of Newspaper Articles in The Globe and Mail**

**Legend**

+ = Positive Orientation  
-- = Negative Orientation  
~ = Neutral Orientation  
X = Variable Present in Article  
N = No Author(s) Acknowledged  
F = Female(s)  
M = Male(s)  
U = Unknown  
N (total articles) = 82
# The Globe and Mail

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Cumulative Totals: 72 37 52 40 50 30 31 9 18 31 24
**Sources Utilized In The Globe and Mail**

<table>
<thead>
<tr>
<th>Type of Source</th>
<th>Male</th>
<th>Female</th>
<th>Unknown</th>
<th>Total</th>
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<td>Doctors</td>
<td>64 (20.0) [91.4]</td>
<td>2 (0.6) [2.9]</td>
<td>4 (1.2) [5.7]</td>
<td>70 (21.8) [100]</td>
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<tr>
<td>Academics</td>
<td>36 (11.2) [66.7]</td>
<td>13 (4.0) [24.0]</td>
<td>5 (1.6) [9.3]</td>
<td>54 (16.8) [100]</td>
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<td>Judges/Lawyers</td>
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<td>6 (1.9) [14.3]</td>
<td>8 (2.5) [19.0]</td>
<td>42 (13.1) [100]</td>
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<td>Clients of IVF/Fertility Programs</td>
<td>9 (2.8) [29.0]</td>
<td>22 (6.9) [71.0]</td>
<td>0 (0.0) [0.0]</td>
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<td>9 (2.8) [32.1]</td>
<td>6 (1.9) [21.4]</td>
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<td><strong>Totals</strong></td>
<td>182 (56.6) [38.5]</td>
<td>93 (28.9) [53.8]</td>
<td>46 (14.4) [7.7]</td>
<td>321 (99.9)</td>
</tr>
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*Table #3 Types and Amounts of Sources Utilized in The Globe and Mail*

**Legend**

na = not applicable  
( ) = % of total number sources (N)  
[ ] = % of type of source  
N (total sources) = 321
CHAPTER FIVE

THE STORIES: EXAMINING A FEW ARTICLES IN DETAIL

The Globe and Mail newspaper constructs the stories of reproductive technologies in particular and limited ways. The previous chapter discussed the articles mainly as a group in relation to the categories of analysis utilized in the thesis. In this chapter, five articles are examined in detail. The articles cover fifteen years of the twenty year time span and were chosen because they each focus on a different theme and illustrate the major trends examined in the first four chapters. The first article tells the story of the first in vitro fertilization birth that occurred in England during 1978. The second article relates to the issue of pre-conception arrangements and in particular, to the custody battle between Mary Beth Whitehead and the Sterns that took place in 1987 in the United States. The third article is written with a feminist viewpoint that examines the reproductive technology of IVF and the telling of women’s stories in relation to the technology. The fourth article examines the issue of multiple birth families in the context of fertility drugs and specifically relates the story of quintuplets born in 1988 in Ontario, Canada. The final story surrounds the multiple birth of quadruplets in Ottawa through the use of in vitro fertilization.

The Birth of Louise

The first article under consideration was printed in the Thursday July 27, 1978 edition of The Globe and Mail and covers the birth of the world’s first “test-tube” baby, Louise Brown in Oldham, England. Like so many of the articles under investigation, this article did not identify the author. Instead, it merely states the origin of the piece as being from the New York Times
Service. The article consists of nineteen paragraphs which are spread over page one and page two of the newspaper with an accompanying photograph on page two. There is a picture of Queen Elizabeth and two of her sons on the first page which probably displaced the photograph of baby Louise onto the next page. The first page coverage consists of the headline along with four paragraphs of text that are all positively oriented towards the technology except for one short phrase that explains “churchmen nodded a skeptical approval” towards the birth. It is not until the reader turns to the second page that negative aspects of the technology are mentioned. Nelkin discusses journalists’ tendencies to cover reproductive technologies as both “a miracle and a sign of apocalypse” and the use of quoting and paraphrasing both optimists and skeptics of the technology (1995:43-44). This particular article displays these tendencies. While some sources, such as the father, a doctor, and some churchmen are optimistic and hopeful of the procedure, others, such as a Parliament member and other churchmen, are presented as skeptics and warn of “master races,” but the latter positions are not elaborated upon. The article presents two competing viewpoints to the reader. The viewpoints themselves do not delve deeply into the issues, but instead present only a superficial examination of the benefits and hazards of the technology. Interestingly, the only sources quoted are male sources, except one source that is not identified, but originates from a Catholic Church. The voice of the mother, Lesley Brown, is not heard and her stories regarding the technology and its procedures are not told. How the technology has affected her mentally, physically, and emotionally is not revealed to the public.

The headline that appeared across page one of the newspaper exclaimed, “‘So happy, I could cry,’ says father of test-tube baby Louise.” As many people believe, men are supposed to be in control of their emotions; they certainly are not supposed to cry, especially in happiness.
The quotation leads the reader to believe that the event described and covered in the article is very extraordinary and very powerful. In reality, it is both of these and more. The event is so powerful that it leads grown men to the brink of tears. The headline also aids in creating the use of the term “test-tube baby” as commonplace and everyday. In an earlier chapter of the thesis, the shortcomings and the misleading nature of the term were examined, i.e. how it negates the role of women in the reproductive process and mistakenly presents the conception and gestation of the egg as taking place within a test tube.

