THE NEW REPRODUCTIVE TECHNOLOGIES : A SOCIOLOGICAL PERSPECTIVE ON SOCIAL CONTROL OF THE FEMALE BODY

Dissertation submitted to Jawaharlal Nehru University
in partial fulfilment of the requirements
for the award of the Degree of
MASTER OF PHILOSOPHY

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Certificate

Certified that the dissertation entitled **The New Reproductive Technologies: A Sociological Perspective on Social Control of the Female Body** submitted by **Ms. Anjali Widge** in partial fulfilment of the requirements for the award of the degree of **Master of Philosophy**, has not been previously submitted for any other degree of this or any other University and is her original work.

We recommend that this dissertation may be placed before the examiners for evaluation and consideration.

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Anjali Widge

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Introduction

(I) INTRODUCTION

Family welfare is important and seems a reasonable concern for individuals, families and the state. However, as we take a closer look a different picture emerges. Family welfare looks like `population control'. This sets the agenda for control of pregnancy and childbirth. Implicit in this is a programme to `control' women in general and her body in particular. There is evidence to prove that the health of women is adversely affected by societal effort to control population.

Population control brought new technological developments i.e. contraceptive technology. These are mostly developed for women and are used on their bodies irrespective of their consequences.[1] The most recent case of application of harmful technology has been the case of `Norplant-6'. This is another magic contraceptive device added to the list of various others. Its effect lasts for five years but

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1. In the 1970's there was a controversy in the West about the injectable contraceptive Depo Provera. In U.S.A., where it was manufactured, it was disapproved because of its carcinogenic effects. But, the Indian Council of Medical Research (ICMR) did not ban it. This was followed by trials of a bi-monthly injectable, Net-en which is also considered dangerous for women's health. For details see Nandita Gandhi and Nandita Shah, The Issues at Stake: Theory and Practice in the Contemporary Women's Movement in India (New Delhi: Kali for Women, 1992), pp. 118-119.

it requires monitoring by an effective health care system which most rural areas in our country lack.

The domain of technology concerning female fertility has grown over the years to become a `relatively autonomous' area called `Reproductive Technology'. This area includes technologies which help cure infertility, which inhibit fertility and which help in identifying genetic abnormalities. These technologies have positive and negative aspects but what is of concern here is: *Who controls these and what are their consequences?*

This thesis is concerned with the patriarchal control of women's bodies through scientific intervention in the form of New Reproductive Technologies. I will attempt to bring to relief the *invisible linkages between science/technology, social control and patriarchy*. The manner in which I have developed my arguments are as follows: In the rest of this chapter, I will argue that science is not only in the control of men but is also, in terms of its concerns, male-biased. It is powerful, violent and patriarchal. The concept of social control is brought in to assert that patriarchal forces exert social control over the female body through scientific intervention.

In this chapter, I will start with a brief discussion on the concept of patriarchy and social control and then

look at how science is violent and patriarchal and how it exerts control over women in society. This general discussion obviously has links with the New Reproductive Technologies (NRTs) which is the central theme of this research endeavour.

Two objectives are achieved by pursuing the above concerns . First, they allow me to locate the female body in a framework in which men exercise control because of the power they have acquired through control over important social institutions over the ages. This forms the second chapter. The second follows from the first. One extremely important area where men exercise their `power' is the area of science, medicine and technology. This leads us to a discussion of social control of female reproduction manifested in the New Reproductive Technologies which are designed by men for women. This is the content of the third chapter.

The tone of this work is critical of the NRTs because they attempt to take over women's generative power i.e. reproduction. These technologies, as explained, affect women's health in many ways. Women's control over their own health is a crucial aspect of their liberation from `male control'. The state and the patriarchal order combine to make sure that this area remains in their hands. A women's

view on health is required and an appropriate health policy to add to it.

(II) UNDERSTANDING PATRIARCHY

A great deal of work has gone into understanding patriarchy. Central to this understanding is gender inequality and gender oppression. It is important to know that both are social not biological. Some of the themes that characterize gender inequality are :

a) Men and women are differently and unequally situated in society.

b) This inequality results from the organization of society, not from any biological and personality differences.

[c) No significant pattern of natural variation distinguishes the sexes.

d) It is possible to change the situation because women and men respond easily and naturally to more egalitarian situations.]

