The new reproductive technologies and female infertility: liberal, radical and poststructuralist feminist approaches

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Declaration

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ABSTRACT

In pronatalist Western culture motherhood is defined as the primary role and responsibility of women. In such a society female infertility is constructed through medical discourse and popular media as a problem - more specifically as a medical problem for which medical technology is the only answer. Such a view is supported by the discourse of reproductive liberalism which promotes the NRTs as liberating for women because they supposedly increase the options and choices available, therefore allowing women greater self-determination, autonomy and control. Radical feminists, particularly those associated with the FINRRAGE organisation, vehemently disagree with reproductive liberals arguing instead that because the NRTs are designed within a patriarchal system they are exploitative, not only of the women directly involved, but also of women worldwide. FINRRAGE writers and others argue the 'choices' offered by the NRTs are coercive and culturally forced and therefore reduce women's autonomy and self-determination. Through international networking and information sharing radical feminists aim to actively resist the increasing medicalisation of women's lives. The following literature review highlights the main issues associated with the liberal and radical arguments and attempts to go some way towards grasping how the two theoretical stances can arrive at such disparate conclusions about the NRTs. The section following this discusses some of the difficulties associated with the radical feminist perspective on the NRTs, especially the concept of 'patriarchy' and the essentialising tendencies of radical feminist theory. I then outline the benefits of poststructuralism in general, and then attempt to use a deconstructive approach in order to examine one of the more interesting aspects of infertility. That is, the popular construction of 'infertility-as-crisis' and the 'desperation' for a baby which results from this. I conclude by briefly suggesting how poststructuralist theory when used in relation to debate on the new reproductive technologies can be useful for feminist politics.

PART 1: THE NEW REPRODUCTIVE TECHNOLOGIES AND INFERTILITY

1. THE NEW REPRODUCTIVE TECHNOLOGIES: OVERVIEW AND DEFINITION

The world's first 'test-tube baby' Louise Brown was born in England in 1978. Since then approximately 10,000 babies have been conceived through the much publicised in vitro fertilisation (IVF) technique worldwide (Klein, 1989). However while IVF is the most well-known it constitutes only a small part of the wider field of the 'new reproductive technologies' (NRTs) defined in a US Congress Report as:

> anything to do with the manipulation of the gametes [eggs or sperm] or the fetus, for whatever purpose, from conception other than by sexual union, to treatment of disease in utero, to the ultimate manufacture of a human being to exact specifications. ... Thus the earliest procedure ... is artificial insemination; next ... artificial fertilization ... next artificial implantation ... in the future total extra corporeal gestation ... and finally, what is popularly meant by [reproductive] engineering, the production - or better, the biological manufacture - of a human being to desired specification. (US Congress Report, cited by Hanmer, 1983, p. 183).

The NRTs thus include techniques from artificial insemination and surrogacy through to in vitro fertilisation and gamete- and zygote intrafallopian transfer (GIFT and ZIFT/PROST), and a range of related techniques from electronic foetal monitoring (EFM), ultrasound, preimplantation diagnosis, sex selection and selective abortion to genetic manipulation, cloning, cryopreservation and the possibility of ectogenesis (see 'Glossary of Terms' for specific descriptions and definitions). Such technologies are being developed by medical scientists supposedly in response to women's demands for them, and because they potentially create new options for motherhood and assist in overcoming the perceived crisis of female infertility.

2. FEMALE INFERTILITY: MEDICAL DEFINITION

The most commonly accepted medical definition of female infertility is

the inability of a woman to conceive within 12 months of ceasing contraception. Infertility is reported to affect up to 15 percent of Australian couples (Wood, 1985) - that is, heterosexual married or cohabiting couples. The main medically identified causes of infertility in women are the blockage of one or both Fallopian tubes, endometriosis, anovulation and ovarian disease. Male factors such as azospermia or oligospermia are also obvious contributors (Wood, 1985). Currently, around 16 percent of all IVF attempts involve fertile women with subfecund male partners (Laborie, 1988). These causes are all taken to be medical indicators for the use of IVF and/or its related techniques, GIFT and ZIFT/PROST (See Appendix A for details and explanation).

Within this medical model female infertility is assumed to have a physiological aetiology whose treatment requires medical intervention. Female infertility is thus medically defined as an individual case problem with a medical-technological solution. For involuntarily childless women however, infertility is a far more complex phenomenon than its medical diagnosis indicates; it has personal and social consequences as well and potentially represents a major life crisis.

3. FEMALE INFERTILITY: PERSONAL AND SOCIAL IMPLICATIONS

Nursing and sociological literature suggests that parenting is an expected life goal of many adults. It is part of the progression through the 'normal' events of lifespan development - marriage, family, career - which many people take for granted. Such events can be refused since fulfilling alternatives to them do exist, but for people who accept them they represent the potential for self-actualisation and control over life. Parenthood for many presumably brings personal pleasure but it also has desirable socially

constructed meanings signifying morality, responsibility, sexual competence, fertility, 'normalcy' and psycho-emotional health (Veevers, cited by Williams, 1990). Interviews with infertile women have shown that motherhood is perceived by them as an integral part of women's social role and sense of 'feminine' identity, and as essential to family formation and marriage (Williams, 1990). Infertility represents a barrier to the achievement of these goals and has a dramatic and often devastating effect, calling into question the individual's personal competency, self-perception and self-esteem.

Infertility challenges an individual's expectations of life and alters the perceived control that individuals have over their bodies and their life circumstances. For women especially the formal diagnosis of infertility brings with it feelings of anger, unworthiness, guilt, depression, denial, isolation, grief and loss (Woods, Olshansky & Draye, 1991), an overwhelming sense of defeat, failure and sorrow (Napier, 1984), and negative body-image (Crowe, 1985a). Infertility is also experienced by some as the metaphorical death of the potential child (Menning, 1980), the family lineage and of femininity itself. Infertile women may experience a profound sense of 'otherness' and may characterise themselves as somehow 'lacking', of being 'less' - that is, less womanly or less human - because of their infertility (Weideger, 1988). On a social level too, infertile women are subject to scrutiny and overt pressure by family, friends and others, compounding feelings of isolation and negativity (Crowe, 1985a). The inability to conceive through 'natural' means can thus produce a major identity crisis. Why involuntary childlessness produces such pain, internal conflict and 'desperation' can be understood by looking at infertility in its wider context of pronatalism. This has been dealt with briefly below.

4. FEMALE INFERTILITY AND WESTERN PRONATALISM

This notion of 'female infertility as crisis' is created within a Western culture based in a pervasive pronatalist ideology. In such a society women's primary role and function is that of breeder and nurturer - other identities assume secondary status. Motherhood is constructed through various discursive fields as a 'natural' and instinct-driven desire for all women, and a role from which women should derive most, if not all, of their individuality and sense of self. Huge cultural significance therefore is placed on women's fertility while infertility is constructed as an "unbearable problem" (Williams, 1990, p. 229) which, if left unfulfilled will lead to the internal dissonance and crises of self-perception outlined above.

As Corea (1988) points out this social construction of an infertile woman as having lost the most basic source of her identity has great coercive and emotional power, and is enough to structure an infertile woman's desires and motivations strongly towards motherhood. However there is an obvious 'gap' between the desire for a child and the ability of the infertile physical body to satisfy this desire.

This 'gap' is filled through the use of the NRTs, technologies which medicos claim are able to transform an infertile woman's reproductive consciousness from 'failure' to 'success' - from 'nonmother' to 'mother'. The NRTs thus appear to be responding to women's demand, giving infertile women what they want - the chance to have a child, conform to social expectations, gain self-esteem, and above all, overcome the personal trauma of involuntary childlessness.

Because medical science appears therefore to be benevolent, the

proliferation of the NRTs is widely supported by many individuals, including some feminists. Their pro-technology stance can be broadly classified as 'reproductive liberalism', the dominant discourse in much writing on the NRTs. Critics, especially those associated with radical feminist politics and activism, have largely been ignored or marginalised.

It is my belief however that such critics, with their explicitly gynocentric focus, have much to offer in terms of their insights into the social, political and global effects of the NRTs on women, their health and their rights. As a consequence of this I have dealt only briefly with reproductive liberalism and have biased the following literature review and general discussion deliberately in favour of radical feminist thought. There are, however, some conceptual difficulties associated with radical feminism which will be detailed later, but for now I have tried to summarise here the main points of reproductive liberalism and the radical feminist opposition to the NRTs.

PART 2: REPRODUCTIVE LIBERALISM

1. REPRODUCTIVE LIBERALISM: OVERVIEW

The rhetoric of reproductive liberalism characterises the discourses of Western medical science, law, policy-making and some feminist writing and has done since the early 1960s. The quintessential values of reproductive liberalism are the rights to freedom of choice, unlimited procreative liberty and privacy, and gender equality.

With these values in mind, the two main goals of liberals working in the area of reproductive technologies is to modify legislation which discriminates against certain groups of women, and to achieve the

equitable distribution of resources between all groups in society. Liberals make the assumption here that technological interventions into reproduction are neutral and that the technologies themselves are not the cause of inequalities between women. Rather, discriminatory laws which do not permit all women equal access to the technologies are the source of inequality and require reform. The aim of reproductive liberals then is to create an interlocking social and legal system in which all individuals, regardless of gender, have equal choice and freedom to use existing technologies, and a system in which these individual choices are supported by the rights to autonomy and privacy in reproductive decision-making.

This pro-technology stance of reproductive liberals is based on their argument that technological and medical interventions into reproduction provide increased reproductive 'options' and 'choices' for infertile and fertile women alike, and are therefore inherently beneficial. Liberals argue that the new reproductive technologies and contracts fulfil feminist goals, firstly because they move towards the attainment of the essential feminist principles of self-determination, autonomy and control, and secondly because they open up the possibility for the formation of completely new family structures capable of challenging the oppressive meaning of traditional motherhood and the nuclear family. Both the provision of increased 'choices' and the redefinition of the family brought about by the NRTs are seen by reproductive liberals as being positive steps toward the eventual liberation of women. The idea of increasing choices as a method of moving toward personal control over reproduction and ultimately, freedom, has a historical basis in the contraception and abortion rights activism of the 1960s and 70s.

2. THE CONCEPTS OF 'CHOICE' AND 'CONTROL'

Developments in contraceptive methods during the 1960s for example were considered libratory because they allowed women increased sexual freedom and the ability to control the timing of reproduction. As Petchesky (1980) argued reliable contraception meant that motherhood was no longer defined as destiny but instead was a controllable choice. Accordingly women would not be defined only in terms of 'mother' and would not be denied opportunity on the basis of their status as potential or actual mothers. Sexual and social equality would be the eventual result (Petchesky, 1980). The issue of a "woman's right to choose" related not only to the use of contraception but was also central to feminist campaigns for safe, legal and accessible abortions. In both instances for liberals 'choice' meant control over the physical reproductive self.

This same 'pro-choice' rhetoric has been invoked in defence of women's right to use the new reproductive technologies. Liberals assume that because the NRTs supposedly broaden the range of 'choices' women have, like contraception and abortion, the NRTs also give women more control over their reproduction. Consequently liberals suggest that to oppose the use and development of the NRTs is to undermine women's reproductive freedom and eventually women's right to abortion. The right to choose alternative methods of reproduction is therefore seen as an inseparable extension of the rights to abortion and contraception use. On this point, well-known liberal, Lori Andrews, writes:

> ... the constitutional underpinnings for reproductive choice regarding abortion and contraception also protect autonomy in the use of artificial insemination, embryo donation, surrogacy and so forth (1987, p. 46).

She goes on to argue that a woman's right to use the NRTs is

essentially the 'positive' reversal of the 'negatives' of contraception and abortion. That is, if a woman is free to choose technologies to avoid or negate pregnancy she must also have the freedom of choice to become pregnant through any means available including medical technologies. She should also be free to exercise choice in deciding to become a surrogate mother, and to donate eggs and/or embryos, argue liberals. This right to 'unlimited procreative liberty' is extended not only to women, but to men as well. They, too, should be free to use all the NRTs and/or to hire a surrogate mother in order to procreate. (This however ignores the obvious fact that it is predominantly women who are subjected to the technological manipulations of the NRTs, not men - this fundamental gender inequality and the ways in which it serves to privilege male reproductive goals will be discussed in a later section. For now, however, it is my purpose to describe the liberal concept of 'unlimited procreative liberty'.)

3. UNLIMITED PROCREATIVE LIBERTY

John Robertson, an influential spokesperson for procreative liberty in the United States, argues for the protection of the right of any individual, regardless of gender, to procreate irrespective of whether this is done 'coitally' or 'non-coitally', that is, with the aid of donor gametes, technological intervention, or through surrogacy contracts. Because of the assumed beneficial nature of the NRTs no distinctions are made between the various 'non-coital' technologies, for example between extra-corporeal fertilisation techniques (IVF and its variations) and assisted reproduction (use of donors and surrogates). The argument for procreative liberty also extends further into the areas of sex selection and genetic engineering:

> The right of married persons to use noncoital and

> collaborative means of conception to overcome infertility must extend to any purpose, including selecting the gender or genetic characteristics of the child or transferring the burden of gestation to another. (Robertson, 1983, p. 450).

Robertson (1988) believes the unregulated freedom individuals have to procreate coitally should be extended equally to those wishing to reproduce non-coitally. He writes:

> ... the reason and values that support a right to reproduce coitally apply equally to noncoital activities involving external conception and collaborators. While the case is strongest for a couple's right to noncoital and external conception a strong argument for their right to enlist the aid of gamete and womb donors can also be made. (Robertson, 1986, p. 961).

In other words all people, fertile or infertile, should have equivalent and unregulated rights to procreate, regardless of the procreative method, and should all be allowed complete autonomy in their reproductive decision-making.

Such a concept of 'autonomy' implies that an individual is free to be his or her own person,

> without constraints either by another's action or by psychological or physical limitations. The autonomous person determines his or her course of action in accordance with a plan chosen by himself or herself. Such a person deliberates about and chooses plans and is capable of acting on the basis of such deliberations. (Beauchamp & Childress, 1983, pp. 59-60)

Every individual thus is seen as being capable of acting rationally and choosing appropriate courses of action based on her or his individual needs. This means that the decision to reproduce should be a private one, and not subject to state regulation or other external interference. Indeed, placing restrictions on the use of a certain technology for example could be seen as inhibiting an individual's procreative liberty and autonomy.

Because of its permissiveness 'procreative liberty' has become the main slogan of the medical profession and other liberal establishments and has been used to underpin controversial legal decisions such as that made during the 'Baby M' case. In validating this highly controversial surrogacy contract Sorkow judged that William Stern's

> ... right to enter such a contract is protected by a fundamental right to procreate ... it might even be argued that refusal to enforce these contracts and prohibition of money payments would constitute an unconstitutional interference with procreative liberty since it would prevent childless couples from obtaining the means with which to have families. ('Matter of Baby M', New Jersey Supreme Court ruling, cited by Raymond, 1994, p. 77-78).

That is, judicial interference in procreative decisions was seen by Sorkow to be an infringement of Stern's rights to reproductive autonomy, and as a threat to the procreative liberty of individuals in general. Furthermore, such interference is construed by liberals as a threat to the protected right to privacy in reproductive decision-making.

4. THE RIGHT TO PRIVACY

Sorkow's libertarian and individual-based view of procreation and technological intervention is supported by the right to privacy. The right to privacy in reproductive matters implies the notion of 'body as property', that is, the 'right to do with one's body what one chooses', free from state or other regulatory interference, in order to be self-fulfilled.

The way reproductive liberalism and the right to privacy operate in practice is exemplified in the cases of pornography and prostitution. These two areas have flourished because of the liberal emphasis placed on choice and individual self-fulfilment. Because women are seen as 'owning' their bodies, they are also seen as capable of 'using' their

bodies to best advantage. That is, women are seen as able to make rational decisions maximising benefit to themselves as autonomous individuals. Pornography and prostitution for example are then viewed as the valid and informed choices of individual women who take personal responsibility for their own actions and are thus answerable only to themselves. In other words a woman's decision to become involved in pornography or prostitution, for example, is seen by liberals as a free choice concerning only the woman involved. She becomes involved because she 'wants' to, not, as radicals would argue, because of coercive circumstances or because she sees (or is permitted) no other alternatives. Her perceived ability to make rational independent choices should therefore be protected by the right to privacy and an overall policy of non-interference argue liberals. In the same way, an individual's choice to use the new reproductive technologies and contracts is seen as the outcome of rational and calculated decision-making processes and should also be protected by the right to privacy and self-determination.

5. SUMMARY OF REPRODUCTIVE LIBERALISM

The above brief description of the main tenets of reproductive liberalism has shown that the individual is supreme and is viewed as capable of functioning within society as a complete, critically thinking unit, basically unaffected by external pressures and other influences. Autonomy in reproductive decision-making with the aim of self-fulfilment is the essence, and it is made clear that nothing should impede the pursuit of an individual's procreative goals and ultimate happiness. As Robertson (1988) points out, "moral distaste [for the NRTs and/or their implications] alone would not be a sufficient ground for limiting procreative liberty" (p. 181). The NRTs must be supported on the grounds that they all constitute valid

'choices' for infertile women and/or men argue liberals. Failing to defend the NRTs as part of the 'pro-choice' platform could potentially damage the hard-won gains made in the areas of abortion and contraception, and would provide ammunition for the conservative anti-abortion lobby.

The focus then is on the individual and the fulfilment of individual procreative desires through any means available, not on the social context in which reproductive choices are constructed, or the overtly sexist nature of society, or the basic inter-relationality of humans. The discussion of this philosophical clash between individual autonomy and the social implications of individual choice, and the challenging of the benevolent nature of science and technology, are the primary domain of radical feminist opponents of the NRTs.

PART 3: RADICAL FEMINISM

1. RADICAL FEMINISM: OVERVIEW

There is a clear polarisation of viewpoints between reproductive liberals and radical feminists on a range of issues. Central to the debate are the notions of 'choice' and 'control'. As pointed out above reproductive liberals believe technological developments from contraception to the NRTs increase a woman's choices, her autonomy, her ability to determine the course of her life, and thus the level of control she has over her reproductive destiny.

Radical feminists on the other hand argue that a line should be drawn between those technologies which are genuinely liberating - primarily contraception and abortion - and those that take self-determination away from women - namely, the NRTs. On this point Raymond (1994) writes:

> There is a vast difference ... between women's right to choose safe, legal abortions and women's right to choose unsafe, experimental, and demeaning technologies and contracts. One allows genuine control over the course of a life; the other promotes abdication of control over the self, the body, and reproduction in general. (p. xi).

Such a perception arises from radical feminist awareness of the pervasive patriarchal social context in which reproductive 'choices' are structured, and in which the technologies are developed. The increased array of 'choices' offered to women by the technologies must therefore be examined in light of this oppressive context - this is, in essence, the wider radical feminist project.

Radicals argue that the technologies and the 'choices' available undermine women's reproductive control and are oppressive because they are created by a male-controlled medical system that seeks to control women and their reproduction. Women's autonomy in, and control of, their reproductive decision-making is usurped by the medical profession because the 'choices' offered by reproductive technology are highly coercive. That is, 'choices' are structured by patriarchal pronatalist society in such a way that to 'choose' the NRTs becomes the only real 'choice' available. Other options such as remaining childfree or adoption are constructed as unenviable and in contemporary Western society are largely unacceptable, or at least, are considered less socially valuable. They therefore do not 'count' as 'choices' a woman can make freely and rationally.

In addition, radical feminists argue that the 'choice' to use a particular technology is not accompanied by an equally valid 'choice' <u>not</u> to use that same technology, the latter frequently incurring personal, social, sometimes legal, penalties. Thus, women are forced into using the patriarchally-endorsed option (because they really have

no choice), but by doing so, women are 'playing into the hands' of the patriarchy and are giving up increasing degrees of their reproductive control and freedom. Patriarchally-constructed 'choices' thus serve to close off reproductive options for women, not broaden them. It is this debate about the meaning of 'choice' that produces the major conflict between liberals and radicals.

As more technologies are developed, more and more reproductive options are shut down, and women's autonomy, control and self-determination are further reduced. While women's control over their reproduction is being decimated, male control of female reproduction is being more firmly established. Critics therefore urge women to look at the NRTs not as a 'gift' to women, or a response to women's demands for alternative methods of reproduction, but as part of an overall process of medicalisation that must be curtailed. Raymond (1994) writes:

> Perhaps the most confusing messages about the new reproductive technologies is that they are a gift to infertile women, because they appear to give so-called infertile women the ability to reproduce. However, when women look this "gift-horse" in the mouth, they will see that it comes accompanied by the persistent medicalization of women's lives. This means that more and more areas of female living have been colonized by medical intervention, and staked out as its territory. (p. 12).

Radical feminists then, are looking beyond a simple reliance on 'choice' and 'individualism' and are examining the wider social and global contexts of reproductive 'choice' and the implications of what is basically unsuccessful experimental technology. They are concerned not only for the decrease of control individual women experience through using the NRTs but are also concerned for the future, and the rights, of women on a global scale. They argue that it is up to women to fight to maintain these rights in the face of the increasing medicalisation of women's reproduction. This involves not only the

activities of political organisations but the recognition by individual women that their 'choices' and behaviours affect not only themselves but have international implications.

Radicals see women as a social group operating within a controlling and exploitative patriarchal context rather than as autonomous and rational individuals functioning in a neutral and egalitarian society. For radicals, behaviour does not exist in a vacuum, nor is it the product of random idiosyncrasies, but occurs in, and is shaped by, a social context. As such it has political ramifications for women worldwide, for which individual women must become collectively responsible. This 'personal is political' philosophy marks a significant break from the apparent neutrality of reproductive liberalism.

It was the debate surrounding pornography and prostitution that was central to this change of focus from an individually-based one of personal choice and freedom, to a socially-based one. Writers such as Andrea Dworkin (1981) and Catherine MacKinnon (1977; 1983) were instrumental in changing this focus with their suggestions that women as a social class, rather than simply as individuals, were harmed by both pornography and prostitution. Instead of viewing pornography for example as being the rational choice of an individual woman, it was seen as being symptomatic of a male-controlled female sexuality which kept all women oppressed. Similarly, radical feminists see an individual woman's 'choice' to use the NRTs as a method of not only decreasing her own reproductive control but also as a method of supporting patriarchy and the virtually unchecked expansion of medical technologies, thereby intensifying the exploitation of women worldwide.

Appropriately, an international network of feminist writers has collaborated to produce an overall world picture of the effects of the NRTs, and to provide resistance to the spread of the NRTs. This group, the 'Feminist International Network of Resistance to Reproductive and Genetic Engineering' (FINRRAGE) has provided the most cogent and sustained attacks on the NRTs to date. They state their position as follows:

> ... the female body ... is being expropriated and dissected as raw material for the technological production of human beings. For us women, for nature, and for the exploited peoples of the world, this development is a declaration of war. We know that technology cannot solve problems created by exploitative conditions. We do not need to transform our biology, we need to abolish patriarchal social, political and economic conditions. ... Genetic and reproductive engineering is another attempt to end self-determination over our bodies. ... Externalization of conception and gestation facilitates manipulation and eugenic control. The division, fragmentation and separation of the female body into distinct parts for its scientific recombination disrupts historical continuity and identity. ... (FINRRAGE Resolution, cited by Klein, 1988, pp. 258-9).

Because of this perception of the misogynistic nature of medicine and the pervasive nature of patriarchy, radical feminists question whether it is possible for women living in a male-dominated society to avoid being exploited and manipulated by the practitioners involved with the NRTs. Given that reproductive technologies reinforce the capitalist-patriarchal status quo and greatly endanger the health and well-being of the women involved, radical feminists call for restrictions, even prohibition of the NRTs, at least until their practical and ethical implications are better understood. Until a completely free and egalitarian society is created through political action, the most powerful and direct way to inhibit the development and use of the NRTs is to inform women of their possible personal, social and ethical

consequences, to show they are only experimental and to urge women to boycott them.

Before going into the radical feminist arguments in detail it is necessary to explain the development of the critical concept of 'patriarchy'. Following this I will explain how the medical profession generally, and the new reproductive technologies specifically are seen by radical feminists as avenues through which patriarchal male violence is perpetrated against women.