Considering the fact that this technology was very new and innovative at the time, there was no detailed examination or presentation of the in vitro fertilization procedure. The fact that the newspapers frequently relate brief and simplified versions of the technology and its procedures was examined in an earlier chapter and this article illustrates the tendency for brief descriptions. If one role of the newspapers is to inform the public about certain events and occurrences, then a more detailed examination of the procedures should be forthcoming. Instead, the article merely states that “They [Drs. Steptoe and Edwards] fertilized one of Mrs. Brown’s eggs with one of her husband’s sperm in a laboratory and implanted it successfully in her womb.” The article also mistakenly states that Louise was “the world’s first baby born from an embryo fertilized in a laboratory.” Technically, the embryo is not fertilized, but it is the egg that is fertilized which then develops into a zygote, embryo, and eventually into a fetus. The procedure is also mistakenly presented as a success that occurred relatively easily. One doctor is quoted as saying that “it is an exciting piece of original research,” leading the readers to conclude that the conception and birth transpired with very little, if any, prior experimentations and failures. All the women that preceded Lesley Brown, who were experimented upon in order
to allow Lesley Brown the opportunity to have this baby, are ignored. Their stories are not told, nor even acknowledged. Instead, the public is presented with a technology and its procedures that appear relatively simple and uncomplicated. It is not until the second page that the reader is informed that the technology is more complex and rarely simple or easy. Other medical authorities unknowingly predict the future when they advise "childless couples not to expect their problems to be solved overnight." How true this statement is. Here we are, twenty years into the future and the problem of infertility has not been solved, nor have the reproductive technologies offered success to the majority who undergo them.

Women's roles in the reproductive process are largely ignored in the newspaper article. The technology is the driving force. In regards to women, what is focused upon are women's childlessness, their wombs, and their eggs. They become pieces of their bodies and they are dismembered into separate units removed from their wholeness. The conception, the creation of life that has the potential to become human, takes place outside of their bodies and under the direction and control of male medical authorities. The reimplantation also occurs through the hands of medical doctors. Even the delivery of the child is in the hands of the male doctors as Louise is delivered by caesarian section. The physical and mental contributions of Lesley Brown throughout the long procedure and gestation of the child are ignored; it is solely medical technology that is responsible for the child.

Almost half of the article, nine out of nineteen paragraphs, is devoted to the newspaper "wars" over the rights to the exclusive story of Louise's birth. The article states that it came from the New York Times Service and it is possible that the article originated from a British paper. It is reported that one newspaper paid $575 000 for the parents' story. The rivalry and
The competitive nature of the newspaper industry is revealed to the reader. In fact, this aspect becomes one of the main focuses of the article. The actual birth becomes secondary, especially on page two of the newspaper. The fact that a newspaper would pay such an exorbitant amount of money for exclusive rights underlines the economic aspects of the newspaper industry. Getting the story first and presenting it to the reading public in order to reap the economic benefits and prestige are primary instead of offering excellent, well-rounded, and extensive coverage of the event. Instead of reporting upon the child-like behaviour of the newspapers involved in scooping the story, the paper could have presented to the reader more extensive coverage of the reproductive technology, a more thorough examination of the consequences of the technology, or could have included the voices and stories of women, including Lesley Brown if she was able to tell parts of her story two days after the birth of her daughter. It is interesting that one paper reported that the child was going to be a boy because they had overheard hospital personnel refer to the fetus as a “he.” The tendency to use the male generic term either intentionally or unintentionally is very powerful. The male is prioritized and often, especially in earlier decades, the male generic term “he” became the acceptable way to refer to objects and people even when they were not male. I even wonder, had the child been a male child, how the coverage of the birth would have differed.

The final comments that I wish to present focus upon the photograph accompanying the text on the second page of the newspaper. The photo consists of a man with his back to the camera, holding up the centre spread of The Daily Mail newspaper which displays a photograph of Lesley and Gilbert John Brown along with baby Louise. It is fascinating that a man holds this picture, the epitome of the reproductive technology. It metaphorically attests to the fact that the
technology, that reproduction, and that women’s places within these technologies are literally becoming placed in the hands of a male-controlled medical science. The mother is in her hospital bed, holding the child who sleeps, peacefully, in her arms. The baby is situated in the centre of the photograph. The father is sitting beside the hospital bed and the parents are gazing happily and lovingly into each other’s eyes. Smiles are upon their faces. The baby sleeps quietly, oblivious to the excitement going on around her; unaware of the sensation of her birth and the consequences that it has upon human reproduction and the changing roles that women and men have within it. As discussed earlier in the thesis, the photograph presents to the reader the happy, beneficial, and positive aspects of the reproductive technologies. A limited and partial aspect of the technology is exhibited in the photograph. The other stories that the technology makes possible are obliterated.