It is quite clear from the examination of the above themes that gender inequality is not biological per se. It is a result of an unjust social arrangement. This unjust social arrangement has been the concern of a number of

social theories. I shall look at some theories selectively and briefly.

(1) Theories of Gender Inequality and Gender Oppression

Theories of gender inequality look at women's location in most situations as different from and less privileged than or unequal to that of men. In contrast, theories of gender oppression emphasize "women's oppression": Women are not just different from or unequal to men but actively restrained, subordinated, molded, used and abused by men.

(i) Theories of Gender Inequality

(a) Liberal Feminism

Liberal feminism tries to explain gender inequality and points to sexism, an ideology similar to racism, which consists partly of prejudices and discriminatory practices against women. According to these theorists, because of sexism, females are socialized from childhood onwards so that they can move into their adult roles as dependent, mindless, subconsciously depressed beings created by the constraints and requirements of their gender specific roles.[2]

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2. Patricia M. Lengermann and J.M.N. Brantley, "Contemporary feminist theory" in George Ritzer, Contemporary Sociological theory (New York: Alfred A. Knopf, 1988), pp. 296-309.

(b) Traditional Marxist Feminism

The traditional Marxian feminist theory presents a powerful theory of gender inequality. Contemporary Marxian feminists include gender relations within the structure of the contemporary capitalist class system. Marxian feminists acknowledge that within any class, women are less advantaged than men in their access to material goods, power status and possibilities for self actualization. The causes of inequality lie in the organization of capitalism itself.

(ii) Theories of Gender Oppression

Theories of gender oppression describe women's situation as the consequence of a direct power relationship between men and women in which men, who have fundamental and concrete interests in controlling, using, subjugating and oppressing women, effectively implement those interests. This pattern of oppression is incorporated into society's organisation, a basic structure of domination called *patriarchy*.

(a) Socialist Feminism

Socialist Feminism focuses on women's oppression and on understanding it in a way that brings together knowledge of class oppression and gender oppression. In other words they

describe the system as `capitalist patriarchy'. They look at the economic aspects but also go beyond and look at the human body, its sexuality, involvement in child rearing and unpaid domestic labour.

Thus in socialist feminism, Patriarchy denotes a structural system of male domination. It locates differences between men and women and focuses on structures of exploitation and oppression.

(b) Radical Feminism

According to Radical Feminists `patriarchy' is the power of men over women, particularly over their sexual functions. "Our society ....is a patriarchy. The fact is evident at once if we recall that the military, industry, technology, universities, science, political offices, finances - in short, every avenue of power within the society, including the coercive force of the police is in Male hands."[3]

Shulamith Firestone, a radical feminist, gave a biological explanation for the basis of male power. She further argued that technological advances like making it possible for ova to grow to human beings without the sperm and techniques for bearing babies outside the womb will make it

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3. Kate Millet quoted in ibid.

possible for women to escape all biological limitations and do without men altogether.

Today patriarchy cannot be properly understood if we do not take into consideration the dominant form of social organization that is globally pervasive i.e. capitalism. `Capitalist patriarchy' is the present articulation of patriarchy.

(3) Capitalist Patriarchy

An important feature of patriarchy is defined in terms of male control of women's labour. In the capitalist mode of production, there is a patriarchal structuring of the relations of production. The production of things which is commodity production is in the control of men. The production of life which is the production of labour power is the assigned role of women. In a patriarchal capitalist order the former is a privileged activity.

The production of labour power is carried `outside' the sphere that generates profits and the capitalist does not place much value on it (even though it is essential for the capitalist class as a whole). The control of the sphere of wage labour lies with men which gives them social power. Women spend their time in reproduction and caring for which they are not paid for. This does not appear in capitalist accounting. In this sense capitalism is totally patriarchal.