2. THE CONCEPT OF 'PATRIARCHY'

This divergence between reproductive liberals and radical feminists on the issues of individual rights versus social contexts and responsibilities is not a recent phenomenon. Even in the late 1960s some feminist groups were calling for a more radical socially-oriented politics capable of explaining and dealing with their increasing awareness of the enormity of sex, class and race oppressions - that is, the larger social context of women's subjugation. Radical feminists began refining this awareness and dissatisfaction with the naivete of the liberals' rhetoric of individual rights into a theory and analysis of 'patriarchy', defined as follows:

> [O]ur society, like all other historical civilizations, is a patriarchy. The fact is evident at once if one recalls that the military, industry, technology, universities, science, political office, and finance - in short, every avenue of power within the society, including the coercive force of the police, is entirely in male hands. (Millett, [1969] 1977, p. 25)

'Patriarchy' is the interlocking system of social institutions within which women are subordinated primarily on the basis of their biological difference from men (for example Firestone, 1970; Millett, [1969] 1977). This biological division of the sexes is seen by

radical feminists as the fundamental organising principle of all social institutions - medicine, religion, education, law, the nuclear family and so on - and the basis from which other forms of exploitation and oppression arise. Morgan writes that sexism is the "root oppression, the one which, until and unless we *uproot* it, will continue to put forth the branches of racism, class hatred, ageism, competition, ecological disaster, and economic exploitation" (1978, p. 9).

The oppression of women then is a basic structural component of society and is supported firstly by ideologies which perpetuate the inferior and powerless status of women relative to men, and secondly by sex-role socialisation processes which ensure that females and males adopt behaviours and attitudes consistent with their socially prescribed roles - females as subordinate and passive, males as dominant and active. The point of patriarchal institutions and ideologies is to reinforce to women that they are members of a lesser class who exist primarily as accompaniments to men, to serve men sexually and reproductively, and to ensure that women fulfil this function.

Patriarchy flourishes by capitalising on the relative powerlessness and vulnerability of women and uses women's bodies as the major 'currency' through which male hegemonic power is maintained. Control over, and possession of, the female body is necessary for the perpetuation of patriarchy. Men appropriate female sexuality and declare that women's bodies are 'for' men - that is, for male use and pleasure. Such appropriation and control can take the form of restrictive abortion, contraception and sterilisation laws, and use of the new reproductive technologies for example, and various forms of

violence against women - pornography, prostitution, and other physical, sexual and emotional abuses. It is a basic assumption of radical feminism that the more dehumanised and intimidated a woman becomes through such forms of objectification and male control, the less power and bodily autonomy she will have.

The pattern of patriarchal violence against women has a history in which medical science, and the development of the NRTs play a significant part. Radical feminist concerns specifically about the implications of the NRTs are grounded in the well documented past abuses of women by the medical profession. These are broadly summarised in the following section.

3. SOME PAST ABUSES OF WOMEN BY THE MEDICAL PROFESSION

By the early 1970s a systematic pattern of evidence of the medical abuse of women and increasing health and safety concerns surrounding contraception and other reproductive interventions had begun to accumulate. Technologies which were supposed to liberate women had created new threats ranging from iatrogenic injury to death (Behuniak-Long, 1990). Diethylstilbestrol (DES) for example was known to cause a type of vaginal cancer, infertility in sons and daughters of women exposed to the drug and a higher incidence of breast cancer in DES mothers (Orenberg, 1981). Corea (1977) noted that the Pill was associated with 54 side-effects ranging from headaches to amenorrhea, heart attacks and strokes. Intra-uterine devices (IUDs) were responsible for the hospitalisation of many women, with the Dalkon Shield in particular causing the deaths of 17 women before it was taken off the market (Bell, 1984). In the United States a strong correlation was found between the number of sterilisations performed and the race and class of the female patients involved, most of whom

were American Indian, Puerto Rican or Black (Davis, 1981). The 1970s also saw the increasing medicalisation of childbirth (supposedly to provide a safer birthing process), and the rising powerlessness of women in the whole procedure - it was described by many feminists as the taking over of a fundamentally female experience by a male-centred medical profession.

Publications emerged such as Claudia Dreifus' (1977) Seizing Our Bodies which detailed medical abuses including those involved with cancer treatment, childbirth and hysterectomies; in Gyn/Ecology Mary Daly (1978) equated contemporary gynaecology with European witchburning, Indian suttee, African clitoridectomy and Chinese footbinding; in The Hidden Malpractice Corea (1977) urged women to abandon faith in the male medical system and to return to woman-centred health care clinics, organisations and self-help groups. Further, Barbara Ehrenreich and Deidre English (1978) described the sexual politics of illness in For Her Own Good while authors like Suzanne Arms (1975), Adrienne Rich (1976) and Nancy Chodorow (1978) all critiqued the male domination of the birth process and emphasised the necessity for women to reclaim it.

This evidence made it clear to radical feminists that the medical profession is a patriarchal institution which has a history of abusing women and is using the power imbalance between the genders to gradually usurp the exclusive power women have to create life. The following section will show how medical science and the technologies it develops are seen by radical feminists as fundamentally patriarchal in intent.

4. THE MEDICAL PROFESSION AS PATRIARCHAL INSTITUTION

The above medical abuses of women clearly indicated to radical feminists that the medical profession is an institution through which white male power can be exercised. This power seeks to control women's lives and their reproductive ability from pre-conception to delivery. The control of women is not a chance outcome, but is built into the design and development of increasingly specialised medical technology, designed and used by communities of scientific and medical professionals who are usually men (Hanmer, 1983; Zimmerman, 1986). Medical technology is therefore not value-free and does not develop through its own momentum in circumstances devoid of political implications. Instead, it reflects the patriarchal ideologies, intentions and consciousness of its developers (Arditti, Klein & Minden, 1989). Mies (1985) writes:

> Technical progress is not neutral. It follows the same logic in capitalist-patriarchal and socialist patriarchal societies. This logic is the logic of the natural sciences, more exactly physics, and its model is the machine. It is always based ... on exploitation of and domination over nature, exploitation and subjection of women, exploitation and oppression of other peoples (p. 555).

Thus, for radical feminists technology and patriarchy are seen as inextricably intertwined.

The vast majority, if not all, radical feminist opponents of the NRTs would consequently disagree with both the liberal position and Firestone's (1970) proposition that technology itself is neutral with its exploitative power only being evidenced when its accessibility is limited or when it is used incorrectly. Firestone for example, wrote that a "serious error" arises when "results of the *misuse* of technology are very often attributed to the use of technology *per se*" (p. 186). She goes on to suggest that woman-controlled reproductive

technology would cease to be exploitative. However, radical feminists now believe that the oppression of women is built into technology and cannot simply be overcome by widening its availability and/or by giving control of its use to women.

This value-laden and inherently exploitative nature of technological advance however is frequently obscured by capitalist-patriarchal ideology in which ideas and technologies are promoted as autonomous since they derive from the apparently 'objective' natural sciences (Crowe, 1985b). This false assumption that science is the paradigmatic expression of rationality and objectivity has been exposed by feminist philosophers of science and others who have shown that what generally passes for objectivity is in fact "male subjectivity" (for example, Spender, 1980). Critics take this knowledge and claim that technology is not objectively derived but reflects male values.

Using this conclusion and the accumulated evidence of the medical abuses of women detailed above radical feminists go on to suggest that the natural sciences and the medical profession have been constructed in hostility to women and what is classified as female (Longino, 1988) and are underpinned with sexist, classist and racist ideologies (Halpin, 1989). These define the white Western male as 'normal' and 'healthy' while what is female is classified as 'deviant' and 'unhealthy' (Beagan, 1989) and in need of medical intervention.

For radical feminists the rise of obstetrics and gynaecology as medical specialities, with which the majority of women at some stage will come into contact, attests to the medical perception of the deviant nature of female reproductive capacities. The consequent

pathologisation and medicalisation of female reproduction enables the scientific objectification of women and the reduction of them to 'nature', and thus a disconnected sequence of disempowered, fetishised and mechanical body parts which can then be manipulated by medical scientists (Griffin, 1978; Bleier, 1984; Fox-Keller, 1985) and their technologies. For radical feminists this process of fragmentation of women using technology which reduces women to objects represents a method of controlling women; it is a form of patriarchal violence.

In the following section I will explain how Mary O'Brien's theory of 'reproductive consciousness' and the 'Baby M' surrogacy case have been used by radical feminists as two examples demonstrating how the NRTs gain control over women's reproduction and fragment motherhood. The objectification of women, as a further method of reducing the power of women, is then explained in the subsequent section with reference to analyses of the language used to describe the NRTs.

5. MALE CONTROL OF FEMALE REPRODUCTION

(a) Mary O'Brien's theory of 'reproductive consciousness'

Radical feminists see the development of the NRTs as a way in which men gain an unprecedented level of control over women's reproductive powers, of which men are basically envious (Baruch & D'Adamo, 1985).

Such desire to control and dominate has a long history and began with the development of 'reproductive consciousness' (O'Brien, 1981) in which men recognised the discontinuity and alienation of their reproductive experience and the problematic nature of paternity. Radicals claim that the feelings of isolation and separation experienced by men as a result of this brought them to need to devise technologies which would create reproductive continuity for them, by

giving them the ability to reproduce. Rich (1979) further argued that men realise women's unique power to create life, but they also fear it.

Given this fear and jealousy men seek to restrict the power of women through obstetrics, gynaecology and the NRTs. On this issue Corea (1985a) writes:

> Now men are far beyond the stage at which they expressed their envy of woman's procreative power through couvade, transvestism, or subincision. They are beyond merely giving spiritual birth in their baptismal-font wombs, beyond giving physical birth with their electronic fetal monitors, their forceps, their knives. Now they have laboratories. (p. 314).

What Corea means by this is that the disintegration of women's experience of motherhood and womanhood can be achieved not just by imitation or techniques to assist in the actual process of birth, but also by the use of the NRTs which allow men to create life. Not only is women's procreative power being taken over by men, but the NRTs also allow the complete separation of the components of motherhood and facilitate the disempowerment of the experience for women. Now women, rather than men, are alienated from the birth process and are robbed of one of the most potent sources of their social power, status, identity and experience (Woliver, 1991).

The alienation caused through the increasing reach of technology into reproduction and sexuality equates with the continuous erosion of women's bodily integrity and autonomy argue writers like Shelley Minden (1985); even motherhood as a concept is becoming fragmented, as the 'Baby M' surrogacy case demonstrated.

(b) The 'Baby M' surrogacy case

The reality of surrogate motherhood, gamete donation, and embryo lavage and transfer for example means that the possibility exists for one child to have three 'mothers'. Contrary to the argument of reproductive liberals who claim this situation is liberating for women, radicals say there is no way to define the 'real' mother since all three - genetic, gestational and social - theoretically have some claim to motherhood status (Hanmer, 1987). Maternity is thus wide open to dispute and motherhood has now become a discontinuous experience subject to legal determination of which 'mother' has the most 'rights' to the child. The rights of the 'ejaculatory father' on the other hand are fast becoming inalienable.

In the 'Baby M' case the sperm donor/husband (William Stern) became 'the father' with undisputed rights to the child while Stern's wife (Betsy Stern) became 'the mother' through adoption[1]. In the 'simplest' surrogacy scenario the adopting mother has no genetic input into the child and does not have the continuous experience of conception, gestation and birth that the so-called 'surrogate' does. However, when it comes to legal status and custody battles the surrogate mother has few rights compared with those of the sperm source.

William Stern was identified as 'the father' by virtue of his ejaculation of sperm, seen as a sufficient determinant of fatherhood, and was not penalised for his need to procreate through hiring a surrogate, because of the philosophical and legal existence of procreative liberty and his perceived need for 'genetic fulfilment' (Raymond, 1994, p. 30). Mary Beth Whitehead (the 'surrogate') on the other hand was not only not defined as 'the mother' of the baby, even

though she had provided the egg, gone through 9 months of pregnancy, regular medical observation and labour, but was also heavily penalised for her involvement in the surrogacy contract. Her character and personality were attacked during the ensuing legal proceedings. She was defined as an 'unfit mother' because she allegedly gave the baby the wrong toys to play with and was herself portrayed as narcissistic because she dyed her hair (Woliver, 1989). Eventually her parental rights were restored (a positive, albeit small, concession to women), but custody was given to the Sterns (Thom, 1988) whose abilities to be 'fit parents' or parenthood motivations were never questioned or scrutinised by the press.

Critics use this 'Baby M' case to make the point that even in the least technologically-dependent form of the 'new reproduction' maternity is rapidly becoming a contestable 'right' rather than a unitary genetic, gestational and social experience. Meanwhile, the sperm donor is treated as the rightful biological and social father without question. 'Father-right' is becoming incontrovertible while 'mother-right' is becoming increasingly doubtful and subject to proof and external legal, and to some extent, media and popular judgment. According to opponents, the more complex technologies only compound this separation of women from motherhood, and cause the division of women from one another. According to critics maternity is becoming a more abstract and increasingly disempowered concept in the same way that paternity has been (Lauritzen, 1990).

While motherhood is being dismembered and thrown into doubt by the use of surrogacy and the NRTs, the certainty of paternity is increasing as is the overall male control of reproduction. As more and more technologies develop so the fragmentation of motherhood will continue

and power over reproduction will be consolidated in male hands. In a parallel to Huxley's Brave New World ([1932] 1994) radicals envision a dystopian society in which relatively few men would be able to control and construct the future of humanity through the NRTs.

Some critics take this critique further and argue that developments in the NRTs are merely ways of discovering and 'improving' techniques which will eventually make ectogenesis technologically feasible (St. Peter, 1989). For radical feminists, once ectogenesis is a reality, rather than a futuristic possibility as it is now, men will have gained absolute control over women - the connections between women and pregnancy, childbirth and motherhood would be severed completely and paternity could be finally and irrefutably established. Women would be made redundant and reproductive power would be totally reversed. As Al-Hibri (cited by Donchin, 1986) writes:

> Technological reproduction does not equalize the natural reproductive power structure - it *inverts* it. It appropriates the reproductive power from women and places it in the hands of men who now control the sperm and the reproductive technology that could make it indispensable ... it 'liberates' them from their 'humiliating dependency' on women in order to propagate. (pp. 131-2).

The alienation of women from the reproductive process and their objectification is further exemplified in analyses of the language used to describe the NRTs; this is the focus of the following section.

6. THE LANGUAGE OF THE NRTs

Radical feminist analyses of the discourses surrounding IVF procedures show that the progressive alienation and dismemberment of women's identity occurs linguistically through the processes of 'erasure' (that is, the elimination of references to 'women'), and 'recombination' (that is, the manipulation and reconstitution of women

as a series of body parts; Steinberg, 1990). Rowland (1991) elaborates, suggesting that this 'language of dismemberment' effects women's loss of control over themselves as 'whole people' to the extent that they disappear completely and are reconstituted in the medical literature merely as 'uterine' or 'endocrinological environments', 'therapeutic modalities' and 'recipient endometria' (Beagan, 1989).

Radical feminists are appalled by what they see as the reduction of women to body organs, a collection of useful 'reproductive bits' and the technologists' assumption that the subsequent reification of the 'bits' represents the whole individual. Thus, a woman's identity as a female in the medical literature argue radical opponents, equates with her reproductive diagnosis - she is an 'infertile recipient', 'a donor uterus' or an 'ovarian failure' (Beagan, 1989).

Moreover, she is constructed as a passive recipient of technical manipulations. This asymmetrical assignment of agency is highlighted by this medical abstract:

> After *performing* 56 nonsurgical uterine lavages in 42 fertile donor women, we *transferred* 17 conceptuses and *produced* eight pregnancies. Four of the infertile recipients have now *been delivered* of healthy neonates. (Formigli, et al., cited by Beagan, 1989, p. 6)

Women are also attributed a negative agency and in effect are 'blamed' when IVF fails - they have 'insensitive ovaries', 'immature oocytes' or 'oocyte incompetence' (Malloy, et al., cited by Beagan, 1989), or are 'poor responders' (deZiegler, cited by Beagan, 1989). She is also blamed for her own infertility through the use of common medical descriptions of women's infertility such as 'ovarian failure' and 'hostile cervical mucus'. Iatrogenic infertility on the other hand is

concealed through linguistic manipulations providing terms like 'surgically absent ovaries' and 'therapy-induced ovarian failure' which remove direct blame and responsibility from the medical profession.

Using such evidence radical feminists then argue that the words used to describe the NRTs reflect their emergence from a male consciousness and male-dominated science and technology based on the patriarchal aims of objectification, domination and control. By using language that denies the existence of women as individuals means that women no longer have identity, or by implication the power, to resist systematic medicalisation. Women have been effectively reduced to reproductive organs and commodities available for manipulation; they are experimental 'test-sites' (Arditti, et al., 1989), 'mother machines' (Corea, 1985a) and 'living laboratories' (Rowland, 1984) - basically raw material available for scientific experimentation.

This reduction of women to experimental objects is not a new phenomenon however, and radical feminists draw connections between the contemporary use of infertile women in experimental IVF and related procedures and the historical use of Third World women, disabled women, lesbians, women of colour, and young and older women as subjects in experimental trials relating to contraception, IUDs, DES, Thalidomide, psychiatry and hormone replacement therapy, to name but a few (Arditti, et al., 1989). The exploitation of women as convenient 'guinea-pigs' then is a continuous process relating not only to the 'old' technologies (DES, Thalidomide, IUDs and so on), but also to the 'new' reproductive technologies (Corea, 1985a).

This distinction between the 'old' and the 'new' technologies,

however, is another deliberate linguistic manipulation. It is intended to convey the impression that the 'old' and 'new' technologies arose from two distinct medical systems, the former with a history of having harmed women, the latter with a clean record (Corea, 1985a). Using the word 'new' also implies a homogeneity between the technologies and a consensus on the legitimacy of their use, a point critics are keen to refute (St. Peter, 1989). Thus for critics there is one historically continuous system of medical exploitation and experimentation of which the NRTs are only one example. The following section will look at the experimental nature of the NRTs as seen from the radical feminist point of view.

7. THE EXPERIMENTAL NATURE OF THE NRTs

In the early stages of IVF development women were singled out as a potential 'captive population' on whom various techniques could be trialled:

> There were early suggestions to begin a monkey colony to test the [IVF] procedures. That would have been a very expensive procedure. Using human volunteers would be more efficient and far more likely to bring results. (Roberts, cited by Woliver, 1989, p. 37).

This basis of using women as experimental subjects continues to be used - now women are the subjects on whom new combinations of fertility drugs can be tested, as this French medical text excerpt reveals:

> IVF is a remarkable instrument for testing new ovulation procedures thanks to: the parameters it allows to be controlled; the number of women who can be treated. Lastly, it enables controlled series to be carried out which compare the new therapeutics with "routine" stimulation protocols. It no longer appears possible to consider the marketing of new drugs for stimulating the gonado-pituitary axis unless they have been tested within the framework of IVF. (Buvat & Bringer, cited by Klein & Rowland, 1989, p. 345).

Thus, women have become the testing ground for procedures and ranges of potentially lethal drugs whose side-effects are unknown or which are not acknowledged by the medical profession.

Radical feminists take on the task of documenting these side-effects and in doing so attempt to counteract the medical view that dismisses women's complaints as insignificant and that continues to present the NRTs, through various media, as positive scientific and technological progress for which women should be grateful. Further, critics argue that IVF and its related technologies must be considered experimental because they clearly do not work. These points are dealt with in the following four sub-sections.

(a) Some reported side-effects of reproductive medicine

Goldman (1989) reports on the physical pain involved with the IVF routine - the full bladder and distended abdomen required for ultrasound and laparoscopy, the bruised veins resulting from blood tests, the humiliating, uncomfortable and public position required to facilitate embryo implantation, and the stresses of worrying about the effect of hormone treatments, the possibility of enlarged ovaries and whether or not the embryos will successfully implant. Personal reports such as those contained in Renate Klein's (1989) book Women Speak Out provide further details and stories about women's experiences with the medical profession and reproductive medicine.

Reporting on the more explicitly medical effects of the NRTs Holmes (1989) writes that 172 women were exposed to hepatitis B when contaminated human blood serum was added to the culture medium used in the fertilisation, and embryo development and transfer stages of IVF. The use of blood serum has not been proven necessary although it is a

commonly accepted practice in IVF. One woman (O'Keefe, 1992) strongly suspects IVF treatment was connected to her later development of breast cancer. Corea (1985a) has reported that at least one woman died during or after laparoscopy and another died after treatment with Pergonal. Other effects of IVF treatment include infections which may subsequently cause infertility in fertile women who undergo IVF on account of their male partner's infertility, and the increased risks of ovarian cysts, tubal adhesions, burst ovaries and various cancers (Klein, 1990). For the few women who do actually manage to get pregnant through IVF, risks include spontaneous abortion, miscarriage, ectopic pregnancy, stillbirths, and the increased chances of physical or genetic abnormality in live infants, and perhaps even early menopause (Klein, 1990). For radical feminists one of the more worrying aspects of the NRTs are the "hormonal cocktails" (Klein & Rowland, 1989, p. 333) prescribed to women during treatment - clomiphene citrate is used as a case in point.

The hormonal superovulant clomiphene citrate (trade names - 'Clomid' or 'Serophene') which is used routinely along with HCG, HMG, FSH and LH (see 'Glossary of Terms') to stimulate egg cell growth in the IVF procedure is presented by radical feminists as another example of the abusive reality of medical treatment. As Klein and Rowland (1989) point out, women prescribed this drug have reported a range of side-effects from depression, nausea and weight gain to the development of cancer. Clomiphene citrate has also been linked to birth abnormalities in children, and because the structure of the drug is similar to that of DES, feminists fear the consequences could also be similar (Klein & Rowland, 1989).

(b) The dismissal of feminist concern by the medical profession

Radical feminists are angered that such feminist concern regarding side-effects and long-term physical damage has been dismissed by the medical profession as 'scare tactics', and doctors continue to develop technologies (GIFT, ZIFT etc.) and use harmful superovulants, not only for infertile women (or fertile women with infertile male partners) undergoing IVF, but also as a 'conventional treatment' for fertile women (Klein & Rowland, 1989).

Opponents of the NRTs argue that fertility specialists and other medicos deny that clomiphene citrate has recognisable serious side-effects, and consequently choose to inform their women patients only of the possibility of one or two of the milder consequences - production of multiple eggs, dizziness/nausea, affected hormone levels, weight gain, and so forth (Klein & Rowland, 1989) - such observations are backed up by women's personal stories.

Even if serious adverse effects are acknowledged by the medical profession, they may be concealed from public awareness. This is not unique to the use of Clomid, but seems to have an ongoing historical basis. The controversial case of silicon gel breast implants is another example of the use of 'damage control' techniques to minimise bad publicity, and is an area which has recently received some attention in the feminist and the popular media.

In this case, both the manufacturers and doctors had known for two decades about the tendency for the gel sac to leak or rupture, although this information had been efficiently concealed until relatively recently (Scutt, 1992a). The continued use of the silicon implants as appropriate therapeutic and cosmetic treatment for many

women was justified by treating specialists on the grounds that all medical procedures carry some degree of risk. The risk potential however was not frequently conveyed to prospective patients prior to surgery (Scutt, 1992a). Further, as in the case of Clomid, women's complaints were dismissed as 'emotional' and therefore trivial concerns for which there was no supporting scientific evidence. This was partly because the existing scientific data were either falsified or concealed, or arose from biased research funded and conducted by the manufacturers of the implants (Scutt, 1992a; Klein & Rowland, 1989). These processes of falsification and concealment essentially protect the reputations of specialists and the huge profits of pharmaceutical corporations. Complaints and/or other sensitive and potentially damaging information therefore need to be censored.

According to Klein and Rowland (1989) this dismissal of women's complaints and feminist outrage as scaremongering designed to put women off medical treatment and cosmetic surgery reinforces the fact that medicine needs women for its experimental trials. Information on risks which would make women 'think twice' about participating in IVF programs for example runs contrary to this goal and requires suppression or distortion; without women, the immensely profitable business of technological reproduction would cease to exist (Scutt, 1992b). It therefore becomes necessary for hospitals, clinics and other involved organisations to implement marketing strategies which present an uncritical picture of the technologies. The objective of such publicity is to show each development in the NRTs as creating positive scientific and social progress for humanity. Raymond (1994) calls this process "milieu control" (p. xiii).

(c) 'Milieu control'

Biased media reports and the distortion of individual clinic 'success' statistics are used by the medical profession as a way of attaching a 'human' face to the NRTs. What is promoted through this controlled reporting of information is a vision of a progressive science and technology serving the interests of women. However, radicals argue that such a meticulously orchestrated public facade effectively conflates womanhood with motherhood and hides the physical, emotional and psychological trauma to which women are subjected.