_Whose Baby Is It?_

The second article being analyzed appeared on page A4 of the Wednesday February 11, 1987 edition of _The Globe and Mail_. Like the article above and like 48 percent of the articles, this article did not identify the author of the text. Instead, it is acknowledged as the work of the Associated Press. In summary, the article consists of nine paragraphs without any accompanying visuals or photographs and covers the court room testimony of a pediatric psychology professor in the case of Mary Beth Whitehead and William Stern which occurred in the United States. The case concerns a preconception agreement where Mary Beth Whitehead agreed to be artificially inseminated, using her own egg, with William Stern’s sperm. After the birth of the child, Mary Beth decided that she did not wish to relinquish the child, therefore creating a custody battle between the two parties.
The article uses the language of surrogacy. In previous chapters, the inappropriateness of this term was discussed in depth. The article does not only use the term “surrogate mother,” but it quotes the doctor as saying that “Mr. and Mrs. Sterns’ role of parents was achieved by a surrogate uterus, not a surrogate mother.” What is a uterus without the woman within which it exists? Mary Beth’s status as the biological mother is never explicitly stated. Instead she is dismembered and reduced to a biological part. The roles that her body and mind play in the creation of the child are not acknowledged, while she is diminished into a single body part that defines her entire existence. Furthermore, the doctor states that in his belief, “I don’t think that there was any interest on Mrs. Whitehead’s part to ever be a functional parent for this child.” Are not the acts of conception, gestation, and delivery functional roles? Mary Beth’s status as the mother and therefore, parent of the child during gestation and after delivery is ignored and her future role as a functioning parent is dismissed by the psychologist. Biological parenthood and social parenthood are separated; Mary Beth’s biological parenthood is disregarded and her social parenthood is deemed undesirable. Earlier in the article, it states that the child “would be better off with her biological father than with the woman who bore her.” But Mary Beth is her biological mother. Is the child better off with the father because he is of a higher social and economic class than Mary Beth? The redefinition and changing conceptualizations of “mother” as explained by Eichler (1996) and examined in the first chapter of this thesis are apparent in this article. Curiously, it is stated in the article that William Stern’s sperm was utilized, and therefore he is constructed as the biological father and parent of the child, while Mary Beth’s egg is not acknowledged, hence neither is her biological parenthood. The father’s case to the general public and his right to custody are strengthened due to this omission.
The headline for the article states that “Doctor says Baby M should be with father.” The reference to the doctor, a person given authority and prestige in our society, adds weight to William Stern’s fight for the child. Furthermore, the reference to the baby as Baby M also constructs the child as William Stern’s child. Apparently, William Stern referred to the child as Melissa and Mary Beth Whitehead referred to the child as Sara. This fact, that the child had two different names from the mother and father, was not revealed in this particular article, but it was revealed in other articles. It is interesting that the press and the judicial system referred to the child as Baby M. Furthermore, the headline does not state that the child should not be with her mother because Mary Beth Whitehead is not presented to the readers as the biological mother and parent of the child.

In this article, William Stern is exhibited as part of a married couple since there are references to his wife, Elizabeth. Mary Beth Whitehead is also a married woman, but there are no references to her husband. She is referred to by the term Mrs a number of times in the article, but her husband is never named in the article. When one reads this article in isolation from other coverage of the case, placing the child within an identified married couple unit is seen as preferable to giving the custody of the child to Mary Beth Whitehead and an unknown man who is her husband. In addition, it is explained by the psychologist that William and Elizabeth Stern “carefully thought out their decision to hire a surrogate and should be given custody of the infant.” The statement implies that Mary Beth did not seriously consider acting as a surrogate. Instead she entered into the agreement or contract on a whim. Any discussions that took place between herself and her husband are ignored in the article. Since she is presented as entering into the contract without thinking it through, her actions now can be described as the result of
not carefully considering the consequences of the agreement. She acts capriciously, changing her mind, even taking the child to another state and hence, she is constructed as a criminal since she “fled with the infant to Florida.” Through the coverage presented in the article, the consequences that befall Mary Beth appear to be deserved because of her careless agreement to act as a surrogate mother.

An Alternate View of IVF Told Through Women’s Words

The next article under consideration appeared on page A2 of the Saturday August 15, 1987 edition of the newspaper. This article consisted of thirteen paragraphs with an accompanying photo of the Canadian columnist responsible for the article. Hence, the columnist is not only identified by naming, she is further identified through the use of visuals. By presenting the name and photograph of the writer, the story becomes a subjective piece; the belief that news is an objective endeavour is eroded. As stated earlier in the thesis, I believe that all the authors should be identified whether or not they are columnists because it helps to illustrate to the reading public that the news is a socially created product. The article is feminist in nature. As explained in Chapter Four, the majority of feminist articles identified the author of the work as compared to the minority of authors identified in the other articles which presented non-feminist viewpoints to the reader. Overall, the orientation of the article is negative.

The article under review relates the stories of women who have undergone the process of in vitro fertilization. The author, Michele Landsberg, heard their stories at a conference in Ireland that centred on reproductive technology. As such, the article relies on female sources in order to construct its story. Giving voice to women, allowing them to tell their stories and their
experiences is the focus of the article. Explained in the fourth chapter of the thesis was the fact that feminist articles relied more heavily upon female sources compared to the rest of the articles under consideration. The author utilizes information and stories heard from women at the conference to examine the reproductive technology of IVF at a deeper level than what is usually presented to readers of the newspaper.

The headline accompanying the story states that “Guinea pigs of test-tube fertilization have second thoughts.” The headline’s language helps to construct the technology as experimental. Since the reader is aware of the fact that animals are often used in experiments and those that are tested upon are often referred to as guinea pigs, we get the sense that the science of IVF is not as scientifically sound or successful as we are usually led to believe. The women who spoke out and told their stories became aware of the fact that they have been used by a medical science for the sake of experimental purposes. The headline, I found, could be classified as either negative or positive depending on how one approached it. On the one hand, it could be negative because it reveals the fact that the women involved with IVF have been used as guinea pigs; they have been experimented upon. One the other hand, it could be positive because it displays the fact that the women have reached another level of consciousness with regards to the reproductive technology. For the purposes of classification, I tended towards the former usage because it seemed to be more apparent from the headline whereas a change in consciousness may be difficult for the average reader to decipher from the headline.