Central to the effort of understanding patriarchy in general and capitalist patriarchy in particular is gender inequality. Sylvia Walby has identified and named four categories of writings on gender inequality:

(*) gender inequality as derivative from capitalist relations;

(*) gender inequality as a result of an autonomous system of patriarchy, which is the primary form of social inequality;

(*) gender inequality as resulting from patriarchal relations so intertwined with capitalist relations that they form one system of capitalist patriarchy; and

(*) gender inequality as the consequence of the interaction of an autonomous system of patriarchy and capitalism.[4]

In this work, I shall take the fourth position. The position `captures the autonomy of patriarchal relations whilst not ignoring the significance of capitalist relations.'[5] In this position there are two groupings : `firstly, those which allocate different spheres of society to the

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4. Sylvia Walby, Patriarchy at Work : Patriarchal and Capitalist Relations in Employment, (Cambridge : Polity Press, 1986), p.5. Walby has named another category i.e. the fifth. I have not included it here as it is not directly related to our discussion.

5. ibid., p.33.

determination of either patriarchal or capitalist relations; and secondly, those which see patriarchal and capitalist relations as articulating at all levels and spheres of society'.[6] I shall maintain the second position. At the heart of the patriarchal social organisation is a form of inequality that disadvantages women at every level. The patriarchal social order thus, is built on gender inequality.

This brief discussion on gender inequality and patriarchy is important to locate social control which will be discussed subsequently. At the same time it is important to be sensitive to the concept of `*deviance*'. Women are often viewed as `all purpose deviants'. Even their sexuality and their power of reproduction can be constructed as grounds for deviance. The purpose of `naming' someone, a group of people, or some acts as deviant is to imply that an established social order is or will be under threat by these persons/acts. It is therefore important for those who consciously or unconsciously sustain patriarchal interests to exercise or promote social control to maintain an established order.

Thus there are two dimensions to the patriarchal social order. On the one hand it is built on gender inequality and

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6. ibid.

the inequality is maintained by social control mechanisms; on the other, any tendency to upset this inequality is 'named ' as deviance and accordingly taken care of by social control mechanisms. Since social control is an important process, it is necessary that we understand its nature in a patriarchy.

(III) UNDERSTANDING SOCIAL CONTROL

(1) Social Control through Normative Compliance

The term `social control' is used in the study of social order and stability. Social order is the result of individuals'/groups' behaviour being regulated through internalization of social norms. Thus social control is generally associated with normative compliance.[7]

A careful review of contemporary Sociological literature on social control indicates that the concept is encountered in the analysis of deviant behaviour. Talcott Parsons, for instance defined it as a process by which, through the impositions of sanctions, deviant behaviour is counteracted and social stability is maintained.

Thus it becomes pertinent to ask the question: Do ideational or coercive forces provide the more central basis for social order and stability? In response to this question, one position emphasises normative compliance. Thus, theorists like Emile Durkheim and Talcott Parsons have asserted that ideational (i.e. socio-cultural) factors provide the bedrock of social order. Social control of deviant behaviour in order to maintain social order is

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7. T. B. Bottomore, Sociology : A Guide to Problems and Literature (Bombay : Blackie and Sons, 1985), p.217.

achieved through normative `pressure'. Who exerts normative pressure is not addressed seriously. There are, however, two other positions which consider this.

(2) Social Control through the Use of both Physical Force and Normative Hegemony.

The Marxian position connects theoretically the use of physical force and ideational factors to understand social control. Theoretically society is broken into two classes, one of which is the dominant class. This class is able to reinforce its material control of the economy (i.e. the base) through successful extension of that control to the ideational domain (i.e. the superstructure). The dominant class is able to propagate its interest as the general interest of society. In the event of a crisis of economic reproduction, the consensus that had been built breaks up and physical force is used to maintain capitalist social relations. The most vicious form has been`fascism'.

(3) Antonio Gramsci: Social Control through `Hegemony'

Following from this Antonio Gramsci elaborated the idea of normative compliance by introducing the notion of `he-

gemony'.[8] Gramsci was trying to understand why a revolutionary upsurge had not taken place in the more developed nations of Europe but had occurred in Russia, a relatively less developed nation. In order to explain this occurrence he developed an argument that a well developed `civil society' had come into being in Western Europe and that the dominant class had resorted to using the institutions of civil society for the purpose of reproducing the social conditions that sustained class relations and suppressed the revolutionary urge. The institutions of civil society were used to organise `hegemonic' control of the other dangerous classes.

For Gramsci, civil society was the socio-cultural domain. The dominant class diffuses its thoughts and ways of life throughout society in all its institutional and private manifestations. The dominant class thus has access to and controls institutions like the family, school, media, religion, culture etc. This is the process by which the dominant class controls society and maintains social order. This Gramsci understands as the process of hegemony.