Expansive public relations campaigns organised by medical and research facilities showing proud happy couples cuddling their IVF 'miracle' baby (or babies) presided over by what Corea terms the 'technodoc' provide emotionally compelling and often irresistible images for infertile women. Reports are consistently biased towards the 'positive' results of IVF - that is, the baby - while simultaneously failing to balance the situation with critical information, or document the frequently experienced physical pain and the emotional pain of returning time and again to a clinic which artificially raises hopes by promising a baby for some, and which subsequently fails to deliver. One woman writes of her personal experience of this "emotional rollercoaster" (Klein, 1990, p. 244) as follows:

> I cried and cried when I heard that the embryo transfer hadn't worked. Ever since they allowed John and me to have a look at our embryos in the glass dish through the microscope I had really believed it. Yes, we *could* have our own children, there they were ... for the first time that abstract hope 'child' becomes real ... and then all you get is this phone call: 'Sorry Mrs H, see you next time ...' and you ache and ache but then sign on again because it seems you were so close, close as never before in your life ... so you had to give it another try ... (Anon., cited by Klein, 1989, p. 168).

Biased media and medical reporting thus give women the false

impression that IVF is a 'cure' for female infertility.

Numerous critics have responded by arguing that IVF is only a technological 'fix' (Crowe, 1985b) because it bypasses the real causes of infertility in women altogether - physiological factors (including sexually transmitted and pelvic inflammatory diseases), environmental issues (pesticides for example; Koval & Scutt, 1988; Klein, 1988) and iatrogenic injury. Little research on these causes has been done however (Donchin, 1986) probably because such research would displace the focus from the individual (who, it seems, can currently be blamed and thus forced to take personal responsibility for the failure of technology) to the social (costly consequences for which neither the medical profession nor the state are willing to readily assume responsibility, or compensate those affected). Thus, defining infertility within a medical and biological framework removes the economic and political issues surrounding reproduction and thus promotes medical technologies as the only successful 'solutions' to what are essentially difficult socio-political problems (Woliver, 1991).

Radical feminist analysis attempts to counteract these pervasive medical and popular views portraying IVF and related technologies as highly successful techniques whose side-effects and failures are merely inconsequential technical imperfections. Critics in fact use medical 'success' statistics to show how unsuccessful IVF programs really are.

(d) The failure of IVF

Since only 5 to 13 percent of women involved in an IVF program will leave with a live baby radicals argue the terminology of 'success'

should in fact read 'failure' (Arditti, et al., 1989, Klein & Hawthorne, 1991; Scutt, 1991). Such success rates are biased in any case argue radicals because they are based on data inclusive only of those women who completed a treatment cycle - women who did not complete a treatment cycle due to the ill-effects of the drug regimens, or because of problems with 'egg production' or 'fertilisation', for example, are deleted from the final statistical analysis, thus biasing the overall success rate (Australian Consumers' Association, 1989). Moreover because 'pregnancy' is variously defined as 'biochemical' (a skipped menstrual cycle), 'clinical' (a heartbeat detected at six to seven weeks) or 'viable' (a baby which under ultrasound appears 'normal' from twelve weeks onwards), reported 'pregnancy' rates are also distorted and highly suspect (Bartels, 1987; Australian Consumers' Association, 1989). It is also important to note here that the quoted 'pregnancy' rates are not equivalent to 'live birth' rates. The former however are sometimes cited as individual clinic 'success' rates even in cases where the clinics have not yet had a live birth (Australian Consumers' Association, 1989).

Data from the Australian National Perinatal Statistics Unit is also quoted by some critics (for example, Bartels, 1987) to illustrate the failure of IVF technology more exactly. For the period 1979-85 Bartels notes that 1510 in vitro pregnancies were recorded. Of these 251 terminated in preclinical abortion, 292 spontaneously aborted and 65 were ectopic. Of the remaining 902 viable pregnancies, 22.2 percent were multiple with 169 being twins and 32 being triplets. However, not all 902 pregnancies resulted in the birth of healthy live babies. In 47 cases the babies were dead at birth, or died shortly after. In a further 25 cases the babies had major congenital defects (spina bifida, cardiac deformities and major urinary tract

malformations being the most common) and in another 112 cases the babies were premature, weighing in at less than 2 kilograms (NPSU, 1984, 1985, 1987). What these data are used by critics to suggest is that even if a viable pregnancy were achieved (and the chances of that are slim), about 50 percent of the resultant babies would be seriously underweight, malformed or dead.

That exact information on the 'success' rates and possible harmful consequences of drug regimens and surgical procedures is not made public knowledge and is often concealed from the women involved in fertility interventions has caused radical feminists to seriously question the liberal concept of 'informed consent'. This is the focus of the following section.

8. THE CONCEPT OF 'INFORMED CONSENT'

In its 'purest' form the concept of 'informed consent' implies that an individual must have access to information about all available treatment options, the risks and benefits accompanying each, the probable success rates and the emotional investments and costs involved. The treating doctor has an obligation to the individual concerned to provide information regarding all possible risks. However, as illustrated above, such information can be distorted by doctors who are able to exercise their 'therapeutic privilege' (Scutt, 1992a) to withhold information if it can be shown that the information would cause unnecessary psychological harm to the potential patient (Scutt, 1992a). It is this proviso which essentially gives legal permission for the provision of some information to be denied to the prospective patient in order to secure her or his 'informed' consent. Critics imply that the flexibility in the definition of 'informed consent' protects the interests and reputations of the medical

profession while disregarding the costs to the women involved.

In some cases in which women have brought legal actions against treating doctors who did not provide adequate information about all risks attendant on some surgical interventions, it has been shown that the depth of information provided has been more or less dependent on the type and depth of questions asked by the patients. The "if you don't ask you don't find out" principle seems to prevail. Thus some responsibility for obtaining information on risks can be left up to the patient (this fluctuates depending on the individual doctor and the specific treatments involved) who needs to be aware of the relevant issues and the 'right' questions to ask.

Scutt (1992a) points to the sex-bias inherent in this. Women, under reproductive liberalism are assumed to be 'rational actors' capable of collecting and assimilating information on which to base their choices. They are also assumed to be on an equal footing with men when it comes to information-gathering. However because there is more of a power and status differential existing between female patients and their doctors than that which exists between male patients and their doctors, women in practice are often not in a good position to ask for and receive all information necessary. Further, men generally have access to more social and economic resources than women and can use these to their advantage. Consequently male patients are commonly in a far better position to ask for and obtain information and make choices about medical treatments than women who are more likely to be intimidated by doctors and thus be compliant and unquestioning about procedures they undergo (Scutt, 1992b). As the following excerpt shows, women accept the authority of the doctors. Women believe what doctors say because of the perception of authority and power, even

when this information is misrepresented as shown above, and even when they have been given contrary information by individuals with lesser perceived authority and power:

> I hadn't heard of Clomid before in my life. One of my girlfriends, a nurse, warned me. She explained that hormone-drugs could be dangerous. At that time I didn't know what to do with her words. *I desperately wanted to believe the gynaecologist. He was the authority and I thought he would know best.* (Anon., cited by Klein & Rowland, 1989, p. 344; my italics)

That the medical profession can justify their manipulation of available information and (ab)use their power in order to "manufacture consent" clearly takes the meaning out of 'informed', opponents argue.

The additional possibility that women will also be verbally coerced into undergoing treatment also makes the notion of 'consent' (that is, willing compliance) questionable. When it comes to participation in IVF programs some women report they have virtually been forced to be tolerant and accepting, or run the risks of being demoted to the bottom of the waiting list or removed from the programs altogether. One woman writes:

> When I first came with my list of questions, Dr. X patted me on my head and said, "Now don't you worry your little head off. We know what's best for you, so if you co-operate and stop worrying you'll have a good chance". Later, however, he stopped being so "nice" and once, when I complained about his assistant being too late for egg pick-up - which means that I had missed my chance that month - he commented sharply ... "Doctor's wives always cause trouble", and "You want a child don't you? If you do, then give up your job, stop being a problem, and co-operate". So I felt I had to shutup or risk delay on the program. (Anon., cited by Klein, 1989, p. 39).

Such verbal coercion combined with 'milieu control' and misinformation in a patriarchal society which structures women's desires and identity towards motherhood and which views childless women as social anomalies is interpreted by radical feminists as a blatantly oppressive

environment in which to make choices. This leads into the big issue for radical feminists - that is, what degree of 'choice' do infertile women really have when opting for technological reproduction.

'Choice' as it relates to IVF in particular will be discussed in this following section, while its relation to techniques such as prenatal genetic screening in the West and the Third World will be discussed in a later section dealing with the international implications of the NRTs.

9. THE ISSUE OF 'CHOICE'

'Choice' is often put forward as a measure of 'informed consent'. However, Corea (1985) asks:

> what is the real meaning of a woman's "consent" to in vitro fertilization in a society in which men as a social group control not just the choices open to women but also women's motivation to choose? ... Any discussion of "rights" and "choices" assumes a society in which there are no serious differences of power and authority between individuals. Where power differences do prevail, coercion (subtle or otherwise) is also apt to prevail. (p. 3).

Overt coercion does exist as shown above, but it comes in a more subtle and insidious form too.

As shown at the beginning of this essay, serious identity crises (for women at least) are the common result of the medical confirmation of infertility. The radical feminist standpoint argues these crises are the outcome of the ideological construction of infertility as an undesirable state, particularly in a pronatalist society that gears women wholly towards motherhood leaving no other equally socially-approved role for women. The existence of technologies which promise to overcome infertility (for some) and the stigmatisation that goes with it thus constitutes a 'coercive offer' (Lauritzen, 1990). As

Lauritzen (1990) states, some women "may not wish to undergo the trauma of an *in vitro* procedure, but unwillingly do so" (p. 40) because of the social and ideological pressures exerted on them, and because they perceive the personal and social disadvantages associated with being involuntarily childless as worse than those associated with reproductive technologies.

Because of the glamourised portrayal of the NRTs and their exaggerated success rates, the technologies become attractive and "almost compulsory" (Klein, 1989, p. 248), with many women finding it difficult to refuse to try the technologies at least once, and, once accepted into a program, finding it extremely difficult to quit. One woman writes:

> I've been chasing a baby ever since I was twenty-two. You've got to draw the line somewhere. Thirty-five *was* going to be "it" ... but I still feel that physically and mentally I could still have a child. (Anon., cited by Crowe, 1987, p. 92)

Another woman states:

> For the last twelve months I've been trying to kid myself into saying that I don't care if I quit anyhow. I'd like to be in a position so that I feel more free and not subject to any manipulation ... But really, ..., it's been a struggle inside myself, and I never reached that stage where I could say I could quit. (Anon., cited by Crowe, 1987, p. 97).

Kozolanka (1989) claims that the almost daily advances in technologies, hailed as 'medical breakthroughs' constantly offering 'new hope' make it "downright impossible" (p. 122) to choose to 'give up'. In her words the 'choice' to 'give up' is the "choice that isn't" (Kozolanka, 1989, p. 121).

Kirejczyk (1990) points out that making the newest technologies publicly available is high on the list of priorities of medical

specialists who are keen to advise their patients of these new developments. Combined with this is the patient's tendency to be "afraid that they may later regret their decision not to use a particular technique" (Kirejczyk, 1990, p. 27). To avoid future regrets then, individuals frequently try each new technology as it becomes available. In one sense each new development is another enticement to women and the thought of having regrets in the future is coercive enough to make women try. One woman reports that:

> when you know you've got a chance ... and you're not making the most of it ... you don't want, in years to come, to think - If only we'd tried one more time! (Anon., cited by Crowe, 1985a, p. 551).

At least if IVF is tried once, then the infertile woman will be perceived by herself and her family and friends as having done everything possible, and will then be able to assume a more acceptable position within society - her position will be understood by others, rather than scorned. Women often report a sense of "great relief", "liberation", "peace of mind" and closure when they finally realise that IVF has not worked for them and that having a biologically-related child is no longer an all-consuming issue (Koch, 1990).

In summary, because the 'choices' available to infertile women are structured in a controlled pronatalist and patriarchal environment, they cannot be thought of as 'authentic' or 'free' choices argue radical feminists - rather they should be seen as ideologically forced choices. The existence of coercion, subtle or otherwise and the fact that women are 'choosing' reproductive alternatives and exercising their so-called 'procreative liberty' under what are clearly coercive and artificially manipulated circumstances means that their autonomy and ability to 'be rational' are both questionable.

10. THE CONCEPT OF 'AUTONOMY' IN REPRODUCTIVE DECISION-MAKING

In relation to reproductive liberalism and the NRTs rationality and autonomy should theoretically operate thus:

> I believe that I have the power to make an informed choice to use these technologies responsibly, ethically, and holistically. To say "no". To say "not that way". To say "that's enough". (Fedeski-Koundakjian, cited by Vanderwater, 1992, p. 216).

However the radical feminist arguments presented in the previous sections showed that women are prevented from making a completely 'informed' decision because of the biased and misleading information about the NRTs provided by the medical profession. To say "no" also is not an easy or particularly viable 'choice' in pronatalist society. In addition, documented reports such as Kirejczyk's above, suggest that it is also very difficult for women to quit the program without a baby, and to accept their childless status.

According to critics, the decision to say "that's enough" is an extremely complex emotional and social one, and cannot be viewed as an objective and rational decision made lightly. It is obvious that many infertile women do not feel they have the power to quit, and the seemingly relentless pursuit of a genetically-related infant means that women are often not in an emotional 'mind-set' conducive to accepting infertility or to making their lives fulfilled without children. Despite this, Fedeski-Koundakjian assumes that she can override all these personal and ideological constraints and in fact, be autonomous in her decision-making and use the technologies without experiencing exploitation. This attitude however belies both the social and ideological forces which construct and limit choices and autonomy outlined above, and the fundamental gender inequality of liberalism. The gender imbalance associated with liberalism will be

the focus of the next section.

11. GENDER INEQUALITY AND THE PRIVILEGING OF MALE REPRODUCTIVE GOALS

Liberalism grants the rights to procreative autonomy and liberty on the basis of the assumed possession of such independence and rationality as expressed by Fedeski-Koundakjian. Rationality itself is taken to be a gender-neutral trait, possessed equally by males and females. However critics point out that the ability to 'be rational' and to have access to 'rational knowledge', in practice, is associated with the masculine (Lloyd, 1984), and that consequently, rational knowledge aims to transcend 'the feminine'. Thus, liberalism is grounded in a philosophical tradition based on the opposition and domination of women. It is a system into which women cannot simply be 'inserted' (Lloyd, 1984). Critics therefore question whether it is possible in such a system to simply grant "women's rights" to reproductive autonomy and freedom, firstly given that the inequality of women is an organising principle of liberalism, and secondly, given that society and its structure and organisation are fundamentally sexist.

Radical feminists would argue that sexism and the power differentials existing between women and men must be abolished before there can be any real recognition of "women's rights". With this in mind radicals point to the fact that it is women who are being used to fulfil the reproductive intentions of men and in this process women's so-called 'rights' to procreative liberty, privacy and self-determination are clearly not equal to men's rights to the same. In fact radical feminists point out that it is not difficult to see how the simple declaration of 'women's rights' and the consequent assumption that women are therefore equal to men serve to undermine women and move

reproductive power subtly across to males. As mentioned previously the assumption of equality and the focus on the ungendered individual of liberal humanism obscures the oppressive social context of the NRTs which is seen by radicals to be exploitative of women.

Janice Raymond's incisive critique of liberal humanism (1994) explains this gender inequality in terms of the NRTs. She argues that in relation to the right to procreative liberty arrangements such as IVF and surrogacy privilege men and male reproductive goals, while seriously disadvantaging women. Because men and women are assumed to be equal under liberalism, their input into technological procreation is also assumed to be equivalent. In effect, undergoing multiple invasive, emotionally distressing and possibly harmful procedures (as in IVF), or giving 9 months of life (in the case of contractual surrogacy) is treated as the same as "popping sperm" (Raymond, 1994, p. 80), which clearly is not the case. To ignore a woman's greater investment into the reproductive process reduces her once again to a mechanical breeder without rights (Raymond, 1994).

Furthermore, in custody disputes, particularly in surrogacy cases, women and men are assumed to be equal in the eyes of the law. However this obscures the fact that women generally in a patriarchal system are socially and economically disadvantaged in relation to men. This serves to privilege 'father-right'. The 'Baby M' case demonstrated this as William Stern, with his bourgeois background and strong financial situation, was privileged over the working-class Mary Beth Whitehead. Stern was seen as being able to provide a far more 'secure' (that is economically and therefore a more emotionally stable) environment for the baby than could Whitehead.

This gender inequality essentially privileges the 'sperm source', rather than the woman who should be considered the 'real' mother since she made a major contribution to the child's formation (Raymond, 1994). Women's rights are being undermined while "men's/father's rights" and 'foetal rights' are becoming more and more prominent and legally justifiable. Raymond (1994) points to the foetalist legal climate in which cases are seen to be more 'winnable' if the arguments are based on foetal rights and personhood than if they are based on women's rights and personhood (Raymond, 1990; 1994). The foetus has become an entity separate from the woman's body, but joined to 'fathers'/sperm donors, protected by the state and the law. In this process, women are turned into "spectators" (Raymond, 1990, p. 49), and have very little protection, and little input, except as the 'receptacles' for the foetus.

Gender inequality is also evident in the right to privacy. According to radical feminists and other critics of the liberal position, a woman's right to privacy in reproductive and other matters often translates into "a man's right to do with/to her what he wishes, shrouded in the privacy of his bedroom, his courts, his country" (Raymond, 1994, p. 82). The right to privacy not only permits male access to women's sexual capacities in the 'private' realms of prostitution and pornography as explained previously but also allows unlimited access to women's reproductive capacities. The male abuse of women in sexual, reproductive and domestic spheres is justified by the right to privacy (Raymond, 1994). The right to privacy equates to a 'male entitlement' in the same way that unlimited procreative liberty equates to the right for men to use women to fulfil what are essentially male reproductive goals (Raymond, 1994).

The concept of 'unlimited procreative liberty' while privileging men, also serves to bolster heterosexist and patriarchal norms of 'appropriate' family structure. Unlimited procreative liberty is deliberately not extended to lesbian women, or single or divorced women (Kaufmann, 1985) - their 'choices' are therefore restricted rather than broadened. Again, this is seen by radicals as being another way in which male and conservative interests are protected at the cost of women. Living independently of men and trying to create an alternative family lifestyle is made difficult by legislation which systematically excludes those women viewed as threatening to patriarchal values, power and social 'stability'. For example, in one report, the British Council for Science and Society states that:

> In so far as the social norm clearly associates childbearing with family life and parents who are married, this practice [of providing AID for single heterosexual women and lesbians] is abnormal ... AID to single women will increase the social problems of child-care and welfare, and the encouragement of lesbian families can be seen as a threat to normal family life, to say nothing of both instances failing to provide a nurturing father-figure. The imbalance of interests in these cases suggests that the practice should be discouraged. (BCSS, cited by Overall, 1986, p. 43).

IVF then, is generally available only to heterosexual married women or women in a stable cohabiting relationship with a male (Thom, 1988). Because of the cost of the treatment (around A$3,000-$4,000), access to IVF is usually also restricted to women who can afford to pay, namely middle-class women (Crowe, 1987). For poorer women, IVF is not even a nominal choice. Some women state that the most preferable situation is to be financially supported by a partner since requesting time off work for virtually one month in every three (Crowe, 1985a) is prohibitive for most employers. As one woman writes:

> After my first go [at IVF] they (the employers) told me that either I go on the program or I give the job away. I've heard of a few girls who've had that happen. They *know* their job is on the line by having to go into hospital every day

(Anon., cited by Crowe, 1985a, p. 551).

Women are not only not equal to men under reproductive liberalism, but patriarchal power serves to create inequities and hierarchies between women on the basis of sexuality and class as well.

In the following section radical feminist work examining the global implications of the NRTs will be discussed. The eugenic potential of the NRTs and the abuse of technologies in the Third World as well as the developing international surrogacy market are central to this discussion.

12. THE EUGENIC POTENTIAL OF THE NRTs

In historical terms eugenic ideology has given rise to the ethnic and cultural cleansing of the Nazi Holocaust, selective sterilisation and immigration laws in Britain and the US, and the attempted elimination of all people with "schizophrenia, feeble-mindedness, manic depressive insanity, genetic epilepsy, Huntington's chorea, blindness, deafness, physical deformity or alcoholism" in Germany from 1933 onwards (Klein, 1989, p. 259). Klein writes that:

> Reproductive and genetic engineering has a history; what is new is only the refined technology which now makes it possible to select 'worthy' and eradicate future 'unworthy' human life at the time of conception. (Klein, 1989, p. 260).

That medical technologies now not only have the power to determine how babies are born, but what type are born (Minden, 1985) is the key criticism of radical feminist writers.

Disability rights advocates also closely monitor developments in reproductive technology and genetic engineering and argue along with radical feminists that the categorisation of genes as either 'good' or

'bad' (that is, 'handicapped' in some way) is a highly political decision, not just a medical one (Minden, 1985). Such writers suggest that genetic engineering and other techniques including preimplantation diagnosis (PID), prenatal screening via amniocentesis and chorionic villus biopsy (CVB), ultrasonography, and selective abortion of foetuses identified with a known genetic disorder, aim to improve and eventually perfect the human race. They see genetic screening tests for example as a way of aborting handicapped people even before they have been given a chance at life, eradicating genetic 'defects', and of implementing sexist and racist ideologies (Henry, 1987; Groth, 1987). Such techniques are thus underpinned with a eugenic ideology claim opponents, supported by contemporary reductionist medico-scientific statements which argue for the genetic bases of all diseases and disabilities, and which stress the importance of early screening tests (for example, Baird, cited by Klein, 1989).

Eugenic ideology greatly oversimplifies the political, economic and personal issues involved in disability by classifying all disabilities as unenviable and by assuming that society will be 'better off' without disabled people. This of course fails to grasp the ideas that people can become disabled at any time from infancy through to adulthood, and that people with disabilities are not necessarily 'handicapped' but can often lead full and satisfying lives. Furthermore, most, if not all, people with disabilities would resent being classified as a 'welfare burden' and therefore less intrinsically 'worthy' than 'able-bodied' people. This eugenic ideology also gives the impression that 'perfect' babies are desirable and easy to engineer, and that genetic screening tests are a 'fail-safe' method of achieving this goal.

There is some evidence however to suggest that amniocentesis and CVB may cause miscarriage in some instances (Bartels, 1988). Further, chorionic villus tissue has been found to be not exactly representative of the foetus and may have a greater number of abnormalities present, leading to a small percentage of misclassifications of healthy foetuses resulting in unnecessary abortion (Bartels, 1988; Schei, 1992). In addition, only relatively few genetically-related diseases and disabilities can be identified by prenatal genetic screening tests, despite the image of technical thoroughness projected by medical science on all fronts.

Despite these quite major limitations genetic screening tests continue to be presented as ways of allowing a woman to 'understand' her pregnancy better and to help her make an informed decision if any abnormalities are detected.

However, given that such technologies can be clearly located in a eugenic framework with a definite historical basis it is possible to argue that the issues of 'helping' women make decisions about their pregnancy, and the overall goals of improving the social gene pool and reducing the financial cost to the state of looking after people with disabilities are becoming increasingly conflated. The main question raised by these issues is whether genetic screening tests are increasing women's choices, or whether they are in fact being used as agents of a eugenicist ideology.

13. PRENATAL GENETIC SCREENING AND THE CONCEPT OF 'CHOICE'

Radical feminists clearly argue that the advent of new technologies claiming to provide more information about the genetic and physical

state of the foetus are in fact curtailing women's reproductive choices, not enlarging them. It is the state that is gaining control over the increasingly mechanised production and quality of human life, not women. As Rothman (1984) points out "in gaining the choice to control the quality of our children, we may be losing the choice not to control the quality, the choice of simply accepting them as they are" (p. 30). Snitow (1986) further questions whether the supposed increased 'choice' offered by prenatal genetic screening techniques is actually a 'choice':

> Is it a choice to know your baby *might* be born with a certain health problem, and this problem *might* be mild or serious, and you *might* abort this so-called questionable fetus even though by the time you've got these inconclusive test results you're already in your fifth month? (Snitow, 1986, p. 46).

In a succinct comment applicable to all the NRTs Hubbard (1985) points out that the supposed increased choices offered by technological innovations "merely replace one set of social constraints with new ones" (p. 575). The uncertainty created by <u>not</u> knowing certain details about the baby has been replaced by the conflict and uncertainty created by <u>knowing</u> details about foetal condition.

For opponents of the NRTs increased information does not equate to increased control and choice. Rather, the provision of information is perceived as part of the insidious process of 'medicalisation', a process which takes control away from women, leaving them with reduced power and self-determination. As Petchesky (1984) explains, foetal medicine:

> ... is currently being used ideologically to discredit or circumvent the decision-making autonomy of pregnant women, in consultation with doctors, about whether to carry through a pregnancy and through what medical means. It is a pretext for defining [women] as merely the biological vessels of the unborn. (p. 353.)