The conflicting presentations of these women involved with IVF and the way that mainstream media tend to present IVF was explored in the article. In the beginning of the article, the author acknowledges that she arrived at the conference believing that the reproductive
technology of "IVF was one of the benign technologies: a modern miracle, a boon to infertile women." At the conference, she underwent a learning process where her level of consciousness surrounding the technologies shifted. Landsberg presents the routine and shortened version of the IVF process to her readers and then she explores another reality of the process. She contrasts the brief descriptions often offered to newspaper readers by detailing the long, complex procedure as experienced by the women. The women's voices, stories, and experiences are important to the columnist and she relates them to the reader by using some quotations from the women.

In addition to exploring the lived reality of the procedures, Landsberg details the fact that it is the male doctors who have control over the access to and the procedures of IVF. The discriminatory aspect of who the doctors prefer, the "married, middle-class, young women" that can offer the money for the procedures and the better odds of success is raised. The women reveal that they are "so pathetically grateful to be 'chosen,' to 'qualify,' that they never questioned the methods or the ultimate results" of the procedures and the technology. But it is not just the responsibility of these women to critically examine and critique the technologies for their negative and positive qualities, it is up to the whole of society to examine how the science and technology are being used. Many women who enter into IVF are in a vulnerable state having learned that their bodies have betrayed them. They realized that their bodies cannot reproduce and the desire to have children leaves many of the women desperate to try anything. We cannot leave the responsibility of examining the technologies solely in the hands of these women. One woman is stated as saying that "we believed in them because we were in their [the doctors'] power." She and the other women were desperate to try whatever technology was available to
them in order to have a child. But this desperation leads to an imbalance of power between the doctors and the women. Doctors are figures of authority in our society. When we enter into a doctor’s office, we lose some autonomy and authority to the doctor who is considered the expert in our bodies. When we become desperate over matters of our own health, when we learn that something is wrong with our physical self, we will try almost anything in order to fix or overcome the problem. Hence, with the reproductive technologies, the process often becomes a vicious circle with the women unable to stop until the doctor decides to drop them from the program or they have a child or children.

The manipulations involved with the procedures are also revealed by Landsberg. Some of the women have been left with “spare” embryos from the procedures. They question how they can just leave them, throw them out or give them to other women. Hence, they continue on in the process because the thought of the embryos being destroyed or abandoned is too much to bear. In other instances, the women are taken into the laboratories and shown their embryos developing in the petri dishes; their future children coming into being. How can a woman abandon these embryos when all that she sees in them are her future family? Even though the odds of these embryos being successfully implanted into the woman and developing into a fetus are minute, the women continued on in the hopes of success. Landsberg states that an examination into the “success” rates associated with the technology will be the focus of her future article appearing in the next week’s edition of the paper.

Finally, the voices of the women, their pleas to feminists to be cognizant of the infertile women’s desperate hopes and for the feminists’ assistance in helping to understand infertility and the reproductive technologies are told to the readers. Feminists and non-feminists have a
responsibility to examine these technologies and if they are deemed legal, then it is important that they be understood and developed so that the technologies are both safe and effective for all concerned. Landsberg reveals to the readers a different version of reality surrounding the reproductive technologies. She utilizes the voices of women in order to tell her information to the public. In this article, there is no happy ending. There are no photos of smiling parents holding healthy babies. It is, however, a story that needed to be told.

The Multiple Birth Experience

The next article, authored by Dawn King and printed in the Monday February 8, 1988 edition of the newspaper, relates the story of quintuplets born due to the fertility drug Clomid in Ontario, Canada. The article consisted of 26 paragraphs on page A11 with no accompanying photographs. It occupied the top section of the page. The headline that greets the reader exclaims that “Parents compare raising quints to running factory.” The parallels explored between raising a family and the production of work are interesting. We can imagine that running a factory is very hard work or as the article relates the process, “raising quintuplets can be a bit like running a factory, with assembly-line feeding, shift work and bulk purchasing,” to which we can add limited time off and financial concerns. Although we are sure that the parents are doing the best they can, one must question the circumstances that dictate that the family must be raised in this manner. Working in a factory is synonymous with boring, repetitive work with little stimulation or the chance for personal and intellectual growth. The babies are no doubt receiving some of the positive necessities that they require, but the demand upon the adults makes one wonder if the environment is really conducive to an ideal upbringing.
The overworked parents and other adults who struggle to raise the children to the best of their abilities are let down by a government which could be offering financial and other resources. One nurse is supplied to the family during the weekdays. It is revealed that corporate donations to the family are very small and the contributions to a fund account are only about $1500. It appears that the public and the government believe that the parents are fully responsible for the welfare of the children. The husband is worried about the financial strains of raising the children because his wife will be unable to work for a number of years. We must question the wisdom of fertility drugs when they result in such a strain on parents, financially, physically, and emotionally. Do the drug companies who create these drugs which allow for such births owe the parents of the children any compensation or assistance? As we have seen recently in the news, tobacco companies in some U.S. states have been ordered by the courts to contribute to the financial costs of the state’s health care systems for expenses relating to tobacco illnesses. We can ask ourselves if compensation should be forthcoming from the fertility drug companies to offset the expenses to both the health care systems in Canada relating to multiple fertility drug births and also to the parents that must cope with the added stresses and financial strains.