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8. Antonio Gramsci, Selections from the Prison Notebooks, edited and translated by Quintin Hoare and Geoffrey Nowell Smith (New York: International Publishers, 1971), pp. 12-13.

Gramsci introduced a new way of looking at power. Instead of locating it in one sphere he pointed to its permeability into every aspect of social life. But, he gave too much attention to the socio-cultural i.e. normative compliance and limited the discussion on repressive institutions.

It may be added here that Gramsci did not consider seriously the gender aspects of social control through hegemonic processes. Let us move to another way of understanding social control. I will merely point it out here.

(4) Social Control through `Disciplining' of the Body

Foucault offers us another way to look at social control. He dealt with the changing forms of power and their relation to the body. The body became the focus of power and was `disciplined' and trained to function with co-ordination and efficiency. The body thus came to be `socially controlled'. I shall discuss these aspects in greater detail in the next chapter.

In this work, I shall follow the perspective drawn from social control as in (2) and (4) above. However, (4) is the more important one. Having elaborated on the concept of social control, let me now look at how women are socially controlled.

(5) Women as Socially Controlled

Women are born into a gendered society. They develop characteristics different from men. The male and the female experience the social world differently, thus becoming two cultures. In this type of society, women are defined as `*breeders*' and `*caretakers*'. This would constitute the definition of a `*normal*' woman, a woman who will protect the patriarchal social order. Any other role would by definition be `deviant'. In a patriarchal order, gender then becomes a normative system through which female (and male) behaviour is controlled.[9]

Definitions of deviance tend to be imposed on the powerless by the powerful. Given modern complex and stratified societies, with acutely conflicting interests such as those which exist between men and women, deviance and control apparatus are created to prevent the deviant, i.e. the powerless from pursuing their interests. In a patriarchy, the deviants (actual and potential) are by definition women (as explained above). Having named women as deviants, it is necessary to control them to maintain the patriarchal social order. The male control of female deviants (norma-

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9. See `Introduction' in J. F. McDonough and R.C. Sarri (eds.), The Trapped Woman: Catch 22 in Deviance and Control (Newbury Park: Sage, 1987).

tively defined) results in their continued subjugation in almost all spheres of social life. Women are deprived of basic rights and consequently marginalized.

Female inequality is essential to the maintenance of the male dominated system and granting women equal rights would be threatening to the social order. It is not child bearing, physical weakness or any other biological difference that is the basis of women's subordination within industrial and post-industrial societies. An extremely important basis is the system of production and its dependence on the gendered division of labour.[10]

In addition, the female body and female sexuality are tied to the reproductive process within the confines of marriage, in which the male normally dominates. Men hope to control the "body politic" by emphasising women's motherhood role.

Women are deprived firstly because of the existing patriarchal values and secondly because of the profit making approach towards health care. According to Ehrenreich and English, after their examination of advice `experts' have given to women over a period of 150 years, the advice has

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10. J. F. McDonough and R. C. Sarri, "Catch-22 strategies of control and the deprivation of women's rights" in McDonough and Sarri (eds.), op. cit., p.22.

not been scientific and has constantly echoed the dictates of the economy and supported male-domination.[11]

Patriarchy not only extends to the family but also to the control of the economy, polity and religion by men collectively who use that control to uphold the rights and privileges of the collective male sex as well as individual men. Social control associated with medical domination is then a kind of "extended patriarchy".[12] The male medical establishment took over women's bodies by labeling menstruation, pregnancy, childbirth and menopause `diseases'. All these required the care and control of physicians.

On the basis of the knowledge and skill the doctors have, control is maintained over the (female) patients. Usually, medical control is not challenged. Women are told to accept societal practices and told that not doing so would be unnatural. The gynaecological practices of the 19th and 20th centuries, Sati in India, Chinese footbinding, African genital mutilation and European witch hunting are examples of women being drawn into compliance.[13]

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11. Cited in ibid., p.323.

12. Sue Fisher, "Good women after all: Cultural definitions and social control in McDonough and Sarri (eds.), op. cit., p. 323.

13. ibid., p.325.