Such 'advances' in prenatal screening techniques are obscuring the rights and general welfare of the mother, while emphasising the rights of the foetus. This is exemplified in cases of court-ordered caesarean sections where doctors have gained the right to "restrain a woman and do the surgery under a court order if the women refuses surgery and the fetus is said to be at risk" (Rowland, 1987, p. 525). The foetus thus becomes 'the patient' with full rights, while the gestating woman is merely 'the receptacle' for the foetus who can be held liable for foetal injury (Woliver, 1989); in some cases the womb is even constructed as a 'hostile environment' (Corea, 1985) which itself could damage the foetus.

Knowing about foetal condition has become almost unavoidable since the very existence of technology like amniocentesis pressures women into using it. The women who do have access to it know they could be made to feel negligent or may even be subject to legal action at a later stage if they refuse (Minden, 1985). As Lasker and Borg write:

> A woman does not have a free choice to use a technology if a physician tells her that it is for the good of her baby and she would be irresponsible not to use it. It will not be a choice whether or not to have our embryos or foetuses checked for abnormalities if society condemns women as irresponsible if they give birth to handicapped children. (cited by Woliver, 1989, p. 34).

It subsequently becomes a woman's fault rather than an act of fate if her baby is born with a deficiency which could have been identified by genetic screening tests she refused to undergo (Hubbard, 1985). She then is blamed for causing the baby's physical pain and the socio-emotional trauma caused to the child involved with living in a society which still overtly discriminates against people with disabilities.

The 'choice' to allow genetic screening of the embryo hardly

constitutes a choice in a context where there is prejudice against the disabled argue radical feminists. In a society which makes it extremely difficult to raise a disabled child due to lack of adequate financial and social support, the option of not aborting a foetus identified as handicapped is not open for many people (for example, Rapp, 1984). The social context in which such a decision is made however, is obscured by liberalism which places full responsibility for the decision squarely with the woman concerned, rather than on wider discrimination against the disabled.

Another central concern for feminists is that the NRTs, designed for specific purposes and for specific populations, will be used on expanding groups of women thus affecting women on a global scale, not just those experiencing infertility. The autonomy of all women is threatened by the encroachment of specialised technology on women's lives (Woliver, 1989). IVF and prenatal genetic testing are prime examples of this and opponents of the NRTs argue that it is highly likely that this pattern will eventually extend into other technologies as well (Corea, Hanmer, Klein, Raymond & Rowland, 1987).

IVF for example was developed initially for women with blocked or damaged Fallopian tubes - now its use has been extended to fertile women with infertile male partners who want a genetically-related child (Laborie, 1988). In addition, prenatal screening was initially employed in situations where the risk of genetic abnormality of the foetus was suspected to be high. Now, such techniques are being incorporated into routine obstetric care, with ultrasound for example being "almost inescapable" for most pregnant women attending hospital (Lippman, 1992). Likewise, amniocentesis has become standard procedure for pregnant women over 35 with the aim of detecting the

extra chromosome associated with Down's Syndrome (Lippman, 1992).

Until a few years ago prenatal genetic testing was restricted to the identification of Down's Syndrome, spina bifida and Tay-Sachs Disease, but it now allows the identification of sickle-cell anaemia, thalassemia, cystic fibrosis, Huntington's Disease, muscular dystrophy and haemophilia (Bartels, 1988) and the list goes on. As more 'defects' are identified, the definition of 'disability' broadens, consequently narrowing the definition of 'normal' (Ewing, 1990), opening the way for the full-scale implementation of eugenic policies.

As the number of identifiable disorders increase so the numbers of pregnancies subjected to scrutiny will also increase. More and more women will come under medical control, and increasingly their option to not know about the health of the developing foetus will be shut down. The technological incursion into women's lives shown here combined with the eugenic potential of the NRTs for radical feminists means that women's lives are being more closely scrutinised and regulated. This is not only happening in the 'advanced' West but also in the Third World. This international focus is the theme of the next section.

14. ABUSE OF NRTs IN THE THIRD WORLD

Radical feminists argue that while infertility is being treated as a disease in the industrialised West, it is fertility, or more specifically, female fertility, in the Third World which is perceived as a disease (Gupta, 1991). Considering the global politics of reproduction (as radical feminists do) provides the view that 'superior' middle-class white women in the West are encouraged to reproduce while 'inferior' women-of-colour, generally poor, are

actively discouraged in both the West and the Third World (Arditti, et al., 1989; Bunkle, 1984; Clarke, 1984; Hartmann, 1987; Kamal, 1987; Raymond, 1991). Targeting women's fertility then is a way of implementing eugenically motivated population control policies, allowing 'socially desirable' individuals to procreate while simultaneously controlling the reproduction of 'undesirable' sub-groups.

IVF for example is being used in India as a vehicle for examining factors contributing to infertility in the hope that it might be possible to artificially replicate these in fertile individuals as a means of population control. On this point, Lingam (1990) quotes Bombay's Director of the Institute for Research in Reproduction, Dr. Anand Kumar, as saying:

> The IVF-ER (sic) technique has now provided a major and justifiable reason to investigate infertile couples thoroughly and thus has offered many opportunities to identify and study factors contributing to infertility. And, an understanding of these factors may provide clues as to how to induce infertility in fertile couples as a means of family planning ... (Lingam, 1990, p. 15).

Other techniques such as PID and selective abortion, when combined with a worldwide preference for male children, are being used in the Third World to eliminate females, seen as the cause of population problems and poverty in poorer countries (Patel, 1989)[2]. Already the sex ratios of some societies are changing in favour of males (Hoskins & Holmes, 1985). In India for example, the application of amniocentesis in conjunction with the one-child population control policy means that the practice of femicide is common (Roggencamp, 1989) as it is in China (Mosher, 1984; Rufford, 1994). Looking to the future radical feminists suggest sex selective technologies and

abortions could lead, like the possibility of ectogenesis, to "gynocide" (Corea, 1985, p. 194), the final dehumanisation of women and the end of women's culture (Moen, 1991). Women, rather than men, are seen as being problematic breeders, whose fertility needs to be controlled.

Contraceptive drugs banned in the West because of their harmful effects are being 'dumped' on women in the Third World (Luthra, 1993) who are given 'incentives' such as food, clothing or a month's wages in return for being sterilised or implanted with the long-acting hormonal contraceptives Net-En and Norplant, and other pills and injectables such as Depo-Provera. That the actual numbers of women entering contraceptive programs or being permanently sterilised increases during poor agricultural seasons suggests to some critics that women only enter such programs in order to avoid starvation and to provide food for their families (Gupta, 1991).

'Choice' in this context is therefore non-existent argue radicals because the 'incentives' offered are usually necessities which can hardly be refused. This coercion however is clouded by liberal rhetoric in which contraceptive techniques are often presented to Third World women couched in terms of 'reproductive freedom' or 'choice' when in actual fact they are misused to exert external state control over women's bodies (Gupta, 1991) in order to fulfil an explicitly political agenda[3]. Liberal discourse portrays women as having the 'right' and the 'freedom' to use or refuse medical technology; this so-called 'freedom' however is a "smoke screen for medical experimentation and, ultimately, for the violation of women's bodies" (Raymond, 1994, p. ix).

In the wider context of sex selection in India especially, husbands and mothers-in-law regularly pressurise women to undergo amniocentesis (Luthra, 1993), so again this decision is not made freely. Even if the pregnant woman herself 'opts' to undergo sex testing such a decision has to be seen in light of the male preferential nature of Indian society and the devaluing of women who produce females (Patel, 1989). Also, women are reluctant to have a daughter grow up in a world in which she is likely to be abused and devalued, as the mother herself as been (Luthra, 1993). In this sexist and patriarchal context feminists claim the 'choice' to abort foetuses identified as female is a culturally forced and therefore coercive 'choice' (Woliver, 1989) which decreases women's actual freedom and personal agency.

Feminists have raised many concerns about the social implications of sex selection technologies combined with selective abortion. They envision a future society in which the few existing women will be valued only for their sexual and breeding functions which will in turn reinforce patriarchal values. Rowland (1985a) for example claims the sex imbalance will lead to a rise in the male 'values' of aggression, the sexual and physical abuse of women, alcoholism, random violence, the further curtailment of women's employment opportunities and the development of polyandry. Women's autonomy would be greatly reduced. Men would demand breeding rights and sexual satisfaction from the dwindling numbers of women, creating an exploitative situation in which female suicide rates would be sure to increase (Rowland, 1985b). Women might conceivably be kept in a 'reproductive brothel' and function as 'reproductive prostitutes', selling wombs, ovaries, and eggs in much the same way as sex workers sell various parts of their bodies (Corea, 1985b). In this futuristic dystopia women would be

reduced to machines trapped in an endless cycle of insemination, pregnancy and childbirth and would have no human dignity - quality control, efficiency and productivity would be the main goals.

Corea (1985b) argues this is not such an incredible scenario since the model for the human 'reproductive brothel' exists already in the form of 'factory farms' for animals. Radical feminists are of the opinion that trends in animal husbandry which currently involve the manipulation of animal (and crop) species to produce increased and therefore more profitable and controllable yields are indicators of what may happen to women in the future. That animals and women do not "inhabit vastly different categories in a male supremacist world" (Corea, 1985b, p. 301) - that is, women are treated much like animals by men - and are not permitted the same degree of bodily integrity as males, means the very same ideology which permits the use of 'genetically unworthy' animals as surrogates for 'superior' stock is easily transferable to women; already a form of the reproductive brothel is developing in the human surrogacy industry (Corea, 1985b). This is dealt with in the following section.

15. THE INTERNATIONAL SURROGACY INDUSTRY

Already some legislators in the United States are advocating for the 'institutionalising' of surrogacy, in order that potential surrogate mothers could be licenced and regulated (Corea, 1985b). This is beginning in the US in a formal way with quarterly registers of potential surrogate mothers, including photographs and brief descriptions, notably of genetic characteristics, currently being published by at least one known surrogacy agency (Corea, 1985b; Williams, 1995). The way is thus open for the development of a class of 'professional breeders' with surrogacy providing an "undemanding

career" for women (Packard, cited by Corea, 1985b, p. 301).

If this were the case Corea (1985b) argues there would be little difference between animals and their cycles of forced repetitive breeding and women, who would essentially be doing the same. Thus, surrogacy for radical feminists should not be seen as a contractual arrangement between an individual woman and a 'desperate' commissioning couple, but as the procurement of women for breeding purposes (Raymond, 1991).

It is also possible for a surrogate to gestate an embryo conceived with another woman's egg, and thus, considerations such as race, hereditary traits such as intelligence and physical appearance, and even maternal health to some degree would cease to be important factors in the selection of an appropriate surrogate. This, argues Corea (1985b) has enabled the hiring of surrogates to extend rapidly into impoverished Third World areas (Guatemala and Sri Lanka being documented examples - see Raymond, 1994), becoming a cottage industry in areas where women are willing to settle for a lesser surrogacy fee than their US counterparts (Baruch & D'Adamo, 1985).

Women of the Third World are thus both physically and financially exploited when they are hired to gestate and birth babies for couples in the wealthier industrialised countries argue opponents (for example, Raymond, 1994). Radical feminist analysis indicates this leads to the further oppression of women, defining poorer women as 'inferior' and suitable only for gestating the embryos of 'superior' (white, Western, middle-class) individuals. Women are being used as instruments in an international system of breeding (Raymond, 1994); their rights as individuals with autonomy and rationality are non-

existent. It is clear that Third World women are being exploited by Western capitalism along sex and race lines. Their relative poverty and powerlessness is also being exploited and compounded by the so-called 'choice' of international contractual surrogacy. In turn this affects the global status of women and does not lead to a more equal or humane world for any women, either in the Third World or the more industrialised nations because women will continue to be defined primarily as 'reproducers', 'nurturers', 'mothers' and 'reproductive objects'. This according to the radical feminist argument is inherently oppressive.

(a) The liberal pro-surrogacy argument

Reproductive liberals however disagree with this radical feminist vision of surrogacy. They see surrogacy as being the altruistic choice of an individual woman and this renders wider social concerns about coercion and exploitation completely meaningless. Andrews for example argues that an individual's involvement in surrogacy, like her involvement in pornography and prostitution, is premised on her voluntary and informed consent and the operation of her rationality and right to choose.

The radical feminist argument that poorer women are coerced into acting as surrogates because of their poverty or disadvantaged backgrounds is dismissed by liberals. For writers such as Lori Andrews surrogacy offers a 'choice' to women which they are free to accept or refuse. Becoming a surrogate is not about sexual or economic exploitation, but is about 'providing the opportunity' for poorer women to escape their "desperate conditions" (Andrews, 1986, p. 32), and presumably attain better living standards.

Liberals argue to deny women this 'choice' to improve their life circumstances seems inconsistent in a society in which people are encouraged to earn money from far more dangerous pursuits such as firefighting, car racing and underground mining, activities which again are based on an individual's informed and voluntary consent. Since surrogacy is the least technologically-dependent form of the NRTs, and is more or less like a 'normal' pregnancy, liberals argue that it hardly poses a threat to women's health or well-being. Surrogacy is therefore justifiable on these grounds.

(b) The 'body as property' principle

Under liberalism a woman's body is construed as her property and thus she is able to rent out or sell various parts of it as she sees fit. According to Andrews, the 'body as property' principle is liberating for women because it allows women to achieve equality with men, at least within the boundaries of the capitalist relations of production (Degener, 1990). Because a woman's body is now a marketable and potentially profitable commodity women now have a bargaining point and a measure of power within capitalism. Andrews states that women will have greater legal protection over the treatment of their bodies once they are conceptualised as property (1986). In particular she argues that under the current system individuals do not have a share in the financial profits to be made from medical research on their bodies, and consent is not required as long as the body part is removed in the course of treatment. This scenario arises for example in cases where eggs or other tissues are removed during hysterectomy, or where foetuses are retained after abortion for further research, or the extraction of surplus eggs collected after superovulation with the intention of subsequently fertilising them in vitro and using them resultant embryos for genetic or other research. Treating the body as

property however would allow bodies to be put 'on the market' and would require consent for all types of research and other medical manipulations. This would ensure that patients were protected from coercion and would be given the opportunity to be financially compensated for their bodily contributions (Andrews, 1986). This theoretically would eliminate the bases for unfair and exploitative treatment. Radical feminists argue the exact opposite of this liberalism.

Raymond (1994) points out that owning one's body and treating it as property reduces it to a commodity with 'use value' only, devoid of individuality - this is the ultimate patriarchal imperative. The fact that women can treat their bodies as property believing they are acting on their free will and in accordance with their right to self-determination does not mean that their bodies will not be treated as property by others. The example of surrogacy, while being portrayed as an altruistic choice clearly demonstrates that women's bodies are being used as convenient objects by others in a capitalist market system of exploitation and oppression. As explained in previous sections patriarchal institutions are able to maintain women's subjugation by deeming it necessary for women to sell or yield up various parts of their bodies to medical science and other institutions of control. Selling body parts, even if financial compensation is awarded, is not a path leading to liberation, but is a way of giving up and forcing the confinement of women's actual liberties.

This patriarchal prescription is concealed by liberal philosophy suggesting that selling body parts is the result of individuals exercising their individual will. As Dworkin (1983) has written:

> [T]he state has constructed the social, economic, and political situation in which the sale of some sexual or reproductive capacity is necessary to the survival of women, and yet the selling is seen to be an act of individual will - the only kind of assertion of individual will in women that is vigorously defended as a matter of course by most of those who pontificate on female freedom. (p. 182).

For radical feminists selling body parts is not a libratory act but deepens women's oppression and opens the way for further exploitation. 'Assertions of will' which have real power to subvert hetero-patriarchal norms and which would augment women's individual freedom in reality continue to be denied (Dworkin, 1983).

As shown radical feminists and activists in the women's health movement have given completely new meaning to the language of embodiment. They have been instrumental in suggesting that women do not 'own' their bodies in the sense of property, but that women <u>are</u> their bodies. This conceptualisation establishes the connectivity between a women's physical body, her intellect, personality, sense of self and her integrity, and her interrelatedness with other women. This connectivity cuts across class and race lines and is meant to create emotional and political solidarity. Once women perceive themselves as 'being their bodies' they have regained control and the power to refuse to yield control of their person to the state, to men, or to the foetus. In this way they are able to resist patriarchal power and subvert its meanings. This attempt to reconceptualise women as powerful and whole individuals is the central project of radical feminist political philosophy and organised resistance to the NRTs.

PART 4: RADICAL FEMINIST RESISTANCE TO THE NRTs

<u>1. PRACTICAL STRATEGIES</u>

In response to the issues raised by the NRTs radical feminists propose

a number of practical strategies. These can be summarised briefly as follows:[4]

(1) monitor information on developments in reproductive technologies by attending medical conferences regularly
(2) use feminist media to publish information about medical abuses, personal experiences, legislative changes and other issues and improve women's access to information about the technologies - journals such as 'Issues in Reproductive and Genetic Engineering' and collected interview material fulfil this purpose, but more grass-roots information dissemination is necessary
(3) combine feminist political efforts and discussions with those of other groups likely to be affected by developments in the NRTs, for example, disability rights groups, ethnic organisations, specific women's health facilities, and so on in order to build up a combined vision of the wider ramifications of technology
(4) establish information-sharing networks between feminists and women working in the medical and/or reproductive fields
(5) share personal experiences of infertility and technological interventions in order to define needs of women affected by the NRTs
(6) take part in policy-making processes in order make sure women's needs and interests are represented and to ensure the medical profession is made more accountable for its actions
(7) meet with feminists from different countries to assess the international impact of the NRTs, discuss what actions to take and set up an international committee to keep tabs on developments in the NRTs - the FINRRAGE organisation and several international feminist conferences have already worked well in this area
(8) establish an 'International Tribunal on Medical Crimes Against Women' (Corea, 1985b) to document medical abuses against women
(9) provide more counselling and support groups for infertile people, that is, counselling that enables people to accept and deal with the consequences of infertility and move away from technological reproduction, rather than counselling that encourages people to keep using reproductive technology.
(10) instigate research into the non-biological causes of infertility and work on solutions to these environmental and disease-related factors
(11) advocate for uniform national laws to stop IVF altogether and to prevent the use of embryos for genetic experimentation

2. POLITICAL AND SOCIAL OBJECTIVES

In addition to these practical suggestions for feminist organising, radical feminists also propose structural and ideological reform within the boundaries of their wider political philosophy. In essence this involves the political struggle against the patriarchal forces which are perceived to subjugate women as a social class. Radical feminism thus provides an analysis of the specific forms of male

control as they impinge on both the private and public lives of women and is intended as a way for women to 'make sense' of all facets of their lives and come to a feminist understanding of how patriarchal ideologies have shaped, determined and distorted their experiences as women. Radical feminism urges women to question these patriarchal ideologies. It is the conflict between what women are meant to be (that is, the patriarchal definition of womanhood) and what women actually are (that is, the feminist definition of womanhood) produced by this questioning that opens the way for political activity and social change. If women realise (namely through 'consciousness raising') that the dissatisfactions and conflicts they experience in everyday life are not the products of isolated individual neuroses but are the effect of calculated patriarchal social forces designed specifically to oppress women as a class, they will also be able to grasp the commonality of their experiences and use these similarities as a framework on which to base political activity and the redefining of women. 'Naming' patriarchy was the first step for radical feminists, and it led to the recognition of commonality of experience and political organising on the basis of female experiences, solidarity and similarity.

The focus on understanding personal experience in a radical political framework implies that the private sphere influences, and is influenced by, the public sphere. Thus, political change can, and does, result from personal action - hence the radical slogan 'the personal is political'.

In this way radical feminists emphasise the need for each woman to take a collective responsibility for her actions (or inaction) and can no longer view herself and her life as independent from the wider

social and political environment. As Rowland and Klein (1990) point out "the revolution takes place every day, not in an unimagined future"; women "in every day of our lives ... can make an inroad into the destruction of negative self-image and negative life experience which male-dominated society hands to us" (p. 276). Radical feminist theory thus takes as its basis women's experiences and aims to provide women with alternative non-patriarchal definitions of womanhood.

In this sense, political resistance implies the shifting and changing of women's concepts of themselves, and the ideologies that construct them. This takes places both through language and the subversion of meaning, and through the process of 'consciousness raising', basically a process of becoming aware of issues, social dynamics and consequences, and joining with others in political solidarity. This unity, combined with speaking out and "breaking silence" about the abuses of women in society is where the radical feminist movement derives its strength and momentum. Through this combined power, radical feminism seeks to help women reclaim their bodies, their selves, their integrity and their autonomy and reconceptualises women's sexuality and motherhood from a major site of exploitation to one of strength, pleasure and power. It also attempts to provide methods of subverting patriarchal meanings and organising resistance to the dominant 'male-stream' prescriptions of 'appropriate' womanhood. It urges women to 'take time out' to rediscover themselves as individuals and to examine and perhaps alter their purpose in life. They want women to learn to value themselves. Once this is achieved then women will clearly see how oppressive reproductive technologies actually are and will refuse to comply with them and the patriarchal prescriptions of motherhood they uphold.

In doing this, radical feminists are essentially attacking the concept of 'infertility-as-crisis'. That is, they refute the idea that the inability to bear children is a huge problem that can only be solved by the application of technology. They question the ideology that defines infertility as a problem that requires fixing at all costs, costs that affect both society and the individual. In response, they look for other alternatives to the technological fix - namely, the reconceptualisation of women as worthwhile and valuable individuals, with or without children. Women should not be seen just as mothers, or potential mothers, radicals argue, but as capable of filling a wide range of other equally important and acceptable roles; the 'success' and acceptability of a woman thus should not be judged on the basis of her motherhood status. This could in part be achieved by changing the meaning of human fulfilment such that a life without children can be viewed as equally fulfilled as a life with children.

Concepts of 'love', family life, and nurturing are challenged by radical feminists, who want these to be seen as separate from narrow biological ties, and therefore as more encompassing. Women should be seen, and should see themselves, as capable of extending love and nurturance outside of the maternal biological relationship, and must begin to see and accept these opportunities. The perception of adoption as a 'second-best' alternative should be challenged, since it offers the same possibilities for emotional fulfilment and self-actualisation that biological children do. Radical feminists then are attempting to provide visions for:

> ... a different kind of life: a life without one's own biological children perhaps, a life in which a woman is valued for herself, a life in which women value themselves. This entails nothing less than working towards a society that cherishes a woman's full humanity as an invaluable part of the community; that sees her as a whole person. (Klein, 1989, p. 188).

The feminist reclaiming of the wholeness and integrity of women is the most vital aspect of the radical feminist arguments against the NRTs.

Some feminists also point to the differences in moral development between females and males (Gilligan, 1982); women tend to perceive themselves as interdependent and relative to others, while males view themselves as independent. Judging female moral development as qualitatively better than male development, some feminists would like to see the inculcation of women's moral values into the education system in order that people grow up to become more connected and socially responsible.

Radical feminists also urge political action to implement structural change designed to remove the bases of sexism, racism, classism and poverty that oppress women. They also suggest the necessity for the reformation of science and technology which takes into account women's wholeness and which has an ethics of integrity:

> We seek a different kind of science and technology that respects the dignity of womankind and all life on earth. We call upon women and men to break the fatal link between mechanistic science and vested industrial interests and to take part with us in the development of a new unity of knowledge and life (Arditti, et al., 1989, p. xxi).

The ultimate goal of radical feminism then is to create a society where women have regained their wholeness, integrity and unity and are valued for who they are as individuals, and a society in which women can be treated and accepted as self-determining human beings.

PART 5: SUMMARY SO FAR ...

The literature review and discussion so far has attempted to go some way towards looking at the essential feminist concepts of 'choice' and

'control' as they relate to the NRTs and the pro-technology arguments of reproductive liberalism and the critical views of radical feminism. Opposing conclusions on these concepts and the NRTs have been reached by the two theoretical positions because of their fundamental difference of perspective. Liberals focus on competitive individualism, the inherent libratory benefits of scientific and technological progress and the ultimate perfectibility of the human race. Radicals on the other hand focus on the sexist and exploitative nature of Western capitalist-patriarchal society and the increasing medicalisation of women's lives facilitated by the encroachment of technology into reproduction.

Radical feminists have shown that by basing their arguments on the ungendered rational individual, liberals have managed to deny the sexist social base from which technology develops. They recognise none of the extralegal oppressive hierarchies existing between individuals that radical critics do - that is, issues of sex, race, sexuality and class as sources of oppression - and can therefore 'legitimately' claim that increasing choices equates to increased freedom, autonomy and self-determination for all.