In regards to sources utilized within the article, it is apparent that the husband speaks for the couple. He is directly quoted a number of times and the mother is only paraphrased once. It is his story and opinion that is related to the readers. The mother’s story and experiences are either assumed to be the same as the husband’s or we never learn her real story. In addition, the quotations from the husband almost all relate positive aspects of the children’s births. For instance, he is quoted as saying that “There are hectic times, but we try to enjoy every moment
we can.” And further, he tells us that “I go through the day and I think I haven’t had enough time
to hold each one. . . one smiles a lot, one’s more laid back, and some enjoy baths more than
others.” It is apparent that only certain statements are acceptable when talking about the
children. For instance, the crying, the frustrations, the constantly dirty diapers, all the truly
negative aspects of raising a multiple birth family are not allowed to be told to the public. No
doubt the parents are very happy with the birth of their children, but the impact upon their lives
is only superficially revealed within the article. The ethical questions surrounding the rightness
or wrongness of the fertility drug treatments are never raised or discussed.

The process through which the babies were created is not explored in any detail. The
public is told that the woman took the fertility drug Clomid, but the reasons for her taking the
drug are not revealed. Via the story, we learn that the five babies were conceived from five
different eggs. Through the natural processes of reproduction, this event is extremely rare. The
normal reproductive process of the female consists of only one egg being released and available
for fertilization the majority of the time. Here, five eggs have been released through hormonal
manipulation. What effect upon the woman’s body have the drugs had or will they have in the
future? Her reproductive processes were manipulated so that multiple eggs would be released.
The article’s author in no way raises concerns about the fertility drug nor about the effects it had
or will possibly have upon the mother’s body or the children’s bodies. Will these fertility drugs
create a legacy similar to DES? Furthermore, we learn that the babies were all born premature:
eleven weeks premature. As was discussed in a previous chapter of the thesis, premature births
are common with reproductive technologies even though they are not common in the general
population. The author chose to express the prematurity in terms of weeks instead of months.
The time span of eleven weeks prematurity sounds better than almost three months premature when one considers the fact that a pregnancy is approximately nine months in duration. The babies were born almost one trimester earlier than they should have been born. The effects upon the babies’ health and the hospital resources resulting from the premature births are not explored or analyzed. We learn that the babies were born in the month of September and only now, in February are all the babies reunited at home; two were released just before Christmas and the other three are coming home on the day the article appeared in the newspaper.

The last part of the article relates the story of another multiple birth that occurred in 1986. The mother of these children is quoted in the article directly as she gives these words of advice for the new parents, “Just love them dearly, because they grow up too quickly.” In caring and coping for her children, she had to work out her own schedule during the day as her husband worked and was only available at night. The reader is left with the impression that if she could do it with little help, so can this couple and therefore, extra resources in any great amounts are not needed for the parents. We do not learn if Mrs. Ool’s children were the result of reproductive technologies, but the odds are that they were. Tragically, we learn that one of her quadruplets died shortly after birth in the hospital. Furthermore, the article quickly relates that another Canadian woman has recently given birth to quintuplets as well. The occurrence of three large, multiple birth families in approximately a year and a half leads us to ask what is going on when these types of births which are so rare under natural circumstances are so frequent with the reproductive technologies? Are these drug treatments and reproductive technologies as benign as they are represented to the general reading public?
A Little Story of IVF

The last article under consideration appeared on Monday August 10, 1992 and relates the story of an in vitro multiple birth in Ottawa. The story is only eleven paragraphs in length and is situated near the bottom left-hand side of page A8. What a difference 15 years makes. In 1978 the birth of the first baby through IVF was front page news and now, a multiple IVF birth is relegated to page 8 and only occupies a few paragraphs. How commonplace these births must seem to have them impact very little in regards to placements in the paper. Or does the fact that the event is hidden in the middle of the paper help to make it more acceptable? By not drawing the public’s attention to the story on the front of the paper, there is less chance that the IVF births will be closely examined or critiqued. There is no accompanying photograph with the story nor is the author identified to the reader. The only identification of authorship is the phrase “Canadian Press” which appeared under the headline. Through the headline, the reader learns that the “Hull mother, quadruplets doing well.” The four babies were born on Friday August 7th, but we learn that the mother has been hospitalized since June 25th. Furthermore, the babies are eight weeks or two months premature. Again, the term is expressed in weeks. The occurrence of multiple births being premature begins to become apparent when we read the stories as a whole unit. In addition, we are told that the delivery was by caesarian section. As discussed in earlier chapters, both prematurity and caesarian sections are quite common when the reproductive technologies are utilized. The effects upon the woman’s body are not discussed nor is the fact that she has been hospitalized for an extended period explored in detail.

The article relates to the reader the short and simple version of the in vitro fertilization process that has become common in the newspaper articles. The reader is told that “in-vitro
fertilization takes eggs from the mother’s ovaries and fertilizes them with the father’s sperm outside the womb. The fertilized eggs are then transferred to the uterus.” No mess, no fuss; how simple and uncomplicated it sounds. However, we have learned that the opposite is true. The mother of the quadruplets is quoted as saying that “They’re just beautiful. The babies cover up the pain.” A serious point has been raised here, yet the unknown author does not follow it up. What is this pain that the woman speaks about? We may be able to learn more about the reproductive technologies and their effect upon women, but the author does not question and analyze this comment. Instead, it is left hanging unexplored. The article does not relate why the couple or in reality, the woman, underwent in vitro fertilization, but we are told that the woman is only 26 and the husband is 25. These ages sound young since many in vitro patients are in their thirties and forties. Are the technologies being given increasingly to younger people? It would be interesting to research if the ages of people utilizing the IVF procedure are becoming younger. This would further expand the use of the technologies just as they have been available to a wider constituency ever since the qualification of blocked fallopian tubes was lowered to include other infertility problems.