The main aim of this section was to indicate the social control of women in patriarchal social order. The aim of the next section is to show that control is so thorough that even science in general and medical science in particular cannot claim innocence in the domination of women.

(IV) PATRIARCHY, MEDICAL SCIENCE AND SOCIAL CONTROL OF WOMEN

In considering the above aspect, I shall explore three themes. The first theme of `science and gender' would explore the association made between Nature and women. The second theme concerns `medicalization of social life'. The third theme would be a discussion on the machine metaphor and as a part of this I will explore the `mechanization of child birth'.

(1) Science and gender

The relation of science to society is contradictory. "It has contributed to the enhancement and to the degradation of our quality of life, using nature to both constructive and destructive effect".[14]

The Scientific Revolution brought about the mechanization of Nature. As a result Nature came to be controlled.

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14. Janet Sayers, "Science, sexual difference and feminism" in B. Hess and M.M. Ferre (eds.), Analyzing Gender (Newbury Park: Sage Publications, 1987), p.68.

The new scientific method (of the 17th Century) unified knowledge with material power. The rise of the mechanical world view in some European countries took place at the same time as the rise in central government controls and the concentration of power in the hands of a few. The view that order and power are components of the mechanical view of Nature sanctioned the management of Nature and society. The study of science was reduced to mathematical operations. Nature was divided into parts which could be rearranged according to certain laws. Resulting from the aggressive attitudes towards Nature, scientists supported observation and experimentation for which instruments were developed to discover its secrets.

The mechanical order had associated with it values based on power which was compatible with the rise of commercial capitalism. Scientific study was supposed to be for the advancement of humankind but actually was for the advancement of the capitalists and the State. The idea of scientific progress has been associated with the rise of technology and the requirements of early capitalistic economy.

Mechanistic assumptions about Nature lead to artificial environments, mechanized control over more and more aspects of human life and a loss of the quality of life itself. It leads to the creation of artificial products: modern genetic

engineering and could lead to artificial wombs, cloning and breeding of new human beings.

Rational control over Nature, society and the self was achieved by redefining reality through the new machine metaphor (a theme we will take up later). Mechanism as a metaphor functioned as a justification for power over Nature.[15] This power over Nature in scientific practice was seen in the power over the female in society. This is because women have an age old affiliation with Nature. Nature was regarded as Mother Earth worthy of respect but also regarded as female and uncontrollable. The idea of Nature as Mother Earth vanished with the scientific revolution to be taken over by the idea of Nature as disorder. Since the image of the Mother Earth no longer existed, the earth could easily be exploited.

The Earth Mother was nurturing and fertile, but Nature also brought plague. Similarly a woman (who was associated with Nature) was both virgin and witch - pure and disorderly. The control and the maintenance of social order and women's place within it was one of the reasons for the witch trials in Europe. Religious, social and sexual attitudes

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15. Carolyn Merchant, The Death of Nature : Women, Ecology and the Scientific Revolution. (New York: Harper and Row, 1980).

towards women and their role in contemporary society played a significant part in alienating the victims.[16] Men wanted to eliminate women who had knowledge and were expert healers. The rise of mechanics was seen as the rise of male power. Women's knowledge (and the knowledge of non-western cultures) were destroyed and certain aspects of science which they knew were not brought out. Women began to exclude themselves from the practice of medicine for the fear of being declared a witch.[17]

The rise of a patriarchal science of Nature took place in Europe during the 15th and 16th centuries as the Scientific Revolution was taking place. During the same period the Industrial Revolution resulted out of a patriarchal mode of economic development in industrial capitalism. Male domination over Nature was associated with domination over women and their exclusion from participation as partners in both science and development.

The emergence of science was not `neutral and objective' but aggressive against Nature and women. In the experimental method there was a dichotomy between male and female, mind and matter, objective and subjective, rational

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16. Merchant, op.cit., p.138.

17. Vandana Shiva, Staying Alive: Women, Ecology and Survival in India (New Delhi: Kali for Women, 1988), pp. 14-37.

and emotional. This dichotomisation facilitated masculine domination over Nature and women (and the non-west).[18]

"The removal of animistic, organic assumptions about the cosmos constituted the death of nature ....Moreover, as a conceptual framework, the mechanical order had associated with it a framework of values based on power, fully compatible with the directions taken by commercial capitalism".[19]

In the 16th century(Europe), the organically oriented way of thinking in which female principles played an important part were replaced by a mechanical way of thinking that eliminated the use of female principles.[20] Science developed as a male venture, resulting in the oppression of female nature and the female sex.