It is the radical view however that the process of increasing 'choice' through technological innovation is always accompanied by directly decreased choice for some women especially those whom technology purports to 'help'. Eventually all women will experience decreased freedom, autonomy and self-determination as reproduction becomes more technical, mystified and male-controlled.

I have attempted to show here how radical feminists have used the concept of 'patriarchy' to weave an understanding of why medicine and

the experimental and unsuccessful NRTs may be seen as exploitative of women's bodies. The mechanisms through which female procreative power is being usurped by males and the use of language to systematically objectify and disempower women were also detailed. An explanation of the coercive nature of the 'choices' offered by technological reproduction demonstrated how the meaning of 'choice' has been perverted, such that it no longer implies a range of equally accessible and acceptable options, but instead implies a single patriarchally-endorsed and ideologically constructed prescriptive pathway to motherhood which can seldom be refused - 'choice' then becomes 'forced' not 'free'. The eugenic potential of the NRTs and analysis of the exploitation of Third World women through both technology and the international surrogacy market were also elaborated.

Radical feminists use their knowledge to critique the somewhat hollow liberal notions of 'informed consent', 'choice', 'reproductive autonomy' and 'privacy' and to show how these concepts are used to support an inequitable system privileging the procreative desires of men and using women's bodies to fulfil these desires.

Radical feminists use international networks and information-sharing in order to gather evidence of abuse and exploitation and use their globally-influenced cumulative viewpoint to facilitate and organise resistance to what they see as the technological take-over of reproduction. Such practical and political resistance is organised within the parameters of radical feminist political principles as described. There are, however, some conceptual limitations associated with radical feminist theory. These are the focus of the following section.

PART 6: THE PROBLEMS ASSOCIATED WITH RADICAL FEMINISM

1. THE PROBLEM WITH 'PATRIARCHY'

While radical feminist theory appears to provide a good insight into the social and political issues of technological reproduction and a useful critique of some of the major tenets of reproductive liberalism, there are two quite major conceptual difficulties associated with the radical feminist theoretical approach. These arise largely as a result of the radical feminist assumption of the existence of 'patriarchy', that is, the system of social institutions which oppress women on the basis of their sexual difference from men.

This fundamental assumption of patriarchy suggests a single determining cause for women's oppression, namely men and male power, and assumes that society is made up of immutable male-dominated institutions which interlock to form a global superstructure or grid of oppression from which there really is no clear escape route, except, perhaps, through feminist and/or lesbian separatism. The basis for social organisation and its dynamics then is essentially the sexual antagonism existing between 'men-with-power' and 'women-without-power', with the point of radical feminism being the eventual empowerment of women through CR and political activism.

Patriarchy is viewed as a transhistoric, universal and all-pervasive phenomenon, the power of which is exercised in a historically and socially continuous way. As was evidenced in the radical feminist discussion of the NRTs, men, masculinity and male power in the form of the medical profession were taken to be 'the enemies' of all women; women everywhere and at differing historical moments were seen to be the unwitting 'victims' of a fundamentally malevolent male-dominated profession wielding its power over women in a process of

medicalisation and control so forceful and coercive that women have no real hope of escaping. In this process women are seen to lack personal agency, and become colluders in their own oppression simply because their power has been usurped and appropriated by men, thus leaving very few resources of strength in individual women with which they can resist the male medical hegemony. Combining in solidarity with other women and pooling resources of knowledge, experiences and politics are seen as the only available solutions to this dilemma.

Patriarchy then is seen by radical feminists as an overarching and identifiable system of interacting misogynistic ideologies, laws and specifically oppressive social and cultural institutions - such as the medical profession, police force, army, church and the education system - in which male power resides. These structural features of society exist as tangible entities but are outside the control of individuals, that is, they are uncontrollable at the 'local' level. Rather, they are controlled and operated from 'above' largely by men (or by 'male-identified women') whose power is dispersed from there in a one-way 'top-down' hierarchical system targeted specifically at women. Male power is also seen as located within all individual men who are capable of using, and do use their power to maintain their superiority over women. Because of its apparent awesomeness and all-encompassing nature patriarchy becomes almost inescapable.

The response of radical feminists to what they see as this encircling 'wall' of patriarchal oppression and the female disempowerment and fragmentation caused by the medical profession is to use their standpoint to critique patriarchy, realise its oppressive nature and create an alternative non-exploitative 'reality' based on their perceptions of 'true' womanhood and femininity. Mary Daly explains

how this process, grounded largely in linguistic transformation, can be initiated:

> Since we have come through the somber Passage of recognizing the alien/alienating environment in which woman-hating rituals vary from *suttee* to gynecological iatrogenesis, we can begin to tread/thread our way in new time/space. This knowing/acting/Self-centering Process is itself the creating of a new, women-identified environment. It is the becoming of Gyn/Ecology. This involves the dis-spelling of the mind/spirit/body pollution that is produced out of man-made myths, language, ritual atrocities, and meta-rituals such as 'scholarship', which erase our Selves. It also involves discovering, the source of the Self's original movement, hearing the moving of this movement. It involves speaking forth New Words which correspond to this deep listening, speaking words of our lives. (Daly, 1978, p. 315).

Radical feminists thus have a clear vision of how society should eventually be, after the feminist revolution (enacted through the transformation of language and the renaming of experience) has achieved its ultimate goals.

Here, radicals assume that the empowerment of women through revolution and renewing contact with 'the Self' can 'get beyond' patriarchy, and that there is a 'beyond', or a locatable place of ultimate unfettered 'truth' or 'reality' to be striven for and eventually 'arrived at'. In suggesting this, the radical feminist position also assumes that people are able to free themselves of the relations of power existing in society through personal empowerment.

Taking sexual/biological difference as its beginning point radical feminists seek to circumvent patriarchal oppression by redefining sexual difference in order to give it a non-exploitative meaning. They attempt to give femaleness positive connotations rather than negative ones. Femininity, rather than being a sign of 'weakness', 'Otherness' and a source of derision, contempt and loathing, is

reconceptualised under radical feminism as a locus of potentially subversive female power. Concepts such as women's assumed innate capacities to 'mother', 'love', 'nurture' and 'intuit' are also revalued as being of primary significance to the production of gynocentric culture. This concept of 'female power' and energy leads into the other major theoretical difficulty with radical feminism, that is, the problem of essentialism.

2. THE PROBLEM OF ESSENTIALISM

The essentialising tendencies of radical feminism are most evident in the implicit assumption that women, simply by virtue of 'being female' are in all ways (morally, intellectually and emotionally) different to men. Women's assumed intrinsic qualities of warmth, nurturance, peacefulness and interconnectedness, or women's 'essential nature' (that is, characteristics all women supposedly possess in common because of their biological femaleness), are viewed as capable of curing the world of its destructive, necrophilic and dehumanising masculine aspects. For radical feminists the natural 'goodness' of women is necessary to, and in fact will be able to, steer society away from its inherent 'badness' and ultimate annihilation.

Radical feminists see themselves as the moral leaders at the forefront of this battle for a more humane humanity. This is evidenced in their call for all women to join them in the struggle to stop what they see as the scientific and technological juggernaut from propelling society inexorably towards oblivion. Because their theory allows them to understand the interconnections between capitalism, patriarchy, women's oppression and the ideological and technological forces acting in society, radical feminists feel they have a responsibility to the rest of society to stop the technological invasion of women's lives -

to paraphrase Renate Klein here, radical feminists 'owe it to women' to keep them informed about developments and to help them resist the medicalisation of women's bodies. Women are seen to have the ability and the desire to resist patriarchy because they are fundamentally different from men and therefore possess a common system of values and inherent characteristics universally incompatible with those of patriarchy.

The fundamental assumption that all women are constituted by a basic common essence means that this implied commonality can then be used as a source of political unity and solidarity. It has been deemed necessary by some feminists (for example, Spivak, 1984/5) to essentialise the concept of 'woman' and what it means to 'be female' in order firstly, to create political awareness about women and to lend impetus to the feminist cause and secondly, to have alternative ideas about 'womanhood' to those that are patriarchally prescribed. The feminist alternative can then be focused on as the end-point of the feminist struggle for identity and liberation. Radical feminists also find it necessary to universalise the concept of 'woman' in order to examine the 'female experience' internationally, rather than merely locally or in a specifically Western (white, bourgeois, heterosexual) context. Critics of the NRTs have used this strategy to emphasise the similarity of women's experiences worldwide in the face of medical exploitation and abuse and to draw a common thread joining women together[5]. Examining differences in this context according to radical feminists can only really be seen as divisive and as contrary to their overall goals of documenting and overcoming global medical abuses and exploitation.

The problem with this approach is that radical feminist theory, in

presuming that all women's lived experiences are basically similar in many aspects, masks the diversity of women. It falls into the trap of duplicating the misogynist tendency to stereotype and categorise women. The impression I gained from reading the radical feminist literature is that through the process of "dis-covering the past, [and] creating/dis-closing the present/future" (Daly, 1978, p. 1) feminists are re-classifying women from the patriarchal concept of 'women-as-reproducers-and-nurturers' to what I perceive as the concept of 'women-as-spiritual earth-mothers', imbued, unrealistically, with the power to transform the immediate environment and the world in general. This is neither an appropriate, nor fair, categorisation of women and does nothing to advance the feminist cause, in my opinion. Rather, it maintains the cycle of oppressive definitions of women.

Moreover, at no point does such a classification manage to break out of the misogynist tradition of defining women largely in terms of biology. This radical feminist quasi-lesbian biologism is exemplified clearly by Adrienne Rich who wrote that:

> I have come to believe ... that female biology - the diffuse, intense sensuality radiating out from clitoris, breasts, uterus, vagina; the lunar cycles of menstruation; the gestation and fruition of life which can take place in the female body - has far more radical implications than we have yet come to appreciate. Patriarchal thought has limited female biology to its own narrow specifications. The feminist vision has recoiled from female biology for these reasons; it will, I believe, come to view our physicality as a resource, rather than a destiny. ... We must touch the unity and resonance of our physicality, our bond with the natural order, the corporeal ground of our intelligence. (Rich, 1979, p. 18).

This reclaiming of the female spirit is also put forward as the main objective of "gyn/ecology":

> Since female energy is essentially biophilic, the female spirit/body is the primary target in this perpetual war of aggression against life. Gyn/Ecology [and radical feminism]

> is the re-claiming of life-loving female energy (Daly, 1978, p. 355).

Thus, radical feminists frame their discussion of women in the same terms of biology they find so demeaning and oppressive and thereby perpetuate biologically-based stereotypes of women which do nothing to undermine or subvert 'patriarchy' which still remains intact.

Further, it is not appropriate, I think, to claim moral superiority and thus the 'right' to evaluate and pontificate about women and their lives, or to prescribe courses of action and standards of ideological and political correctness clearly unsuitable for all women. In relation to the debate on infertility and the NRTs it is not fair to suggest that infertile women who will apparently go to any lengths to obtain a child are 'victims' of false consciousness and that if only they could "snap out of it" and realise the other possibilities for self-actualisation available, things would be better, both for them and for society generally. To put infertile women in such a conflicting position and expect them, for the sake of ideological soundness and the ultimate future of women, to somehow abandon their desire for a child is a huge responsibility, and one which should not be placed with a specific group of women. This criticism of feminist insensitivity to the needs and desires of infertile women has been raised by other authors. This notion of 'false' versus 'feminist' consciousness implies the existence of a 'feminist truth' that is attainable if only women could just look beyond their immediate oppressive circumstances.

Radical feminists reject the notion of an unmediated 'truth', but rather claim that there is a 'core' unifying female experience mediated and fragmented by factors primarily relating to race, class,

sexuality and the male fear and jealousy of women. Once these are abolished as sources of suppression of the female, then 'feminine knowledge' and the 'feminine essence' will re-surface and begin their social healing processes. This access to the healing powers of feminine knowledge therefore emanates from within, arising from female biology, and is not accessible to males. Feminine experience and knowledge will then be the basis on which to structure a healthy, post-patriarchal society free of oppressions such as pornography, prostitution and the NRTs - an environment grounded in the life-giving and life-affirming qualities of women.

What I have attempted to show here are the limitations of reproductive liberalism, namely its gender blindness, as seen from a radical feminist standpoint, and the limitations of the radical feminist arguments opposing the NRTs. I have tried to explain how radical feminism tends to rely heavily on the concepts of 'patriarchy' and essentialism in order to underpin and structure its political arguments. Such concepts themselves are reliant on the existence of an ultimate 'truth' and 'reality' that is mediated by experience, and the idea that, given women's resistance and political mobilisation, women can move outside of the power relations that structure society and into a feminist reality where their true selves can find expression. Radical feminists assume that ultimately women can create and live in a society based in true femininity, free of mediating factors such as male violence against women, and race, class and sexuality oppressions.

The main point in outlining these two deficiencies of radical feminism is to show that while radical feminists have certainly created an alternative system, this new system is still firmly entrenched in the

oppressive constraints of biological essentialism and a totalising concept of patriarchal power which is ultimately resistant to change. In relation to the NRTs, because the medical profession was portrayed as a unitary patriarchal institution controlled by men, women could then only be seen as passive victims of the exercise of medical-scientific power who could do nothing but either become active colluders in their own oppression as a result of their false consciousness, or withdraw from patriarchal society altogether in the form of feminist separatism.

Poststructuralist theory allows an escape route from this conceptual bind through its acknowledgment of the importance of the mutually interactive links between knowledge production, power and subjectivity. Poststructuralism is able to account for social change as well as historical continuities, by focusing more on subjective diversity and fluidity than on the universality and unity of patriarchal oppression. It does not view the world as a continual battle of the sexes in terms of the dominant masculine and suppressed feminine as radical feminists do, but seeks to produce different ways of conceptualising gender without necessarily reversing existing hierarchies (by revaluing the feminine) or lapsing into the political dead-end of separatism and biologism. In essence, it questions the humanism on which reproductive liberalism and radical feminism are based.

The most significant effect of poststructuralist thought in relation to the NRTs is that it allows the abandonment of the idea that the NRTs are designed by malevolent practitioners who set out specifically to control women. Rather, the NRTs may be seen as the products of a wider "regime of truth" which validates their development. Thus, the

NRTs can be thought of as specific techniques arising from a political, and historically and culturally specific, view of the world in which they are sanctioned as appropriate - as results of the intersections of various discourses which enable their development and use. The following section will outline some of the major features of poststructuralism, dealing especially with the concepts of 'power' and its interaction with 'discourse', 'language' and 'subjectivity'.

PART 7: THE MAIN FEATURES OF POSTSTRUCTURALIST THEORY

1. THE REDEFINITION OF 'POWER'

Poststructuralism counters the above unitary concept of 'patriarchal power' and the assumed ability of individuals to move outside of it, suggesting instead that 'power' permeates and structures all aspects of subjectivity and bodily experience and cannot be escaped. Poststructuralist theory allows for the redefining of power from the totalising, monolithic, 'power-over' model of patriarchy espoused by radical feminism to one which focuses on the intricacies and local workings of power - that is, how power, as exercised within particular discourses[6], influences the everyday functioning and interactions of individual subjects.

Foucault delineates this concept of 'power' as follows:

> When I think of the mechanics of power, I think of its capillary form of existence, of the extent to which power seeps into the very grain of individuals, reaches right into their bodies, permeates their gestures, their posture, what they say, how they learn to live and work with other people (Foucault, cited by Martin, 1988, p. 6).

The statement made by Foucault here is revolutionary and runs contrary to current dominant humanist discourses which presume individuals are rational and self-present, and able to access 'truth' and 'reality' through experience. Foucault suggests the individual is not the

source of her subjectivity as radical and liberal feminists would presume but rather that she is the effect of the intersections of various specific cultural discourses. I take this to mean that the ways in which an individual behaves and talks for example are the visible manifestations of the discursive construction of her subjectivity and are temporally and culturally specific. Such manifestations then, do not emanate from any 'essential' or 'true' inner self or the operation of her rationality and intellect on the environment. Subjectivity is not innate and there is no 'feminine essence', either in the radical feminist sense of 'female nature' or the liberal sense of 'rationality', existing outside of discourse waiting to be discovered and recaptured, or used to discover 'reality' through objective scientific means. For poststructuralists there is no common essence which makes an individual 'what she is'.

2. THE DECENTRED SUBJECT

What this leads to is the notion of the 'decentred subject', the idea that subjectivity is chaotic and disunified and a site at which meanings are continually being contested. Individuals then are not the integrated and rational beings striving towards perfection, freedom and true human existence that liberal and radical feminist discourses take them to be, but are fluid and subject to change - a subject is always 'in process' and is continually being reconstituted in discourse each time she speaks, thinks or acts (Weedon, 1987). The unified, rational, self-present individual of liberal-humanist discourse who believes herself to be the 'author' or creator of her own subjectivity is undermined by poststructuralist thought; rather, she is the product of the struggle for dominance existing between specific discourses.

The benefit of this is that subjectivity becomes open and contestable, rather than a fixed, universal, innate entity shaping all women's desires, pleasures, emotions and behaviours. 'Decentering the subject' provides a way of allowing the subject to change and to reposition herself in relation to discourses which satisfy her politics or address her needs more directly (Weedon, 1987). Thus, an individual is not limited to the 'either-or' (collusion or separatism) approach of radical feminism. It also enables the subject to give alternative meanings to her subjectivity and to understand the origins of the conflicts and contradictions posed by adherence to the dominant discourse. Such alternatives however are likely to be marginalised by, and in relation to, the dominant prevailing discourse of beliefs, morals and practices, but they nevertheless contain within themselves the potential to subvert the dominant worldview.

3. LANGUAGE AND MEANING

For poststructuralists meaning does not exist prior to language and is not reflected by language; rather, meaning is produced within language. Language is seen as the mechanism through which the meanings of particular discourses and thus subjectivity, and the range of possible social, political and cultural organisations are constructed. Because differences in social and political power exist between discourses they are therefore constantly competing for dominance in the construction of human subjectivity, that is, the everyday practices and activities of individuals. This 'competition' gives rise to dominant and competing subject positions the meanings of which are constituted in language. Language thus becomes central and crucial to the highly political struggle over meaning and subjectivity.

A particular discourse thus positions and 'names' the subject and her pleasures and desires within the boundaries and limitations of the discourse. Power is clearly implicated in this process, both in the sense of the constitution of subjectivity, and in the way a particular discourse or body of knowledge acts as a regulating or disciplining influence on subjectivity. Foucault (1981) suggested that the success of power in this process of inscribing cultural practices on the body is "directly proportional to its ability to hide its own mechanisms" (p. 86). That is, the dominant discourses, those which have the most influence, currently are those which appeal to 'nature' or 'biology' because they are seen to arise from objective scientific enquiry removed from human biases, rather than direct political motivations. As I will attempt to show in a subsequent section of this essay, the appeal to nature and biology is a significant part of the construction of representations and subject positions associated with reproduction and infertility.

To use language then is to take up a subject position within a specific discourse - this act in itself both transforms the subject into an 'agent' of the discourse and makes her subject to its power and discipline.

4. DISCIPLINE

'Discipline' may be thought of as a "policy of coercions that act upon the body, a calculated manipulation of its elements, its gestures, its behaviour" (Foucault, cited by Bartky, 1988, p. 62). Discipline is directly focused on the activities of the individual body, ordering it and constructing it; thus, the body can be seen as the locus of the intimate operation of power. The link between power, knowledge and the body, that is, the 'social' and the 'local' is made. The effect

of discipline is the production of self-regulating, "practiced" and "docile" subjects who comply with the recommendations of the discourse, and by doing so, thus maintain its power and ensure the perpetuation of the prescriptions of the particular discourse.

The internalisation of docility has been likened to the mechanics of the ideal prison, the 'Panopticon' in the sense that the state of perpetual visibility induces a condition of self-consciousness in the prisoner/subject such that self-disciplining and thus the automatic operation of power are guaranteed. The body and mind are disciplined in accordance with the prescriptions of the discourse. The value of this Foucauldian notion of discipline is that power does not need to be conceptualised as a brute force, as overtly oppressive, but can be seen as an insidious process whereby cultural practices are inscribed on the physical body. To paraphrase Bartky (1988), women are 'not marched off at gunpoint' to undergo IVF, but do it willingly because they have taken up the subject position and the self-government associated with the discourse(s) surrounding reproduction. The identification of these discourses and a look at how they interrelate is the ultimate aim of this essay.

In order to get to this final goal it is my purpose in the following section to analyse popular representations of infertility and the NRTs in order to identify two of the major discourses underlying reproduction. Since language can be thought of as a meaning-constituting system, the ways in which language is used to create popular and dominant meanings of infertility and reproduction will be the primary focus of this analysis.

PART 8: REPRESENTATIONS OF INFERTILITY

1. OVERVIEW

The following section is an attempt to outline the ways in which infertility and developments in the NRTs are portrayed in the popular press. It is an attempt to examine the themes and techniques used to construct the narrative of infertility, and to show how technological development follows a linear progression of obstruction and resolution, also evident in popular accounts of IVF and other assisted births. Newspaper articles dating from 1982 to the present were chosen as the material for study in this instance[7].

The rationale for this choice of medium is that newspapers provide an excellent interface between medical science and the general public. They are a way of conveying information to a wide range of individuals in the community. Newspapers are highly accessible, both in physical terms and in terms of the language and stylistic devices employed, compared with the often mystifying and oblique nature of some medical journals and books, for example. The language used in newspaper articles is deliberately non-scientific and self-explanatory, and the combination of photographic material can also provide compelling and seductive imagery, adding to the impact of, and validating, the written material. Papers[8] are frequently the only source of formal knowledge about infertility and the NRTs for many people. They can therefore be used as vehicles through which information and specific dominant viewpoints can be widely disseminated in an easily comprehensible form.

Newspapers thus play a critical part in the construction of 'common-sense' knowledge about infertility, the NRTs and the issues surrounding them. They operate in what may be described as an almost

didactic fashion, providing 'objective facts' and 'news' rather than critical or philosophical opposition or discussion. Frequently the words of 'an expert' or other authority figure, or the "infertile couples" themselves, are quoted or paraphrased in order to add to the aura of realism and non-partiality. Photographs and their captions, because these generally capture the reader's attention and interest and draws her into reading further, are also portrayed as 'snapshots of reality'. However, they are usually posed, selected and edited and are thus individual constructions of cultural values and myth and project dominant belief structures.

Articles and features, sometimes appearing on the cover page, or more frequently on the second and third pages, or special features pages such as The Advertiser's "Appeal" section, serve to inform the public about new developments. In this way an individual's attitude towards, and awareness of current techniques and their moral, social and ethical consequences is shaped and constructed. The reader of the article is thus positioned as the 'receiver' of knowledge which appears as direct, commonsensical, intelligible 'truth' and 'fact', appealing to one's taken-for-granted, assumed knowledge of 'reality' and the world at large. It is this apparently neutral nature of the majority of the press coverage that lends persuasiveness and power to the specific discourses involved.

That the information and themes presented to the reader are in fact generating a body of popular knowledge which is part of the dominant social belief system and its practices, and helps maintain and justify the status quo, is obscured by the consistency of the themes and their non-contradictory nature. Their usage of nature, biology and science and their appeal to the 'common-sense' of individuals lend credibility

and authority to the descriptions of infertility and the NRTs as technological 'solutions' to childlessness. Newspaper articles, as I will show below, contain elements of the dominant discourses surrounding infertility and its appropriate 'therapeutic interventions'. In the following paragraphs I will look at how infertility, medical science and the NRTs are portrayed in a selection of newspaper articles.

2. REPRESENTATIONS OF INFERTILITY: NEWSPAPER COVERAGE

Infertility is said to have a "debilitating impact", causing "misery", "frustration", "desperation", "suffering" and "sorrow". Individuals are said to be "victims" of, or "suffer" infertility. "Infertile couples" or "childless couples" have "failed" to conceive and are left "vulnerable" to stigmatisation and social pressures.[9] These common descriptors appear in the vast majority of the articles surveyed here[10]. The images they project of the emotions surrounding involuntary childlessness are desperation, deprivation, failure and hopelessness, leading to a "major life crisis for people in Australia and throughout the world" (Deb, 1994). The dominant popular representation of infertility thus revolves around 'desperation'.