In the article, some statistics are given with regards to the in vitro fertilization process. The unknown author states that quadruplets are very rare even in the IVF process; the odds are approximately “one in 10 000.” However, multiple births of some form are quite common as a result of IVF. Furthermore, the article states that “each one [of the fertilized eggs] has a 13-per-cent chance of survival.” Here, the poor statistical rate of IVF is revealed, but it is quoted in a story where quadruplets are born. The vast majority of people utilizing IVF in the hopes of having a child do not experience such success. Quoting these statistics in this context, even
though they are giving some useful information to the public, only serves to construct the odds in a favourable fashion since no one knows who will beat the odds. Even though the success rate of 13 percent is revealed, the author does not explore deeper what the failure rate of 87 percent means to our society and to the people that fall into this category.

Conclusion

In this chapter, I have taken five separate newspaper articles from *The Globe and Mail* and examined them in greater detail in order to illustrate some of the points and issues raised in earlier chapters of the thesis. For example, a few of the concerns that were explored in more depth through this chapter include: whose stories are being told, the deconstruction of female bodies and selves into their separate reproductive organs and functions, the dynamics of a patriarchal reproductive technology, the construction of the news as a socially created project as well as the scarcity of thorough, well-rounded coverage and the presentation of conflicting viewpoints within a single story. Each article’s author, whether identified or not, chose to represent the reproductive technologies in a specific and particular way so as to construct the article in a distinct manner. By analyzing these stories in detail and by raising certain issues related to the telling of each story, I have attempted to show how the newspaper stories are ideological constructions. As the earlier quotation from Hall in Chapter Two explains, the construction of the events, persons, and angles contained within each newspaper article is an ideological procedure and process. Many factors come into play with regards to the construction of the newspaper stories. Their constructions are not just related to the individual authors of each article, but they are connected to the newspaper industry and to the wider social and historical position in which they exist on a day to day basis. The extent to which various women’s stories
and experiences will be told in the newspaper is related not only to who is writing the article, but it is related to who controls the newspaper, its editors and board members as well as the current social and political position of women.
CONCLUSION

Through the examination of the newspaper articles selected for this thesis, it can be concluded that The Globe and Mail presents the reproductive technologies to its readers in particular and limiting ways. Because the newspaper's reporters, columnists, and editors choose to foreground some events and issues while relegating others to the background, the reading public is educated about the technologies in an incomplete manner. Canadians look to the newspapers to inform them about events and issues in a timely and relevant fashion. However, it appears that only particular stories, persons, and events are considered relevant and important enough to be covered or used as sources in this newspaper.

When one considers the fact that the new reproductive and genetic technologies are inextricably connected to women's bodies, one would assume that women and this connection would be focused upon in the articles. Instead, women are relegated to a second-class status as it is males and mainly professional males that speak to the reading public about the technologies through the newspapers. In particular, male doctors and academics are allowed to voice their opinions and knowledge concerning the technologies. Furthermore, the pharmaceutical companies frequently supply particular information regarding their drugs to NRGT practitioners, hospitals, and researchers which will help to support the drugs' development and acceptance. These tendencies confirm the propaganda element of the subject as it is those who profit from the technologies who are permitted to voice their opinions for the most part. It is apparent that to a large extent a patriarchal gender ideology is expressed within the pages of the newspaper and
among those that make the decisions upon what and who to cover in the articles. Only when one reads the articles that display a feminist orientation do the women’s voices become more than a whisper.

In the feminist articles, both the satisfied and dissatisfied women are given voices, but there tends to be a focus upon the dissatisfied women. Women are allowed to speak of the personal experiences associated with the technologies. They speak of heartache and betrayal, of a medical system that uses them and their bodies in order to perfect and control the creation of life itself. However, it must be noted that the articles displaying a feminist tone were either negative or neutral oriented. One could assert that the feminist examination of the reproductive technologies in the newspaper tends to ignore any positive aspects related to the technologies. The articles reviewed for the thesis verify this conclusion. Some women are helped by the technologies and are very happy with the outcome. Feminist coverage must attempt to examine and balance both the positive and the negative while making a valid critique and analysis of the technologies. One cannot and should not ignore the women who are satisfied with the technologies nor should the women who wish to have access to the technologies be forgotten. It is true that the feminist angle reveals much valuable information while it balances the other articles within the pages of the newspaper.

In the thesis, it was demonstrated that the technological procedures associated with the technologies are often presented in a simplified format. For a technology that is extremely complex and which affects women in such intricate and personal ways, the procedures as presented in the newspaper seem extremely easy and successful. The reading public learns very little about the actual procedures and therefore, it remains ignorant about their true effects. The
representation contained within the pages of the newspaper only serves to help promote the technologies to the readers. When one encounters an article that tries to explain more fully the procedures and their repercussions upon the women, only then do we realize that the technologies are not so simple. Unfortunately, very few of the articles go into the depth necessary to portray this realistic version. Through the newspaper articles, the technology’s procedures appear to transcend the female body. Instead of placing women’s bodies at the centre of the technologies, the technologies become the focus and the women’s bodies become secondary to the technology.