Juxtaposed with these images are stories of "medical breakthroughs" (Anon., 1992) offering "new hope for the infertile" (Butcher & Hailstone, 1995), and technologies capable of "changing the odds" (Nunn, 1993) and turning "heartbreak" into "hope" (Reddy, 1988). In these articles medical technology is represented as able to resolve the conflict and tension existing between failure and success, as able to transform despair and misery into "ecstasy" and "joy" and a range of other emotional reactions from "crying" (Anon., 1994a; Parry, 1995) to "screaming" (Phillips, 1994). Medical technology is presented as

an effective mediator in providing a resolution to the desperation caused by the "problem of infertility".

In fact, medical technology is frequently shown as the only way for an 'infertile couple' to obtain children, usually by virtue of excluding non-technological options: "women ... thanks to IVF have successfully borne the children they believed would never be possible" (Phillips, 1994). Reddy (1988) reports that "techniques such as IVF and GIFT has [sic] offered them [infertile individuals] at least the hope of an alternative to a childless life". At the 1994 Infertility Awareness Week held in Adelaide much publicity was given to IVF, GIFT and other new developments, again showing technology as the main solution to the 'crisis of infertility'. Technology thus is presented as being a 'gift' to women that "offers" them hope; women must therefore be grateful that science can provide them with this opportunity to 'overcome' their infertility.

In the articles chosen for analysis, infertility was described invariably as having physiological causes (problems with Fallopian tubes, poor sperm motility, 'inability' to produce mature sperm or eggs, and so on) for which physiologically-based technological intervention was seen to be "the only hope". It is this link between cause and treatment that validates the use and development of technology as 'the solution' to the 'crisis' of infertility. This then leads to the perception and the assumption of the benevolence of technology in the process of 'alleviating infertility', and is one of the key features of popular reports on IVF. This assumption of benevolence and the 'increased choices' offered by technological advance can be traced by looking at the reported historical developments in reproductive interventions.

IVF for example, was first developed in response to the perceived need to provide an alternative to microsurgery on blocked Fallopian tubes (a common cause of infertility in women) which was frequently unsuccessful. The birth of Australia's first "test-tube baby" Candice Reed in 1980 justified the perception of IVF as 'successful technology' and permitted its further development. In 1982 the implantation of fertilised donor eggs was seen to "solve the problems of the small percentage of infertile women whose ovaries are inaccessible to egg pick-up or who produce no eggs at all" (Berry, 1982). In 1985 GIFT was developed in order to "replace IVF for all women with one Fallopian tube open, or half of all those seeking IVF" (McIntosh, 1985). In the same year the development of techniques to freeze ova were said to increase women's choices and to circumvent the social, ethical and moral dilemmas of embryo freezing - that is, the need for their destruction if superfluous (Miller, 1985). Freezing ova was portrayed as a technique enabling women to "stop the biological clock" and as having the "potential to help women lengthen their reproductive timespan, allowing career women to postpone childbearing, menopausal women to conceive and women to store eggs as insurance in case of future infertility or even death" (Anon., 1994). In 1990 micro-insemination by sperm transfer (MIST) was confirmed as a successful procedure for "couples who, because of poor quality sperm, were either unable to attempt, or conceive through, conventional IVF" (Anon., 1992). MIST was hailed as "the method of choice in treating male infertility" (Anon., 1992). In 1993 however, intra cytoplasmic sperm injection (ICSI) was developed in order to overcome the difficulties of microinjection. The former technique only requires the injection of a single sperm rather than the multiple sperm needed for MIST which can produce abnormalities in egg cell development.

ICSI has been called "the biggest advance in IVF technology since the introduction of frozen embryos a decade ago" (Hailstone, 1993). This year, however, evidence that conception could take place without sperm - thus helping infertile men - through removing spermatid cells from testicular tissue and using these in the fertilisation process, was reported (Butcher & Hailstone, 1995; Butcher, 1995). Such techniques from frozen ova to reproduction without sperm all avoid the necessity of using donor gametes and thus ensure genetic continuity for both women and men. This biological/genetic theme is elaborated later; in the following discussion however I will concentrate on the structure of the reports of medical "breakthroughs" detailed above.

The preceding summary has shown that the development of technology is structured in a linear way, as a progression of events more successful and more spectacular than the preceding technique. Problems with microsurgery led to IVF; problems with IVF led to GIFT; the problem of male infertility led to MIST; the limitations of MIST led to ICSI and eventually 'no-sperm conception', a technique so new and apparently "revolutionary" (Hailstone, 1993) that it has not yet been named. Each technique is a 'new, improved' method of intervening in reproduction and helping infertile women and men, and its development is facilitated by conflicts or tensions arising from limitations of previous techniques.

New techniques provide resolutions to old problems, be they technical or ethical. Lack of success with one technique prompts further research and development: "Embryo team presses on: Melbourne's test tube baby doctors are persisting with attempts to produce pregnancy from frozen embryos although the most successful attempt so far has ended with a miscarriage" (Metherell, 1983) is an example of one such

headline demonstrating the technological progression forward and the persistence of medical science.

In individual 'success' stories, too, the triumph of technology over nature is evident. In one case, an Adelaide woman went through several unsuccessful IVF attempts before becoming pregnant and giving birth to a baby conceived through ICSI: "Success at last" reads the headline, providing a positive resolution to the unsuccessful attempts at IVF and "joy" to the woman involved (Phillips, 1994).

Such stories read like a tale of heroism, with medical scientists gambling, taking risks and managing in the end to "change the odds", and triumphing over the obstacles posed by nature. Technological progress is a story of scientists engaged in an endless battle to provide the happy ending to the 'personal tragedy' of infertility, to help couples "achieve their lifelong dream of a baby" (Anon., 1994a).

Again the theme of 'obstacle' and 'resolution' appears. The 'resolution' (in the form of a live baby) provides a sense of normalcy to the increasing technological manipulations necessary to produce a child. For the reader this resolution is a satisfactory ending to medical and technological invasions of women - somehow the image of smiling mother and baby is enough to justify technology and make it acceptable. Such closure of each article gives a sense of finality and completeness - if the desired goal has been achieved then there is no need to ask questions about the ethics of technological reproduction, or to question the artificiality of the whole procedure. As an example, a recent report on the birth of IVF quadruplets in England ended with a description of how "good" the in-laws and other acquaintances have been throughout, and a closure of the story in

which the father said: "Fortunately the young ones are sleeping between feeds, they are being very good" (Parry, 1995). This gave a happy and unproblematic ending to the article, and left no space to question the ethics of a procedure which regularly produces multiple births. Thus, the ends are used to justify the means.

'Success stories' are often also accompanied by 'madonna-like' images of mother and child, with the baby facing towards the camera as the central focus of the photograph. Such images validate the perception of the medical process being a source of fulfilment and happiness for individuals. The photographs of the "miracle baby" and its mother/parents invoke feelings of 'love', warmth, "togetherness" and happiness and the unified family, as opposed to the divided incomplete one caused by not having children. In one report, childlessness was seen as a threat to the couple's marriage, with divorce becoming a viable option, if technology would not provide a baby for them (Reddy, 1988). Failure of technology then in some cases is equated with failure of the relationship, while a successful technological outcome is associated with a fulfilled and happy relationship.

All of these stories are constructed as the outcome of logical sequential scientific progress, with technologists viewed as 'pioneers' pushing back "the frontiers" of human reproduction in an exciting quest for perfection, and technological "world-firsts" (Anon., 1990). This international battle for fame and recognition gives rise to headings such as: "Australia leads world in 'test-tube' baby techniques" (Hicks, 1980); "Australia's IVF teams lead the world" (Whitlock, 1985); "An Adelaide doctor has pioneered a device to help overcome infertility" (Hailstone, 1992); "Aussie leads world in human egg storage" (Anon., 1994b). Coming second in this race does not

attract the media spotlight; in one extreme case, the birth of the second 'test-tube baby' three months after Louise Brown led to the suicide of the doctor involved - "Jibes put test-tube baby pioneer on path to suicide" read the headline (Gupta, 1981).

As a reader of these articles it is easy to accept both the concepts of 'desperation' as a naturally occurring and self-explanatory emotional phenomenon, and the promise of medical technology to remedy the crisis of infertility. That the articles generally provide resolutions, 'happy endings' and effective closure gives a logical structure to the stories, such that the very elements contained within them appear to be sensible, integrated and believable. One can read accounts of IVF births, and take for granted the central concept of 'desperation' of the 'infertile couple' which legitimates the development of increasingly complex medical technology. The articles provide a neatly packaged formulaic and very familiar pattern of story-telling which proceeds as follows: infertility, 'desperation', physiological cause of infertility, description of medical techniques used, 'hope', 'happy ending'/resolution. If the key issue of 'desperation' were not present there would be no basis or need for the continuing development of technology. The next step in this analysis is to look at the underlying bases for 'desperation', that is, how it is discursively constructed. These discourses fall into two categories. The first is the discourse of 'social failure', the second is the discourse of 'biological instinct'.

3. THE DISCOURSE OF 'SOCIAL FAILURE'

Outlined in a previous section of Part 1 of this essay were the ideas that life is expected to move in a progression of steps which flow on 'naturally' from one another. It was also suggested that many people

expect to marry, and that children will result from the marriage. In a medically-oriented text Alexina McWhinnie (1986) points out that:

> *The expectation and social role of the majority of women is marriage and motherhood.* Both enhance or seem to enhance her social status. For those who cannot follow this pattern, but wish to do so, there is heartache, anger and despair. (p. 216; italics are mine)

Infertility thus creates a barrier to self-actualisation, and has wide implications for women's self-esteem, personal identity and sense of life fulfilment. Infertility becomes a crisis because of the loss of control over their lives that individuals may experience. It represents the loss of the life that they once assumed was possible. As Pfeffer and Woollett (1983) point out:

> Infertility is a major life crisis. For women who want children but cannot conceive it is a major blow. It shakes your ideas about yourself, about your femininity, and it involves a shift in your ideas about how your life will proceed. ... Your problem is exposed to outsiders and you must submit your personal life for scrutiny and tests - with an inevitable strain on your relationship. (p. 2)

Newill (1974) points to the "misery and distress" caused to "a young married couple by their *failure* to start a family" (p. 14; italics are mine). Workshop and conference proceedings also reinforce the notion of 'desperation' caused through infertility (for example, Need, 1982; Steigrad, 1982; Maddocks, 1982; Armstrong, 1982; Brennan & Brennan, 1982).

Compounded with this is overt social pressure from family and friends that infertile individuals experience. They may feel alienated from their friends who have children and may experience envy or jealousy at counterparts who manage to conceive relatively easily. As Newill (1974) writes:

> only childless married women know the despair they feel on social occasions when the only subject of conversation among women seems to be their children. Women can be remarkably

> tactless and insensitive towards their less favoured acquaintances on such occasions. (p. 14)

Infertile individuals also may feel they have not 'lived up to' the expectations of family and friends. The Warnock Report (1984) suggests that:

> Family and friends often expect a couple to start a family, and express their expectations, either openly or by implication. ... For those who long for children, the realisation that they are unable to found a family can be shattering. It can disrupt their picture of the whole of their future lives. They may feel themselves excluded from a whole range of human activity and particularly the activities of their child-rearing contemporaries. (Warnock, 1984, p. 8)

Self-help publications created to provide information to infertile couples reinforce these ideas about the feelings of the infertile and the sense of 'desperation' arising from infertility, and the sense of 'hope' offered by technology. Judith Murray (1988) for example writes, "... there is a significant number of couples for whom dreams of becoming a parent for the first or subsequent time, will be at worst, shattered, at best severely shaken" (p. 14). She also reports on the social ostracism experienced by infertile people, who feel themselves to be an "embarrassment" to society (Murray, 1988, p. 14). Further, Murray suggests that:

> infertile couples are often dealt the cruelest blow. They grieve for the loss of the children that they can only imagine. They have no tangible evidence of the object of their grief. *Their loss is the loss of their dreams and hopes*. (Murray, 1988, p. 47; italics are mine).

Sher, Marriage and Stoess (1988) write:

> Many infertile couples, having experienced repeated disappointment over the years in their attempts to conceive, have come to our program in *desperation*. Most had previously tried a variety of *unsuccessful* procedures. ... All these couples looked to IVF as a *promising* new procedure that might help them conceive after all of their other attempts had *failed*. (p. xvi; italics are mine).

These authors also write of the "devastating emotional and physical impact" of infertility (Sher, Marriage & Stoess, 1988, p. 4), using statistics to back up their claim that infertility is the major problem in an infertile couple's life. They then lead into a description of technological interventions into reproduction with this paragraph:

> Fortunately, recent advances in the evolution of high-tech methods to evaluate and treat infertility *offer the hope* of pregnancy to couples who *never had any hope* until now. In vitro fertilization is just one of these *promising* procedures, but in many cases it *offers the best hope* for *success*. (Sher, Marriage & Stoess, 1988, p. 7; italics are mine)

Cooper and Glazer (1994) also write of the "depression, jealousy, helplessness, despair, misunderstanding, and insensitivity" (p. 4) experienced by infertile couples. They suggest too, that:

> No matter to what extent a woman has developed a career or a professional identity, the image of herself as a mother tends to be the psychological backdrop from which she operates. When a woman decides to have children but discovers she is infertile, her self-image is assaulted. (Cooper & Glazer, 1994, p. 6)

This "assaulted self-image" can lead to feelings of inadequacy, sexual unattractiveness, depression and being unlovable. The inability to bear a child and give birth, write Cooper and Glazer, "can create profound grief that reaches right into the core of the self" (p. 7). Establishing a sense of the emotional impact of infertility was considered necessary by these authors in order to create the idea that "embarking on their next journey - a journey through the world of assisted reproductive technology" (p. 28) is the logical next step for 'infertile couples'. The transition between infertility, desperation and the NRTs is unproblematic and unquestioned.

What is interesting in these accounts is that even though they have

been drawn from quite different sources they all reinforce the same message of emotional upheaval, depression and desperation. In presenting the feelings of 'infertile couples' in this way they all suggest that 'desperation' and other emotions arise from the individual's 'inability' and 'failure' to conceive. Desperation is presented as the 'natural' (and only) response to the discovery of infertility. If fertility and the creation of biological children are symbols of 'mature' adulthood, then infertility equates to the inability to reach this point. It is this 'inability' to attain the socially prescribed norm of perceived 'adulthood' that leads to the despair of childlessness.

Such themes of failure and despair point to an individual's need for social approval and acceptability. The experience of infertility produces emotions such as 'desperation' because of the 'failure' of the human body to perform in accordance with social expectations. Thus, the need for social approval and conformity is shown as the motivating force behind a couple's use of technological interventions which might give them the desired child.

The same themes of distress, desperation, failure, presence of technological interventions, hope and success are present in the popular constructions of knowledge around infertility, in the guidebooks designed specifically to 'educate' the infertile, and in the government reports and conference papers used above. What they are all suggesting is that infertility represents a deviation from social acceptability, a perceived failure to conform to social standards. The construction of infertility as failure and deviance, and fertility (whether 'natural' or technologically produced) as successful and acceptable induces a sense of 'desperation' for

conformity which sends childless couples off on the "journey" towards normalcy and acceptability through the use of technology. In the accounts described above however, 'desperation' is constructed as a 'natural' and appropriate response only for those people interested in conforming to the prescriptions of heterosexuality, marriage and the biological family. For others, desperation is not an acceptable response. Legislation and other equally powerful social sanctions ensure that parenthood largely remains a privilege of the heterosexual.

4. THE DISCOURSE OF 'BIOLOGICAL INSTINCT'

It is not only the desire for social conformity that produces desperation but also the constructed knowledge that reproduction is an instinct, a vital part of the propagation of life, and genetic and species continuity. As Wood (1981) writes, "the provision of a child to an infertile couple *fulfils a natural instinct* of many people to be a parent and constitute a family" (p. 8; italics are mine). In the Warnock Report (1984) procreation is described as "a powerful urge to perpetuate ... genes" (p. 9). McWhinnie (1986) also writes that having a baby "is to satisfy [a woman's] maternal instinct" (p. 216), and quotes Susan Hampshire as further proof for the instinctual basis of motherhood:

> The *powerful biological desire* to have a child is inexplicable. You can give someone a hundred reasons for not wanting a child, or not wanting more children, but the *determination* of a woman wanting a child will never be thwarted by *rationalisation*. (Hampshire, 1984, p. 9; italics are mine)

The desire for a chld apparently reaches beyond the explicable and the rational.

Newill (1974) also describes procreation as "an urge" and "a primary

instinct" (p. 14). He also argues that a woman "should not be denied the chance to fulfil *her role* in life" (1974, p. 14), and places motherhood in the context of being woman's primary (or only) function in life. He goes on to write that:

> There are certainly some women who say they have no desire to become mothers and genuinely mean it; but they are a minority. Every month a young woman is reminded that *her primary role in life is to bear children* and even the most ardent advocate of Women's Lib sounds unconvincing if she denies wanting to achieve motherhood at least once in her lifetime. (Newill, 1974, p. 14; italics are mine).

Such discourse on the biological motivation towards parenthood thus constructs various aspects of knowledge around reproduction. It suggests that women like men, that women want babies, that the instinct towards pregnancy and pregnancy itself are 'natural' and have genetic and species survival value, and that childbearing is woman's natural role in life. Procreation is seen to be an insuppressible and uncontrollable natural instinct requiring fulfilment. The physiological inability to satisfy this drive then is also represented as the other major cause of desperation.

Additionally, the discourse of 'biological instinct' also constructs biological parenthood created within the institution of marriage as the only valid and acceptable form of parenthood open to individuals. Parenting arrangements which contravene the sanctity of marriage and heterosexuality are considered illegitimate and immoral and are excluded from knowledge and representations of infertility. Thus, the discourses of 'social failure' and 'biological instinct' lead to a situation in which the only valid questions to be asked and resolved, both in medical-technological and legislative terms is 'how a biological child can be created and how the artificiality of technological procedures can be reconciled with the nuclear family'.

This latter point is partially resolved as mentioned previously by the popular closure of articles in which a couple's happiness virtually cancels out any ethical questions or doubts that the reader may have. Photographs of the technologically produced baby integrated with the mother/parents add to the aura of reconciliation.

5. 'SOCIAL FAILURE' AND 'BIOLOGICAL INSTINCT': DISCURSIVE INTERACTION

What emerges from all of this is a situation in which the discourses of 'social failure' and 'biological instinct' operate simultaneously to specify that not only is it socially appropriate for childless heterosexual couples to feel desperate, but such feelings are also biologically justifiable. The intersection of these two discourses therefore construct and maintain the status quo of heterosexuality, the biological nuclear family and the institution of marriage as a legitimating structure for procreative sex and a method of creating an environment 'suitable' for the upbringing of the resulting children, that is, with the all-important 'father-figure'. As Warnock (1984) writes, "... it is better for children to be born into a two-parent family, with both father and mother ..." (p. 11). The use of the word 'better' here constructs alternative parenting arrangements both as socially undesirable and as inferior to the nurturing and care a child would receive in the nuclear family. Again, heterosexuality as normality is reinforced.

This social order, although a construct, constitutes the dominant worldview, from which other subject positions are marginalised and obscured. For women who are seen to wish to conform to social norms, the discourse of biological instinct serves to validate their desire for a child. For women whose lifestyles and attitudes are seen as socially and/or morally unacceptable, social and legislative barriers

come into play to override the so-called 'biological instinct' all women supposedly possess. For acceptable (heterosexual, married) women reproduction is facilitated; for unacceptable women (lesbians, single women) reproduction and access to reproductive technology is restricted by legislation.

The Warnock Report (1984) for example states that:

> we have considered these arguments [for the right of lesbians, gay men, and single people to be allowed access to assisted reproduction], but, nevertheless, we believe that as a general rule it is better for children to be born into a two-parent family, with both father and mother ... (Warnock, 1984, p. 11).

Connon and Kelly (1984) in their report to the South Australian Health Commission do not even make mention of alternative parenting arrangements made possible by IVF and AID. They use the term "couple" throughout their report and presume that this will be interpreted by their readers as meaning a married (heterosexual) couple, or a male and female in a stable cohabiting relationship. The two discourses identified here in the range of representations and texts examined, act to include and exclude specific groups of individuals in accordance with narrow moral and political prescriptions of 'appropriate parenthood', and social organisation and acceptability.

The discourse of 'social failure' provided only a restricted view of childlessness. The concept of 'desperation' arising from the need for social conformity makes sense only in the context of individuals who wish to be socially acceptable and conformist, and who actually want to be part of the stereotype of the nuclear family, complete with mother, father and biological children. Such a representation excludes individuals who parent non-traditionally, such as lesbians, gay men, adoptive or foster parents, and individuals who choose to be

child-free. Because the parenting arrangements of these groups could be considered non-conformist compared to the dominant standard of procreative heterosexuality and the nuclear family, they do not fit into the mould of the 'desperate infertile couple' stories outlined in the analysis of newspaper articles above, and are therefore excluded.

Popular representations of infertility thus offer only one position to the reader, that is, an identification with the biological family, genetically-related children and social conformity. It is only when the reader considers who and what is excluded from the accounts that the constructed narrow nature of the representations becomes apparent.

The power of such representations resides in their ability to present discursive prescriptions about appropriate sexuality and sexual expression, and family and other social structures as natural and 'real' accounts of the 'truth' of infertility. It is because of the familiarity of both the presentation style and the content which makes representations appear normal. The discourse of 'social failure' confirmed heterosexuality as normal through prescribing norms of social acceptability for women. The discourse of 'biological instinct' also served to validate and maintain these prescriptions through appealing to the authority of science and scientific enquiry, namely genetics and theories of evolution. Science is popularly presented as being able to objectively explain and reflect on reality and the natural world. It is generally seen as being beyond the biases of individuals, but it is because of this apparent neutrality that scientific knowledge plays a powerful role in the construction of subjectivity about sexuality and the body.

In the construction of the truth of infertility experience also plays

a key role. Infertile couples and individuals are often quoted in detail in many of the sources examined here. The language they use is seen as 'transparent', that is, reflective of the emotional and social experience of infertility assumed to pre-exist language. Experiences of infertility are viewed as 'true' and as biologically and socially driven, and therefore existing prior to their articulation in language. The description of experience in language then is perceived as a guarantee of the truth of infertility. That a diversity of personal accounts carry the same themes merely adds to the aura of truth and lends power and influence to the particular subject positions created by the body of knowledge about infertility. Such subject positions serve to maintain the dominance of heterosexuality, biological kinship ties, the patriarchal nuclear family structure, and the concept of women's 'proper' sexual and social roles as predominantly procreative and mothering, respectively. Simultaneously, subject positions which challenge and can potentially subvert this dominant worldview are marginalised and denied power.

What I have attempted to demonstrate here is that the construction of specfic knowledge about infertility and reproduction is a highly political process involving the operation of power which ultimately maintains the dominance of current heterosexual social organisation. I attempted to show through the explanation of the discourses of 'social failure' and 'biological instinct' that representations of infertility are not simply about the benevolence of the medical profession, or childlessness, or the experience of infertility per se. Although these aspects are important in their own right, the significance of this analysis becomes apparent when they are taken as a whole. They then can be seen as regulating and limiting influences on the terms of reference for public debates and also shape community

attitudes and behaviours. They construct popular knowledge about appropriate and inappropriate sexual expression, family formation and social organisation. They construct perceptions of the moral and the immoral, the acceptable and the unacceptable, the 'natural' and the 'unnatural'. They define how we should view ourselves as women, and construct the importance of procreation in a woman's life. The popular representations used in the preceding analysis can be thought of as positioning a female subject, defining her reproductive needs and desires, and constructing her subjectivity through the concept of 'desperation' such that to be involuntarily childless in a heterosexual society is an untenable subject position. Regulation and self-disciplining through the use of technology to achieve a subject position compatible with the prescriptions of the particular discourses surrounding infertility then occur, and the power of the dominant regime of heterosexuality is maintained.

PART 9: SUMMARY AND CONCLUSIONS

The purpose of this essay has been to provide an analysis and discussion of the two major strands of feminist responses to the new reproductive technologies, namely reproductive liberalism and radical feminism. It was argued that the concepts of 'choice' and 'control' are central feminist values and have been used by both liberal and radical feminists over the last three decades to support women's right to abortion and contraception. These are seen as essential to women's reproductive freedom and women's liberation.

Reproductive liberals extend 'choice' and 'control' into their discussion on the NRTs arguing that reproductive technologies are liberating for women since they increase choice and control over reproductive destiny. Radical feminists disagree, arguing instead

that given the history of medical abuses of women the NRTs are merely another way in which men can gain control over women. Women lose control over their reproduction whereas male power over women is increased. Moreover, radical feminists argue that the 'choices' offered by reproductive technology are coercive and limit women's freedom, rather than increasing it. These perceptions come about because of the radical feminist belief in the existence of patriarchy. The concept of patriarchy was discussed as were the ways in which the medical profession is seen by radical feminists as being a patriarchal institution.

Having established the radical feminist basis for their critique, a comprehensive review of the literature was presented. In doing this I wanted firstly to provide an up-to-date review of most of the existing radical feminist literature. I felt it was necessary to provide an integrated overview dealing with the radical feminist position on all aspects of the NRTs since this, to my knowledge, was largely lacking in the current literature. My second aim in doing this was to examine the concepts of 'choice' and 'control' in order to see how radical feminists use these to arrive at vastly different conclusions about the NRTs compared with reproductive liberals. The focus of the review was women's rights, freedom and autonomy and the ways in which these are enhanced or restricted, depending on the standpoint adopted, that is, liberal or radical feminist. Strategies for radical feminist resistance were also presented.

Several key criticisms were identified with the radical feminist approach. The first of these related to the understanding of patriarchy as an all-encompassing and overpowering system of domination and oppression. Patriarchal institutions, of which

medicine was assumed to be one example, was said by radical feminists to have as their primary motivation the explicit control of women. Radical feminists perceive social relations to be a system of men dominating women in a non-reciprocal way. It was men who designed the NRTs with the goal of controlling women firmly in mind.

The way out of this medical system of oppression for women was for radical feminists to advocate for the prohibition of technology and to undermine the power of the medical profession by infiltrating conferences and obtaining information that could then be used to initiate public debate and reaction. Radical feminists also attempt to revalue reproduction, motherhood and womanhood by providing alternative definitions. However I argued that this solution merely sets up an equally oppressive system of naming and prescription which runs parallel with 'patriarchy' and does not confront or oppose it. The essentialism and biologism emerging from this concept of feminist separatism and politics I argued was fundamentally disempowering for women. I also argued against the insensitivity of radical feminists to the desires of infertile women.

In response to these identified problems with radical feminist theorising on the NRTs I argued that poststructuralism may provide some answers. In outlining the major benefits of poststructuralism I pointed out that as a theory, it allows feminists to move away from the 'conspiracy theory' espoused by radical feminists. Poststructuralism enables social relations to be conceptualised as the product of the discursive construction of subjectivity, rather than the reduction of social organisation to a 'women-versus-men' scenario. Poststructuralism opens up a new way of thinking which does not necessarily take the individual as the central focus. Rather,

specific discourses and their interaction with cultural practices produce the individual. It is only when one begins to analyse and understand the discursive construction of subjectivity that an understanding of behaviour becomes apparent. It is not a product of false consciousness, but is appropriate to the prescriptions of the particular dominant discourse and worldview.

In my analysis here I attempted to show how the discourses of 'social failure' and 'biological instinct' produce and legitimate 'desperation' and how these discourses intersect to articulate a subject position which coincides with the provision of medical technology. This is not merely coincidental, but is a product of the specifications of the popular and medical discourses surrounding infertility which make the conjunction of 'desperation' and technology inevitable. I also showed how the two discourses identified operated jointly to maintain the dominance of heterosexuality, marriage and the biological nuclear family.

The other main benefit of poststructuralism is the process of 'decentering the subject', a process that opens subjectivity up to change, freeing it from the limitations of the essentialism of humanist discourses, thus making subjectivity fluid rather than static. This concept is critical if feminism is going to progress because it allows for multiple subject positions to co-exist within the one social organisation, and the potential therefore for people to move between subject positions. This ability to move is critical to feminist resistance. In order to resist the dominant, an individual must be free to move to an alternative subject position from where alternative bodies of knowledge can be produced. It is when an increasing number of people can be attracted to take up this

alternative subject position that it can be used to confront and subvert the dominant.

A poststructuralist analysis in relation to the NRTs has been useful because it allows the identification of the discourses which support the current dominant social organisation of heterosexuality. However, by suggesting that such discourses are historically and culturally specific also makes them malleable and introduces the possibility for change which was clearly not an option under radical feminism. Radical feminists presumed that patriarchy and its institutions was continuous, universal and therefore basically immutable which left no possibility for social change, except in the sense of withdrawal from mainstream society into a feminist world of separatism. Analysing discourses and identifying ways in which these interact to produce and maintain dominant subject positions through specific processes of exclusion and inclusion gives an idea of how power and cultural practices are maintained. It also indicates how marginalised discourses are kept marginal. It is through working out these systems of inclusion and exclusion and the alternative concept of power offered by poststructuralist theory which are politically useful for feminist theory.

1. Radical feminists would argue here that the term 'surrogate mother' is misleading since it is actually the adopting wife who is surrogate. The so-called 'surrogate' is the actual mother but by denying her biological and emotional connections to the child, commercial surrogate contractors can more easily exploit and control women (see for example, Rowland, 1987).

2. A more humane approach would view the 'problems' of Third World poverty as caused largely by inequitable global resource distribution and capitalist exploitation of human resources, <u>not</u> as a problem specifically related to Third World female fertility.

3. A political agenda no doubt largely dictated by the West which has the capability to withdraw aid at any time.

4. These appear in no particular order.

5. This concept of female solidarity and commonality is clearly a necessary part of radical feminist politics and reading general radical feminist literature and understanding the notion of patriarchy makes it obvious why solidarity is necessary. However, being a cynic, I personally find it difficult to raise any more than quite vague feelings of empathy for, say, Indian women faced with forced sterilisation, although I can understand, in a small and unelaborate way the politics of the situation. I believe it is possible to theorise in a disengaged way about the circumstances of other women, but find it a quantum leap of logic to assume that because I am a woman that I will necessarily have access to the same range of experiences and knowledge as Indian women and that I must therefore feel unified with them in feminist solidarity.

6. A 'discourse' can be thought of as a historically and culturally specific set of organising principles, beliefs and structures which construct subjectivity. Because more than one discourse is in circulation at any one time, discourses compete for dominance in the construction of meaning and 'truth' in a process that involves conflict and power. Language, thought of as a system through which meanings are constituted, that is, the way in which people represent themselves and their understandings of the world, becomes the locus of this conflict. Discourses can be identified through reading and analysis of texts and documents.

7. Since Adelaide and Melbourne are the major IVF centres in Australia I decided to search 'The Advertiser' and 'The Age' because these are prominent newspapers in these cities and it could be assumed that they would therefore carry reports on developments in the NRTs, births and ethical and political debates. A 'Presscom' search for the years 1988 to the present was conducted using 'IVF', 'human fertilisation' and 'artificial insemination' as keywords. Years prior to 1988 were searched using the 'Australian Public Affairs Information Service' CD-ROM and also through a random search of newsprint on microfilm - this however was an extremely time-consuming process and is therefore not recommended as a search technique (there must be an easier way!!)

Endnotes

8. The exclusive focus on newspapers is not an attempt to discount the effect women's magazines, television and other media obviously have on the construction of subjectivity around issues such as motherhood, parenting and infertility. However, to have considered all these publications too, would have meant a thesis based primarily on the methods employed in cultural and popular studies. It was not my aim with this essay to use this methodology, but rather, to allow myself to begin to understand the main principles of liberalism, radical feminism and poststructuralism in the context of infertility and the NRTs. This, by necessity, allows me the space only to skim the issues and to work out their interconnections and limitations, rather than delve into the workings and application of one particular theory.

9. These were described in part 1, section 3 of this essay, entitled 'Infertility: personal and social implications'.

10. Because such descriptors appear frequently in most articles I read individual references have not been given.

Endnotes

REFERENCES

Andrews, Lori. (1986). 'My Body, My Property', The Hastings Center Report, October, 28-37.

Andrews, Lori. (1987). 'Feminist perspectives on new reproductive technologies', in Briefing Handbook: Reproductive Laws for the 1990s. Women's Rights Litigation Clinic, and Institute for Research on Women, Rutgers Law School, Newark, New Jersey.

Anon. (1990). 'World-first IVF technique activates dud sperm', The Advertiser, May 24.

Anon. (1992). 'Sperm transfer breakthrough for childless', The Advertiser, February 8.

Anon. (1994a). 'Phoebe: made in America', The Advertiser, September 20.

Anon. (1994b). 'Aussie leads world in human egg storage', The Advertiser, June 30.

Arditti, Rita, Klein, Renate & Minden, Shelley. (1989). 'Introduction', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 1-7.

Arms, Suzanne. (1975). Immaculate Deception. New York: Houghton Mifflin.

Armstrong, Ada. (1982). 'The needs of infertile people and the place of a self-help initiative in Western Australia', in P. Harper & J. Aitken (eds.), National Workshop on Infertility: Report of Proceedings. Melbourne: Institute of Family Studies, pp. 15-18.

Australian Consumers' Association (1989). 'IVF: a plea for honesty', Choice Magazine, October, 17-25.

Bartels, Ditta. (1987). 'High failure rates in IVF treatments', Medical Journal of Australia, 147, 474-475.

Bartels, Ditta. (1988). 'Built-in obsolescence: women, embryo production, and genetic engineering', Reproductive and Genetic Engineering, 1(2), 141-152.

Bartky, Sandra. (1988). 'Foucault, femininity and the modernization of patriarchal power', in I. Diamond & L. Quinby, (eds.), Feminism and Foucault. Boston: Northeastern University Press.

Baruch, Elaine & D'Adamo, Amadeo. (1985). 'Resetting the biological clock: women and the new reproductive technologies', Dissent, 32, 273-276.

Beauchamp, Tom & Childress, James. (1983). Principles of Biomedical Ethics. New York: Oxford University Press.

Beagan, Brenda. (1989). 'Jargon, myth and fetishes: language use and the new reproductive technologies', RFR, 18(4), 4-9.

Behuniak-Long, Susan. (1990). 'Radical conceptions: reproductive

technologies and feminist theories', Women and Politics, 10(3), 39-64.

Bell, Susan. (1984). 'Birth control', in Boston Women's Health Book Collective, (eds.), The New Our Bodies, Ourselves. New York: Simon and Schuster, pp. 220-262.

Berry, Aileen. (1982). 'Egg donor move by test tube baby team', The Age, May 24.

Bleier, Ruth. (1984). Science and Gender. New York: Pergamon.

Brennan, Jan & Brennan, Len. (1982). 'Case Study: becoming IVF parents', in M. Brumby, (ed.), Proceedings of the Conference "In Vitro Fertilization: problems and possibilities". Victoria: Monash University Centre for Human Bioethics, pp. 12-16.

Bunkle, Phillida. (1984). 'Calling the shots? The international politics of Depo-Provera', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 165-187.

Butcher, Andrew. (1995). 'Baby boomers of the laboratory', The Advertiser, February 24.

Butcher, Andrew & Hailstone, Barry. (1995). 'Infertile couples boost: breakthrough for infertile couples', The Advertiser, February 23.

Chodorow, Nancy. (1978). The Reproduction of Mothering. Berkeley: University of California Press.

Clarke, Adele. (1984). 'Subtle forms of sterilization abuse: a reproductive rights analysis', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 188-212.

Connon, Aileen & Kelly, Phillippa. (1984). Report of the Working Party on In Vitro Fertilisation and Artificial Insemination by Donor. Adelaide: South Australian Health Commission.

Cooper, Susan & Glazer, Ellen. (1994). Beyond Infertility: the new paths to parenthood. New York: Lexington Books.

Corea, Gena. (1977). The Hidden Malpractice: How American Medicine Mistreats Women. New York: Harper and Row.

Corea, Gena. (1985a). The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs. New York: Harper and Row.

Corea, Gena. (1985b). 'How the new reproductive technologies could be used to apply the brothel model of social control over women', Women's Studies International Forum, 8(4), 299-305.

Corea, Gena, Hanmer, Jalna, Klein, Renate, Raymond, Janice & Rowland, Robyn. (1987). 'Prologue', in P. Spallone & D. Steinberg, (eds.), Made To Order: The Myth of Reproductive and Genetic Progress. New York: Pergamon, pp. 1-12.

Corea, Gena. (1988). 'What the king can not see', in E. Baruch, A.

D'Adamo & J. Seager, (eds.), Embryos, Ethics and Women's Rights: Exploring the New Reproductive Technologies. New York: The Haworth Press, pp. 77-93.

Crowe, Christine. (1985a). ' "Women want it": IVF and women's motivations for participation', Women's Studies International Forum, 8(6), 547-552.

Crowe, Christine. (1985b). 'The reproductive fix', Australian Left Review, Autumn, 4-9.

Crowe, Christine. (1987). ' "Women want it": IVF and women's motivations for participation', in P. Spallone & D. Steinberg, (eds.), Made To Order: The Myth of Reproductive and Genetic Progress. New York: Pergamon, pp. 84-93.

Daly, Mary. (1978). Gyn/Ecology: The Metaethics of Radical Feminism. Boston: Beacon Press.

Davis, Angela. (1981). Women, Race and Class. New York: Random House.

Deb, Karen. (1994). 'A chance to create a life', The Advertiser, September 2.

Degener, Theresia. (1990). 'Female self-determination between feminist claims and "voluntary" eugenics, between "rights" and ethics', Issues in Reproductive and Genetic Engineering, 3(2), 87-99.

Delphy, Christine. (1984). Close To Home. London: Hutchinson.

Donchin, Anne. (1986). 'The future of mothering: reproductive technology and feminist theory', Hypatia, 1(2), 121-137.

Dreifus, Claudia. (1977). Seizing Our Bodies: The Politics of the Women's Health Movement. New York: Random House.

Dworkin, Andrea. (1981). Pornography: Men Possessing Women. New York: Perigree Books.

Dworkin, Andrea. (1983). Right-Wing Women. New York: Perigree Books.

Ehrenreich, Barbara & English, Deidre. (1978). For Her Own Good: 150 Years of the Experts' Advice to Women. New York: Anchor Books.

Firestone, Shulamith. (1970). The Dialectic of Sex: The Case for Feminist Revolution. New York: Bantam Books.

Foucault, Michel. (1981). The History of Sexuality, Vol. 1. Harmondsworth: Penguin.

Fox-Keller, Evelyn. (1985). Reflections on Gender and Science. New Haven: Yale University Press.

Gilligan, Carol. (1982). In a Different Voice. Cambridge, MA.: Harvard University Press.

Goldman, Anita. (1989). 'The production of eggs and the will of god', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women:

What Future for Motherhood? London: Pandora, pp. 67-74.

Griffin, Susan. (1978). Woman and Nature: The Roaring Inside Her New York: Harper and Row.

Groth, Sylvia. (1987). 'Conference Report: Antigena' Off Our Backs, February, 22.

Gupta, Jyotsna. (1991). 'Women's bodies: the site for the ongoing conquest by reproductive technologies', Issues in Reproductive and Genetic Engineering 4(2), 93-107.

Gupta, Ranjan. (1981). 'Jibes put test-tube baby pioneer on path to suicide', Sydney Morning Herald June 26.

Hailstone, Barry. (1992). 'Hatching a dream', The Advertiser, March 13.

Hailstone, Barry. (1993). 'Childless couples new hope' The Advertiser, July 7.

Halpin, Zuleyma. (1989). 'Scientific objectivity and the concept of "the other"', Women's Studies International Forum 12(3), 285-294.

Hampshire, Susan. (1984). The Maternal Instinct. London: Sidgwick & Jackson Ltd.

Hanmer, Jalna & Allen, Pat. (1980). 'Reproductive engineering: the final solution?', Feminist Issues, 2, 53-75.Hanmer, Jalna & Allen, Pat. (1980). 'Reproductive engineering: the final solution?', Feminist Issues, 2, 53-75.

Hanmer, Jalna. (1983). 'Reproductive technology: the future for women?', in J. Rothschild, (ed.), Machina Ex Dea: Feminist Perspectives on Technology New York: Pergamon, pp. 183-197.

Hanmer, Jalna. (1987). 'Reproduction trends and the emergence of moral panic', Social Science and Medicine 25(6), 697-704.

Hartmann, Betsy. (1987). Reproductive Rights and Wrongs: The Global Politics of Population Control and Contraceptive Choice New York: Harper and Row.

Henry, Alice. (1987). 'Conference Report: Reproductive Technology', Off Our Backs, February, 12-13.

Hicks, Ron. (1980). 'Australia leads world in "test-tube" baby techniques', The Bulletin, December 23-30.

Holmes, Helen. (1989). 'Hepatitis - yet another risk of in vitro fertilization?', Reproductive and Genetic Engineering 2(1), 29-37.

Hoskins, Betty & Holmes, Helen. (1984). 'Technology and prenatal femicide', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 237-255.

Hubbard, Ruth. (1985). 'Prenatal diagnosis and eugenic ideology', Women's Studies International Forum 8(6), 567-576.

Huxley, Aldous. ([1932]1994). Brave New World. London: Flamingo.

Kamal, Sultana. (1987). 'Seizure of reproductive rights?: a discussion on population control in the Third World and the emergence of the new reproductive technologies in the West', in P. Spallone & D. Steinberg, (eds.), Made to Order: The Myth of Reproductive and Genetic Progress. New York: Pergamon Press, pp. 146-153.

Kaufmann, Karen. (1985). 'The ethics of IVF: old whines in new test tubes?' Proceedings from "The morals of baby making: ethical issues of reproductive technologies" conference, October, 25-26, University of San Francisco. Women's Studies International Forum, 9(1), ii-iv.

Kirejczyk, Marta. (1990). 'A question of meaning? Controversies about the new reproductive technologies in the Netherlands', Issues in Reproductive and Genetic Engineering, 3(1), 23-33.

Klein, Renate. (1988). 'Genetic and reproductive engineering: the global view', in J. Scutt, (ed.), The Baby Machine: Commercialisation of Motherhood. Carlton,Vic.: McCulloch Publishing, pp. 235-273.

Klein, Renate. (ed.) (1989). Women Speak Out About Their Experiences of Reproductive Medicine. London: Pandora.

Klein, Renate & Rowland, Robyn. (1989). 'Hormonal cocktails: women as test-sites for fertility drugs', Women's Studies International Forum, 12(3), 333-348.

Klein, Renate. (1990). 'IVF research: a question of feminist ethics', Issues in Reproductive and Genetic Engineering, 3(3), 243-251.

Klein, Renate & Hawthorne, Susan. (1991). 'Introduction', in S. Hawthorne & R. Klein, (eds.), Angels of Power and Other Reproductive Creations. Melbourne: Spinifex Press, pp. vii-xi.

Koch, Lene. (1990). 'IVF: an irrational choice?', Issues in Reproductive and Genetic Engineering, 3(3), 235-242.

Koval, Ramona & Scutt, Jocelynne. (1988). 'Genetic and reproductive engineering - all for the infertile?', in J. Scutt, (ed.), The Baby Machine: Commercialisation of Motherhood. Carlton, Vic.: McCulloch Publishing, pp. 33-57.

Kozolanka, Kirsten. (1989). 'Giving up: the choice that isn't', in R. Klein, (ed.), Infertility: Women Speak Out About Their Experiences of Reproductive Medicine. London: Pandora, pp. 121-130.

Laborie, Françoise. (1988). 'New reproductive technologies: news from France and elsewhere', Reproductive and Genetic Engineering, 1(1), 77-85.

Lauritzen, Paul. (1990). 'What price parenthood?', The Hastings Center Report, 20, 38-46.

Lippman, Abby. (1992). 'Mother matters: a fresh look at prenatal genetic testing', Issues in Reproductive and Genetic Engineering, 5(2), 141-154.

Lingam, Lakshmi. (1990). 'New reproductive technologies in India', Issues in Reproductive and Genetic Engineering, 3(1), 13-21.

Lloyd, Genevieve. (1984). The Man of Reason. Minneapolis: University of Minnesota Press.

Longino, Helen. (1988). 'Review Essay: Science, objectivity, and feminist values', Feminist Studies, 14(3), 561-574.

Lorber, Judith. (1989). 'Choice, gift or patriarchal bargain?: women's consent to IVF in male infertility', Hypatia, 4, 23-26.

Luthra, Rashmi. (1993). 'Toward a reconceptualization of "choice": challenges by women at the margins', Feminist Issues, Spring, 41-54.

Mackinnon, Catherine. (1983). 'Feminism, Marxism, method and the state: an agenda for theory', Signs, 7, 515-544.

Mackinnon, Catherine. (1977). Feminism Unmodified: Discourses in Life and Laws. Harvard: Cambridge University Press.

Maddocks, Pamela. (1982). 'A nursing insight into infertility', in P. Harper & J. Aitken (eds.), National Workshop on Infertility: Report of Proceedings. Melbourne: Institute of Family Studies, pp.12-14.

Martin, Biddy. (1988). 'Feminism, criticism and Foucault', in I. Diamond & L. Quinby, (eds.), Feminism and Foucault. Boston: Northeastern University Press.

McIntosh, Philip. (1985). 'New test tube method a spur to twin births, says doctor', The Age, November 20.

McWhinnie, Alexina. (1986). 'Test-tube babies - the child, the family and society', in S. Fishel & E. Symonds, (eds.), In Vitro Fertilisation: past, present, future. Oxford: IRL Press, pp. 215-227.

Menning, Barbara. (1980). 'The emotional needs of infertile couples', Fertility and Sterility, 34(4), 313-319.

Metherell, Mark. (1983). 'Embryo team presses on', The Age, July 18.

Mies, Maria. (1988). 'From the individual to the dividual: in the supermarket of reproductive alternatives', Reproductive and Genetic Engineering, 1(3), 225-237.

Mies, Maria. (1985). ' "Why do we need all this?": a call against genetic engineering and reproductive technology', Women's Studies International Forum, 8, 553-650

Miller, Calvin. (1985) 'Frozen ova may help end dilemma', The Age, March 7.

Millett, Kate. ([1969] 1977). Sexual Politics. London: Virago.

Minden, Shelley. (1985). 'Patriarchal designs: the genetic engineering of human embryos', Women's Studies International Forum, 8(6), 561-565.

Moen, Elizabeth. (1991). 'Sex selective eugenic abortion: prospects in India and China', Issues in Reproductive and Genetic Engineering, 4(3), 231-249.

Morgan, Robin. (1978). Going Too Far. New York: Vintage Books.

Mosher, Stephen. (1984). 'The truth about China', The National Times (Australia), 2-8 March, 25-29.

Murray, Judith. (1988). When the Dream is Shattered. Adelaide: Lutheran Publishing House.

Napier, Lindsay. (1984). 'The emotional impact of infertility: a personal view', Healthright, 3(2), 31-32.

National Perinatal Statistics Unit/Fertility Society of Australia. (1984). In-vitro Fertilization Pregnancies, Australia, 1980-1983. Sydney: NPSU.

National Perinatal Statistics Unit/Fertility Society of Australia. (1985). In-vitro Fertilization Pregnancies, Australia and New Zealand, 1979-1984. Sydney: NPSU.

National Perinatal Statistics Unit/Fertility Society of Australia. (1987). In-vitro Fertilization Pregnancies, Australia and New Zealand, 1979-1985. Sydney: NPSU.

Need, Jillian. (1982). 'Psycho-social aspects of infertility: how the medical profession sees treatment affecting people', in P. Harper & J. Aitken (eds.), National Workshop on Infertility: Report of Proceedings. Melbourne: Institute of Family Studies, pp. 8-11.

Newill, Robert. (1974). Infertile Marriage. Harmondsworth: Penguin.

Nunn, Louise. (1993). 'Infertility: changing the odds', The Advertiser, March 30.

O'Brien, Mary. (1981). The Politics of Reproduction. Boston: Routledge and Kegan Paul.

O'Keefe, Marcia. (1992). 'IVF and cancer: a personal experience', Issues in Reproductive and Genetic Engineering, 5(2), 137-140.

Orenberg, Cynthia. (1981). DES: the complete story. New York: St. Martin's Press.

Overall, Christine. (1986). 'Reproductive ethics: feminist and non-feminist approaches', Canadian Journal of Women and the Law, 1(2), 271-278.

Parry, Ross. (1995). 'Oh brother, they're quads', The Advertiser, April 7.

Patel, Vibhuti. (1989). 'Sex determination and sex preselective tests in India: recent techniques in femicide', Reproductive and Genetic Engineering, 2(2), 111-119.

Petchesky, Rosalind. (1980). 'Reproductive freedom: beyond "a woman's right to choose" ', Signs, 5, 661-685.

Petchesky, Rosalind. (1984). Abortion and Women's Choice: The State, Sexuality and Reproductive Freedom. New York: Longman.

Pfeffer, Naomi & Woollett, Anne. (1983). The Experience of Infertility. London: Virago.

Phillips, Karen. (1994). 'Making babies', The Advertiser, July 2.

Rapp, Rayna. (1984). 'XYLO: a true story', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 313-328.

Raymond, Janice. (1990). 'Of ice and men: the big chill over women's reproductive rights', Issues in Reproductive and Genetic Engineering, 3(1), 45-50.