After reading the articles, it becomes apparent that there are silences and omissions concerning the technologies. I have already commented upon the scarcity of women’s voices that tell their own stories and experiences. Equally, the stories of the children are not told. It is true that the technologies have only been associated with human reproduction for two decades, but it appears that little research and extremely few newspaper stories reflect the possible concerns of the children created through the technologies. We do not know how these children feel about their conceptions, what they think about their multiple brothers and sisters, or if they feel extra pressures because of the effort and expense that was involved in their conceptions. Truly, both researchers and newspaper reporters should turn their attention to the children who are conceived through the use of the technology or the use of contracted arrangements so that a more thorough understanding of the consequences can be attained.

In addition, we do not know the full extent of the effects that the drugs and the procedures have upon the women and the children. Twenty years is not a long time to determine if these will have serious repercussions. Nowhere in the articles are the possible short term and
long term health effects of the drugs and the procedures discussed. If we have learned anything about various drugs, we know that many of them cause side effects. Yet, when these drugs are given to the women with the goal of having a child, no reporter questions or raises the issue of possible problems for the women and her children. In the future, will we be reading about women who underwent IVF and who now suffer from some disease or cancer? How tragic this could be. It is important for the reading public and women in particular to be informed about possible negative health effects that could be generated due to the drugs and the procedures.

One of the interesting parts of this thesis was examining the visuals that accompanied the newspaper articles. Overall, these tended to present positive messages about the technologies which help to promote them to the readers. The absence of women’s bodies and the focus upon the babies only serve to reinforce the fact that the end product, the baby, is worth the effort. In addition, some subtle messages about the fetus as a distinct person requiring protection was exhibited in the visuals. This was accomplished by decontextualizing the fetus from the woman’s body and instead, presenting it as a separate living entity whether in a test tube or behind prison bars and needing the protection of the state. Overall, it is the fetus that obtains personhood and a right to protection while the woman is in danger of losing her personhood and autonomy. Writing an entire thesis on the visual images that accompany the newspaper articles could be an interesting and worthwhile endeavour. Visuals relay an instant message that can be both explicit and implicit. The observer does not have to read paragraphs of text to receive a message, but merely has to glance at a visual to receive some message from it. A deeper and more analytical examination of the visuals may reveal important messages regarding the technologies and those that create the images of the technologies.
Considering the fact that the reproductive and genetic technologies have the capability to drastically alter how humans will reproduce in the future even though they are currently affecting only a small number of people, it is important to examine them on a moral and ethical level. However, this examination is rarely carried out in the newspaper articles. The implications of the technologies receive only superficial coverage while the more difficult questions raised by the technologies are often left unanswered. Problems and risks are quickly covered and then forgotten or else they are ignored. What it means to be human when we are no longer random creations of nature, but carefully thought-out and designed creations is a question that needs to be examined. What sort of society and world will we be creating when eugenics become commonplace and when only certain people are allowed to procreate? These questions may sound like science fiction, yet the path on which we are travelling may lead to this destination. It is imperative that a more thorough examination and discussion of the reproductive technologies is encouraged which could be initiated by newspaper reporting that does not leave the issues at a superficial level.

When the articles were printed in the newspaper, it is interesting to note that almost 50 percent of the selected articles did not acknowledge an author. Instead, only wire services were identified in these particular cases. I find this practice to be confusing. Why are the original authors of the articles not acknowledged and what effect does this have upon the reading public? By failing to note the name of the author, the newspaper helps to create an aura of objectivity surrounding its coverage when actually, the news is a subjective creation. No longer are the written words accountable to an individual person. Instead, they take on an air of authority. If wire services have to be identified, why not note them underneath the author's name? Changing
to this format would illustrate that news is a human endeavour and the words and opinions printed on the newspaper pages are just that, the words and opinions of a person.

MediaWatch reported that just under 30 percent of the reporters and columnists that report in the printed news are women (Graydon, 1995:155). It was interesting to find that of the selected articles utilized in this thesis, female reporters and columnists constituted 30 percent of the authors. Considering the fact that the subject matter is inextricably related to the female body as well as notions of womanhood and motherhood, one might expect a greater number of articles to be authored by women. Instead, the female authors correspond exactly to the proportion as observed by MediaWatch. It cannot be stated that female authors will report upon the subject in a feminist or woman-centred perspective because each woman’s beliefs vary and the decisions relating to what should be printed are not made solely by the writers.

The newspaper industry operates within a predominately capitalist patriarchal society with a gender ideology which often prioritizes the masculine and subsumes the feminine. The choice of what to print, what to visualize, and who to cite is an ideological decision according to Stuart Hall, as discussed in the second chapter. And when the people that make these decisions are embedded within a particular society and history, then these influences - whether they be capitalist, sexist, racist, heterosexist, etc.,- are impossible to fully escape. Presenting a more balanced view or a greater range of ideas, opinions, and voices in the articles is a challenge. It is imperative that the popular presses become more receptive and representative of a diverse range of news stories.

For this thesis, I examined articles found in only one newspaper, The Globe and Mail. When I first conceived my thesis, I considered comparing two newspapers, but this task proved
to be too enormous for the time which was available to complete the thesis. It would prove interesting to examine and analyze another newspaper, perhaps a regional newspaper such as The Toronto Star which has a large circulation to determine what information and messages this particular newspaper relays to its reading public. A comparison between the papers could then be completed.