Raymond, Janice. (1991). 'International traffic in reproduction', MS., May/June, 28-33.

Raymond, Janice. (1994). Women as Wombs: Reproductive Technologies and the Battle Over Women's Freedom. Melbourne: Spinifex.

Reddy, Muriel. (1988). 'The baby makers', The Advertiser, July 2.

Rich, Adrienne. (1979). On Lies, Secrets and Silence: Selected Prose, 1966-1978. New York: W.W. Norton and Co.

Rich, Adrienne. (1976). Of Woman Born: Motherhood as Experience and Institution. New York: W.W. Norton and Co.

Robertson, John. (1983). 'Procreative liberty and the control of conception, pregnancy and childbirth', Virginia Law Review, 69, 405-462.

Robertson, John. (1986). 'Embryos, ethics and procreative liberty: the legal structures of the new reproduction, Southern California Law Review, 59, 942-1041.

Robertson, John. (1988). 'Procreative liberty, embryos, and collaborative reproduction: a legal perspective', in E. Baruch & A. D'Adamo, (eds.), Embryos, Ethics and Women's Rights: Exploring the New Reproductive Technologies. New York: The Haworth Press, pp. 179-194.

Roggencamp, Viola. (1989). 'Abortion of a special kind: male sex selection in India', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 266-278.

Rothman, Barbara Katz. (1984). 'The meanings of choice in reproductive technology', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 23-33.

Rothman, Barbara Katz. (1986). The Tentative Pregnancy: Prenatal Diagnosis and the Future of Motherhood. New York: Viking.

Rowland, Robyn. (1984). 'Reproductive technologies: the final solution to the woman question?', in R. Arditti, R. Klein & S. Minden, (eds.), Test-Tube Women: What Future for Motherhood? London: Pandora, pp. 356-369.

Rowland, Robyn. (1985a). 'A child at any price?: an overview of the

issues in the use of the new reproductive technologies, and the threat to women', Women's Studies International Forum, 8(6), 539-546.

Rowland, Robyn. (1985b). 'Motherhood, patriarchal power, alienation and the issue of 'choice' in sex preselection', in G. Corea, R. Klein, J. Hanmer, et al., Man-Made Women: How the New Reproductive Technologies Affect Women. London: Hutchinson, pp. 74-87.

Rowland, Robyn. (1987). 'Technology and motherhood: reproductive choice reconsidered', Signs, 12(3), 512-528.

Rowland, Robyn & Klein, Renate. (1990). 'Radical feminism: critique and construct', in S. Gunew, (ed.), Feminist Knowledge: Critique and Construct. London: Routledge, pp. 271-303.

Rowland, Robyn. (1991). 'Decoding Reprospeak', MS., May-June, 38-41.

Rufford, Nick. (1994). 'China tries to purify its population', The Australian, Tuesday, 7th February, p. 8.

Schei, Berit. (1992). 'The routine use of ultrasound in antenatal care: is there a hidden agenda?', Issues in Reproductive and Genetic Engineering, 5(1), 13-20.

Scher, Geoffrey, Marriage, Virginia & Stoess, Jean. (1988). From Infertility to In Vitro Fertilization: a personal and practical guide to making the decision that could change your life. New York: McGraw-Hill.

Scutt, Jocelynne. (1992a). 'The right to say yes: the ethics of consent to medical treatment', Issues in Reproductive and Genetic Engineering, 5(2), 183-194.

Scutt, Jocelynne. (1992b). 'A question of choice?: IVF and the politics of coercion', Issues in Reproductive and Genetic Engineering, 5(3), 265-273.

Scutt, Jocelynne. (1991). 'Infertility, sexuality and health: toward a new world for women', Issues in Reproductive and Genetic Engineering, 4(1), 17-26.

Snitow, Ann. (1986). 'The paradox of birth technologies: exploring the good, the bad, and the scary', MS., 15, 42+.

Spender, Dale. (1980). Man-Made Language. London: Routledge and Kegan Paul.

Spivak, Gayatri. (1984/5). 'Criticism, feminism and the institution', Thesis Eleven, 10/11, 175-88.

Steigrad, Stephen. (1982). 'Effect of investigation and treatment of infertility on patients and family', in P. Harper & J. Aitken (eds.), National Workshop on Infertility: Report of Proceedings. Melbourne: Institute of Family Studies, pp. 5-7.

Steinberg, Deborah. (1990). 'The depersonalisation of women through the administration of *in vitro* fertilisation', in M. McNeil, I. Varcoe & S. Yearley, (eds.), The New Reproductive Technologies. Basingstoke: Macmillan, pp. 74-122.

St. Peter, Christine. (1989). 'Feminist discourse, infertility and reproductive technologies', NWSA Journal, 1(3), 353-367.

Thom, Mary. (1988). 'Special Report: dilemmas of the new birth technologies', MS., May, 70-76.

Vanderwater, Bette. (1992). 'Meanings and strategies of reproductive control: current feminist approaches to reproductive technologies', Issues in Reproductive and Genetic Engineering, 5(3), 215-230.

Warnock, Mary. (1984). Report of the Committee of Inquiry into Fertilisation and Embryology. London: HMSO.

Weedon, Chris. (1987). Feminist Practice and Poststructuralist Theory. Cambridge, MA.: Blackwell.

Weideger, Paula. (1988). 'Womb worship: are we once again reproaching women who aren't mothers?', MS., February, 54-57.

Whitlock, Fiona. (1985). 'Australia's IVF teams lead the world', Weekend Australian Magazine, August 17-18.

Williams, Linda. (1990). 'Wanting children badly: a study of Canadian women seeking in vitro fertilization and their husbands', Issues in Reproductive and Genetic Engineering, 3(3), 229-234.

Williams, Nadine. (1995). 'Stop to surrogate-mother baby trade with US urged', The Advertiser, March 21.

Woliver, Laura. (1991). 'The influence of technology on the politics of motherhood: an overview of the United States', Women's Studies International Forum, 14(5), 479-490.

Woliver, Laura. (1989). 'The deflective power of reproductive technologies: the impact on women', Women and Politics, 9(3), 17-47.

Wood, Carl. (1981). 'Foreword', in C. Wood, J. Leeton & G. Kovacs, (eds.), Artificial Insemination by Donor. Melbourne: Brown, Prior & Anderson Pty. Ltd., pp. 8-9.

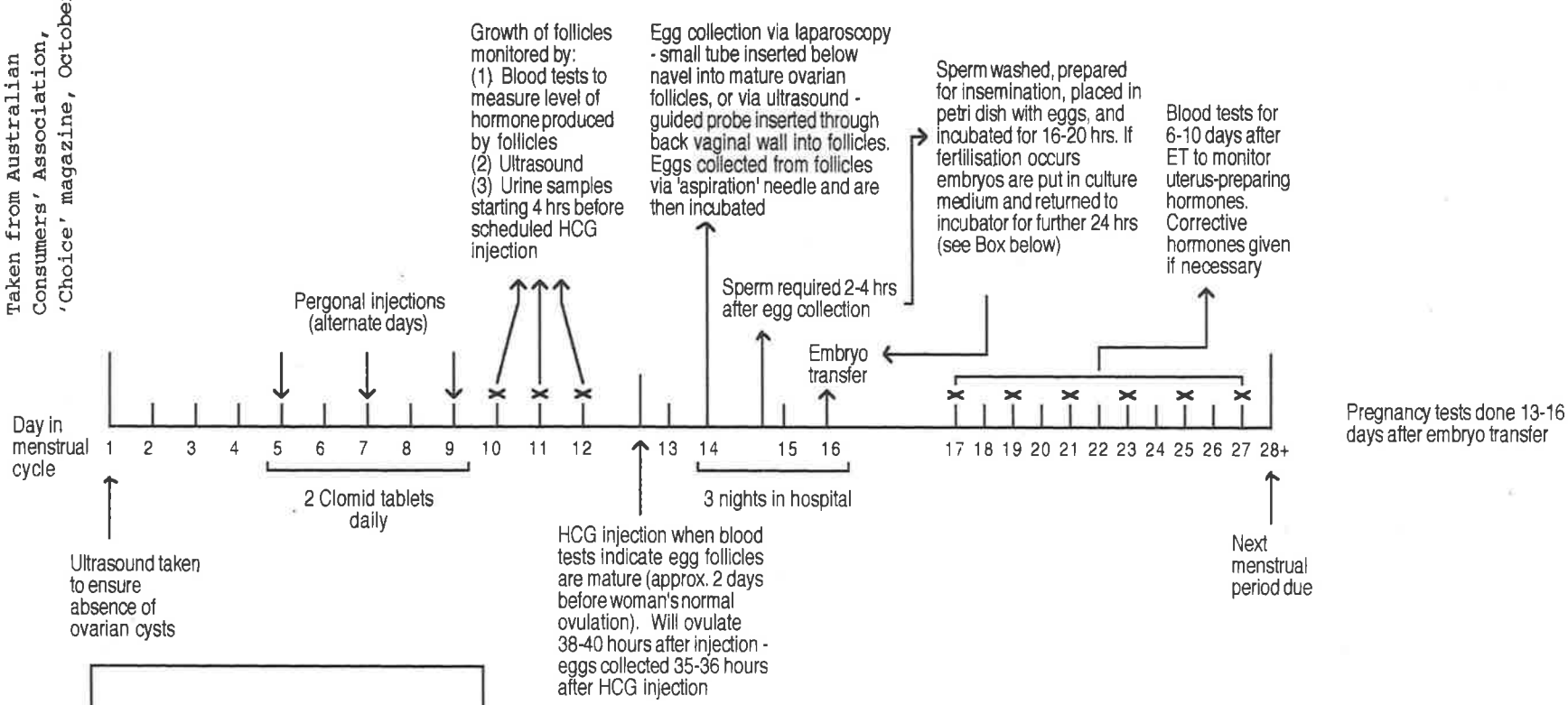
Wood, Carl. (1985). 'In vitro fertilisation - the procedure and future development', New Doctor, 33, 19-22.

Woods, Nancy, Olshansky, Ellen & Draye, Mary Ann. (1991). 'Infertility: women's experiences', Health Care for Women International, 12, 179-190.

Zimmerman, Jan. (1986). Once Upon the Future: A Woman's Guide to Tomorrow's Technology. London: Pandora.

APPENDIX A: Schematic of the in vitro fertilisation (IVF) procedure

Taken from Australian Consumers' Association, 'Choice' magazine, October, 1989.



Variations on the IVF procedure

GIFT (Gamete Intrafallopian Transfer): ovary stimulated, eggs collected via laparoscopy. Prepared sperm are injected along with 3-4 eggs into the end of the Fallopian tube. Fertilisation and embryo implantation processes are expected to occur normally

ZIFT (Zygote Intrafallopian Transfer): Eggs fertilised in the laboratory and are transferred to woman's Fallopian tube (rather than the uterus) 24 hrs after fertilisation.

GLOSSARY OF TERMS

AID
(See 'artificial insemination')

AIH
(See 'artificial insemination')

Amenorrhea
This is the absence of menstruation sometimes caused by using the Pill.

Amniocentesis
First developed in India in 1975 this is a process in which 15-20ml of amniotic fluid is extracted to detect any chromosomal abnormalities in the foetus. It is generally carried out in the 18-20th weeks of pregnancy (second trimester). It is also able to detect the sex of the foetus and in countries where femicide is practiced it is often accompanied by abortion if the foetus is female. Spontaneous abortions and scars on the bodies of children born after amniocentesis have been reported.

Anovulation
Absence of ovulation.

Antenatal ultrasound
(See 'ultrasound')

Artificial insemination (AI)
This is a simple procedure whereby sperm is placed in the vagina as close to the cervix as possible. AIH uses husband's sperm; AID uses donor sperm.

Aspiration
Term used commonly in IVF procedures referring to the removal of eggs by suction - either naturally through the action of the Fallopian tube(s) or medically through laparoscopy.

Azospermia
Type of male infertility in which there is a complete lack of sperm in the ejaculated semen.

Buserelin
An artificially manufactured agonist of LH-RH which in effect stops a woman's natural ovulation cycle.

Chorionic villus biopsy (CVB)
Technique designed to detect chromosomal abnormalities in the embryo (for example Down's Syndrome, thalassemia, haemophilia). It is generally used at the 9-10th week of pregnancy and claims to be less harmful to both the pregnant woman and the foetus than amniocentesis. Its main advantage over amniocentesis is that it allows for the earlier detection of any defects and thus makes selective abortion easier since the pregnancy is in its first trimester (a second trimester abortion resembles premature labour and is painful and distressing for the woman involved). It can also detect the sex of the foetus and is often accompanied by selective abortion.

Clitoridectomy
Traditional African ritual involving mutilation of female genital

organs.

Clomid/Serophene
Trade names of the drug 'clomiphene citrate' used in the IVF procedure to stimulate ovulation.

Cloning
This involves a process of embryo division in which the four-celled embryo is separated into individual cells. This potentially allows for the development of four identical individuals. This has not yet been used on humans.

Couvade
Primitive custom whereby a husband fakes illness in order to be allowed to be in bed with his wife during her processes of labour and childbirth.

Cryopreservation
(See 'embryo freezing')

Decapeptyl
An artificially manufactured agonist of LH-RH which in effect stops a woman's natural ovulation cycle.

Depo-Provera
Injectable contraceptive mostly used under coercive circumstances in Third World countries, but is also still prescribed for racial minorities and lower economic status women in the 'developed' countries who are thought to be problematic breeders. It is a long-acting contraceptive (1-3 months for a single dose). Once injected, women lose control over their fertility. Side-effects include the increased chances of limb defects and chromosomal abnormalities in children of women exposed to the drug.

Diethylstilbestrol (DES)
A drug given to pregnant women mainly during the 1940's through 60's to prevent miscarriage. It is now known to cause cancer and infertility in children of women exposed to the drug and does not assist in the prevention of miscarriage.

Ectogenesis
This allows for the conception and gestation of an embryo completely outside a woman's womb via an artificial placenta. This has not yet been done in its entirety.

Ectopic pregnancy
An often dangerous pregnancy which occurs in the Fallopian tube(s) rather than in the uterus. It can therefore never be carried to term and consequently requires surgical removal which leads in all cases to the loss of the Fallopian tube(s).

Egg recovery
Also known as 'egg pick-up' or 'egg retrieval' this process involves the insertion of an ultrasound-guided probe through the vagina where a needle is passed through the vaginal wall into the follicles on the ovaries. Each follicle is punctured, aspirated and flushed out several times with fluid. The eggs are then passed through the probe where they can then be fertilised via a range of techniques. This process is allegedly painless although this point is debatable.

Electronic foetal monitoring (EFM)
Ultrasound monitors the heartbeats of the foetus as it responds to its own movements or movements of the womb. These traces can be charted on a print-out or represented as a visual image.

Embryo biopsy
Involves the removal and testing of one cell of the 4-celled embryo in order to detect genetic defects before the embryo is implanted into the woman's uterus. If it appears to be normal the remaining 3-celled embryo is implanted. It is a procedure usually only carried out with couples known to be at risk of producing an abnormal embryo.

Embryo flushing
This is a technique in which the embryos produced inside the woman's body (usually after superovulation and artificial insemination), are flushed out with fluid via laparoscopy before they attach themselves to the wall of the uterus. The embryos can then be reimplanted into another woman's uterus.

Embryo freezing
An embryo is frozen in liquid nitrogen at a temperature of -196^{0}C. The embryo can be thawed at a later date and implanted into a woman's womb where it can be carried to term. Medical literature cites this technique as being a kind of 'insurance policy' against future infertility. Gametes can also be frozen in the same way.

Embryo lavage
(See 'embryo flushing')

Embryo transfer (ET)
A technique in which an embryo generated either in a woman's womb or through IVF is implanted into the womb of a second woman via a catheter passed through the cervix.

Foetal reduction
A form of *in utero* abortion used in cases where a woman has become pregnant with multiple foetuses due to the use of fertility drugs and/or the implantation of multiple embryos during IVF. Potassium chloride is inserted into the foetal chest cavity via an ultrasound-guided needle which causes death by heart failure. The dead foetuses are eventually absorbed back into the woman's body. This process however can cause infections, bleeding, premature labour or the loss of all developing foetuses.

Foetus
Fully developed baby in womb.

Follicle stimulating hormone (FSH)
This is a hormone produced by the pituitary gland which controls growth of the ovarian follicles and the maturation of egg cells. It works in conjunction with LH-RH and enables the release of a mature egg from the ovarian follicle.

Gamete intrafallopian transfer (GIFT)
A variation on the usual IVF procedure in which a woman's ovulation is stimulated and the resultant eggs retrieved via laparoscopy. Two or three eggs are placed in a catheter, followed by a bubble of air, then some sperm. This mixture is then introduced into the Fallopian tube(s) under anaesthetic where fertilisation can then occur. This is a type of *in vivo* fertilisation.

Gametes
Eggs and sperm.

Genetic engineering
Processes whereby the genetic make-up of the embryo can be altered by the insertion of cloned material, or the manipulation of existing genes.

Human chorionic gonadotrophin (HCG)
This is a hormone produced by the embryo and later the placenta. It can be extracted from the urine of pregnant women and is used during IVF and GIFT to induce ovulation at a precise time.

Human menopausal gonadotrophin (HMG)
Also known as human pituitary gonadotrophin. This is a hormone-based superovulant obtained from the pituitary glands of cadavers or through the urine of postmenopausal women. It controls reproductive activity and is used during IVF in order to stimulate the production of more than one egg per cycle. It has been linked to the deaths of two women in Australia from a rare degenerative disease (Creutzfeld-Jacob Disease). Its commercial trade name is 'Pergonal'.

Human pituitary gonadotrophin (HPG)
(See 'Human menopausal gonadotrophin')

Hysterectomy
Surgical removal of the uterus.

Iatrogenic injury
Injury or damage caused through medical procedures or surgical interventions.

Idiopathic infertility
Female and male infertility for which causes cannot be found.

Intracytoplasmic sperm injection (ICSI)
A newly developed technique involving the injection of a single sperm into the egg cell in order to facilitate fertilisation. This overcomes the difficulty of poor sperm motility and the problems associated with MIST.

Intrauterine device (IUD)
A contraceptive device inserted into the uterus generally made of plastic or metal.

In vitro fertilisation (IVF)
Initially developed as a medical 'solution' for women with blocked or missing Fallopian tubes or idiopathic infertility, its use has been expanded to counteract male subfecundity. It may also incorporate the use of donor gametes. IVF involves several steps which are outlined in Appendix A.

Laparoscope
A very thin fibre-optic viewing tube inserted through a small incision in the abdomen during the process of laparoscopy.

Laparoscopy
A surgical procedure in which three incisions are made into the woman's abdomen through which a laparoscope, forceps and a teflon-coated needle can be inserted. The woman's ovaries are held with the

forceps while the aspiration device is inserted into each follicle to extract the eggs. The laparoscope is used to examine the woman's reproductive organs and to visualise the egg extraction process. (See also 'ultrasound directed oocyte recovery').

Leutinising hormone releasing hormone (LH-RH)
A naturally occurring hormone which stimulates ovulation. Artificially manufactured agonists to LH-RH (namely 'Buserelin' and 'Decapeptyl') stop this natural cycle which allows for the total external control of ovulation induction through chemical means. The main benefit is that a woman's cycle can be regulated and therefore also manipulated to fit into tight medical schedules. Before creating the 'blocking effect' on the woman's cycle however, these LH-RH agonists may have the opposite effect, that is they may induce the production of LH-RH. This may create a dangerous process of 'flare-up' which has been noted to cause ovarian cysts.

Microinsemination by sperm transfer (MIST)
Recently developed procedure in which multiple sperm are injected into the egg cell in order for fertilisation to occur. It was a technique designed to overcome male infertility caused through poor sperm motility.

Net-En
Injectable contraceptive mostly used under coercive circumstances in Third World countries. Like Depo-Provera it is a long-acting contraceptive (1-3 months for a single dose). Once injected women lose control over their fertility. Uncontrollable bleeding is a common side-effect with other dangers including carcinogenicity and the possible impairment of future reproductive functioning.

Norplant
Implanted contraceptive used mainly in the Third World. It consists of 6 capsules containing an ovulation-inhibiting hormone which are implanted under the skin of the upper arm which are very long-acting (5 years). After this time they have to be surgically removed. This process is often made difficult because fibrous tissue grows around each capsule which then has to be 'dug out' individually. Side-effects include prolonged bleeding, ovarian cysts, nausea, disrupted menstrual cycles, depression and weight gain.

Oligospermia
A cause of male infertility - a low sperm count.

Oocyte
Egg.

Partial preventative termination
This is virtually the same as foetal reduction and is used to reduce the numbers of developing foetuses in the womb.

Pelvic inflammatory disease (PID)
This often causes blocked Fallopian tube(s) and thus infertility and is usually linked to the prior use of an IUD.

Pergonal
This drug is similar to Clomid and is used for superovulation of women during IVF and other related treatments. Also known as HMG or HPG. (See Appendix A).

Preimplantation diagnosis
(See 'embryo biopsy')

Pregnancy
There are three main stages of pregnancy - the first is from conception to 12 weeks; the second is from 12 weeks to viability; and the third is from viability to birth.

Prenatal diagnosis
Includes techniques such as amniocentesis and CVB often accompanied by selective abortion.

Pronuclear stage ovum transfer (PROST)
This is the same procedure as zygote intrafallopian transfer (ZIFT).

Reduction operation
The same as foetal reduction.

Selective abortion
Often used in conjunction with prenatal diagnosis and sex selection techniques generally to remove either damaged or female foetuses.

Sex selection
(See 'amniocentesis', 'chorionic villus biopsy', and 'embryo biopsy')

Spina bifida
Congenital condition in which the protective membranes surrounding the spinal cord protrude through the gaps in the backbone.

Superovulation
Synthetic drugs (Pergonal, Clomid) or other fertility drugs (hPG) are administered to women undergoing IVF or similar procedure in order for them to produce more than one fertilisable egg per monthly cycle (up to 15 mature eggs can be produced as opposed to the single one generated with no intervention). The justification for this is that it increases the chances of some or all of the eggs being fertilised and developing further once the embryos are successfully implanted in the uterus. It also provides an opportunity to create surplus embryos for experimental purposes (namely genetic research) since the accepted maximum of embryo implants is 4. If all implanted embryos begin developing the woman may have to undergo partial preventative termination to avoid multiple births.

Surrogacy
Surrogate motherhood involves an agreement or legal contract drawn up between one woman (the 'surrogate') and an infertile commissioning couple stating that the surrogate will bear a child for the couple which she will relinquish, for a fee, at birth. This fee currently stands at about US$10,000. A further US$10,000 is paid to the facilitating lawyer or other representative with another US$5,000 going towards medical costs which include insemination or embryo transfer, foetal monitoring, ultrasound and other regular health checkup. In short, it involves the renting of a fertile woman's body for reproductive purposes. Two types of surrogacy exist:

(1) the surrogate is the donor of the ovum fertilised with donor sperm. In this case the surrogate is the genetic and gestational mother of the baby.

(2) the surrogate does not donate the ovum fertilised. Fertilisation is achieved in vitro with the resultant embryo deriving from the gametes of the husband and/or wife or one or two donors and is

transferred to the surrogate's uterus. In this case the surrogate has no genetic input into the child and is the gestational mother.
Surrogacy is also used in combination with sex selection techniques so that the commissioning couple can decide what sort of baby they want.

Thalidomide
A drug given to thousands of pregnant women especially in Europe during the 1960's which was meant to be a sedative. Instead it caused the deaths or disfigurement of many children.

Ultrasound
The development of high-resolution ultrasound enables detection of foetal deformities and is commonly used as an antenatal screening procedure during the 19th week of pregnancy especially for women over 35. Detection of congenital malformations is often accompanied by abortion. Is used widely but has not yet been proven to be without long-term detrimental effects.

Ultrasound-directed oocyte recovery
This is a more recent version of laparoscopy. The woman's bladder is overfilled with a saline solution and her abdomen is distended with a carbon dioxide mixture. A hand-held device with a needle at one end is guided through the bladder under constant ultrasound monitoring into the egg follicles in order to aspirate the mature eggs. This is commonly used in the IVF procedure.

Viability
This refers to the time that a foetus can survive outside of the mother's body (usually about 20 weeks).

Zygote
Fertilised egg cell.

Zygote intrafallopian transfer (ZIFT)
This is used as an alternative technique for women for whom IVF has been unsuccessful. IVF is performed but the resultant embryos are transferred to the Fallopian tube(s) by laparoscopy where the process of aspiration will occur naturally through the action of the Fallopian tube(s).