Another area that could be explored with regards to the reproductive technologies is their relationship to a female spirituality or to mainstream religions from a female perspective. Women have challenged mainstream religions in order to exert greater influence and power within these religions. For instance, female Jewish rabbis and Protestant ministers now preach to and teach their respective religion’s followers. In addition, some women have started to explore the history and existence of a female spirituality or goddess. The reproductive technologies have issues that need to be explored from spiritual and ethical perspectives. The question of when does life begin is prompted by the capabilities of the technologies. Issues surrounding donated eggs, sperm, and embryos as well as contractual pregnancies and the freezing of embryos can all be examined with regards to how these issues relate to a female spirituality or a female view on mainstream religions. As an atheist, I have a very limited religious knowledge base from which to comment on the above issues, but someone with a deeper understanding of the subject may wish to apply a female religious perspective to the reproductive technologies.

A further elaboration upon this thesis would be to move beyond the fourth estate, the press, and to examine cyberspace. The Internet is a medium through which people from around the world can communicate instantaneously and receive and transmit from and to almost
anywhere on the planet. The growth of people logging onto the Internet and challenging national and international borders is immense. The new reproductive and genetic technologies exist on the Internet. Stories from women as well as information and advertisements from companies and clinics which offer reproductive technologies and surrogacy arrangements can be found on many websites. A researcher could analyze the messages and images about reproductive technologies that are found in cyberspace as many people now utilize the Internet to provide themselves with information about various issues. The Internet allows a large degree of freedom to transmit information once one knows how to create a website. Ordinary people have the capability to share their stories and experiences with any one of the thousands of persons connected to the Internet. No longer does an editor or publisher have to approve the story before the public can have access to it. Any person can have the ability to influence and shape the ideas of those that visit their website. This freedom and power need to be analyzed and the messages and visuals in cyberspace need to be examined and critiqued. If I was continuing on to a doctorate, this is one area that I would be interested in pursuing, but since I currently am not continuing this part of my education, I leave it up to the next person to attempt this endeavour.
List of Articles from The Globe and Mail

In order to match up the articles in the tables to this list of articles, I placed the articles in chronological order and not according to the author’s surname. This formulation enables easier cross-referencing between the tables and the bibliography. The capitalization in the headlines is also reproduced in this listing so the reader can observe which words are emphasized, capitalized, et cetera.

(Dd/mm/yy)

10/07/78
“‘Test tube baby’ to be born soon: MD” in The Globe and Mail. Page 10.

14/07/78 by Ian Rodger

17/07/78a

17/07/78b

26/07/78a

26/07/78b

27/07/78a
“‘So happy, I could cry,’ says father of test-tube baby Louise” in The Globe and Mail. Page 1, 2.

27/07/78b

28/07/78
“Lab baby, mother doing well; second woman begins process” in The Globe and Mail. Page 1, 2.

31/07/78

06/10/78

01/04/80

17/04/80
18/04/80
Page 15.
19/04/80
08/08/80 by Joan Hollobon
24/04/81a
24/04/81b by Fay Orr
02/10/81 by Joan Hollobon
11/02/82
02/08/82a
02/08/82b by Cameron Smith
03/08/82 by Cameron Smith
31/08/82 by Regina Hickl-Szabo
06/08/83
06/10/83
13/10/83 by Jane Gadd
“First test-tube twins fertilized in Canada expected next May” in The Globe and Mail.
Page 5.
11/02/82
11/02/85 by Stephen Strauss
28/08/86 by Margot Gibb-Clark
11/02/87
26/02/87
01/04/87 by Martin Mittelstaedt
02/04/87a
02/04/87b by Dorothy Lipovenko
04/04/87 by Michele Landsberg
09/04/87 by Robert Hanley
11/04/87
24/04/87
27/04/87 by Nilu Balsara
01/08/87 by Dorothy Lipovenko
“Protecting the fetus: How far can the state go?” in The Globe and Mail. Page D1, D2.
15/08/87 by Michele Landsberg
22/08/87 by Michele Landsberg
06/02/88a by Ann Pappert
06/02/88b by Michele Landsberg
06/02/88c by Ann Pappert
08/02/88a
08/02/88b by Ann Pappert
08/02/88c by Lila Sarick
08/02/88d by Dawn King

09/02/88a by Lawrence Surtees

09/08/88b by Ann Pappert

25/04/88 by Lila Sarick
“Quints’ parents have tears of joy taking babies home from hospital” in The Globe and Mail. Page A12.

31/08/88a

31/08/88b by Ann Rauhala

10/02/89 by Dorothy Lipovenko

04/04/89 by Susan Delacourt

10/08/89

10/10/90a

10/10/90b by Murray Campbell

18/10/90a

18/10/90b

29/10/90a

29/10/90b by Rod Mickleburgh

30/10/90 by Rod Mickleburgh

19/04/91 by Murray Campbell

06/08/91a

06/08/91b
09/10/91 by Murray Campbell

04/02/92 by Rod Mickleburgh

22/02/92 by Jamie Cameron

26/02/92 by Rod Mickleburgh

10/08/92

18/02/94 by Craig McInnes

26/02/94 by Kathleen Byrne

16/02/95 by William Thorsell

24/02/95 by Patricia Baird

14/08/95 by Stephen Strauss

01/10/96

03/10/96

17/10/97

25/10/97
"In-vitro case to go to trial" in *The Globe and Mail*. Page A15.
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University of Ottawa (a)(1998). Two sections of the website were utilized. The main website is located at http://www.conceive.org. The web address for the particular references of University of Ottawa (a) is located in the section: http://www.conceive.org/inbook.htm#stages

University of Ottawa (b) (1998). The second area of the above website that was utilized was http://www.conceive.org/cost.htm.