Modern science is related to violence and profit. It facilitated and contributed to the exploitation of Nature for the maximization of profit and capitalist accumulation. In this we can see a nexus between the State and the scientific community who are part of the dominant elite.

This reductionist science suppresses facts, and rejects beliefs of other systems.[21]

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18. ibid., p.16.

19. Merchant, op. cit., p.193.

20. ibid., p.2.

21. Vandana Shiva, op. cit., p.22.

With reference to the above mentioned, would it be justified if we consider medicine as part of science and male gendered?

Monitoring the family's health is an important function for women. Of course, women officially had to give up midwifery to men as it became mechanical. This transferred authority over women's bodies completely to men. This control is also exerted by State and society besides the professionals.

Families which played an important role in caring were excluded by the rise of professions, occupations, organizations and other authorities. The kind of collectivity that had made gendered and communal caring within a traditional setting sensible, collapsed.

Degendering is an essential property of a distinctively male approach and orientation to the body. Female bodies are more `other' to male practitioners than those of other men. This idea of the body is promoted by professional medicine. The non-participating patient is more of an object of modern medicine rather than its subject. Areas of the practice of modern medicine which directly impinge on the female events of menarche, menstruation, pregnancy, childbearing, lacta-

tion and menopause reveal the degendering of women by men.[22]

Scientists are unaware of the sex-bias that informs their work, they believe that science is neutral. "Because their class position insulates them from suffering of the oppressed" and because they "experience the current organization of society as basically satisfactory ... they accept (as natural) the interpretation of reality that justifies that system of organization."[23]

The priorities of research serve the professional and scientific interest of the scientists involved and the commercial interests of the drug companies which stand to profit. The methodology of research should take into account various changes in women's lives, their experiences and interests.

If women have to serve their needs and interests, they must gain greater social power and influence. *The struggle to achieve a science that meets the real needs of women is linked with a transformation of power relations between the sexes.*

Science encodes a structure of domination and violence. This violence resides in everydayness. Science through this

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22. H. T. Wilson, Sex and Gender : Making Cultural Sense of Civilization (Leiden : E. T. Brill, 1989) p.80.

23. Alison Jaggar, Feminist Politics and Human Nature (Brighton: Harvester, 1983).

violence seeks to impose its order on society.

The modern state guarantees the production and reproduction of science. The increasing accumulation of knowledge by science is seen as a sign of `grace'. Process and modernization as scientific projects legitimate any violence done to the Third World as objects of experimentation. The schemes of progress and evolutionism operate to this day in the policies of modernization and development on reluctant cultures.

The experimental method of modern science is not only a system of political controls but it incorporates a unique notion of violence , `Vivisection', which is the infliction of pain for experimental purposes of understanding and control where pain and suffering are justified in the pursuit of scientific knowledge as an absolute value. Vivisection is a paradigm for general scientific activity extending towards wider domains of control, incorporating innumerable sets of violence. One witnesses the violation of the body in the search for scienticized production and control. The violation of the body leads to the vivisection of the body politic in the theories of scientific industrial management. The scienticization of a problem carries with it the seeds of vivisectional violence.

Science has failed to guarantee life or understand its

meaning.[24] Eighty percent of all scientific research is devoted to the war industry which clearly shows that there is a nexus between science and violence. Modern science is violent even in peaceful domains as in health care and agriculture where human welfare is supposed to be its objective.

Modern science is reductionist in nature. Our economic structure is based on exploitation, profit maximization and capital accumulation. Reductionist science itself resorts to misinformation and falsehood in order to establish monopoly or knowledge. In order to prove itself superior to alternative modes of knowledge and be the only legitimate mode of knowing, reductionist science resorts to suppression and falsification of facts and this commits violence against science itself, which is supposed to be a search for truth.[25]

Modern science is said to be the discovery of properties of Nature in accordance with a `scientific method' which generates `objective', `neutral', `universal', knowl-

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24. Shiv Vishwanathan, "On the annals of the laboratory state" in Ashis Nandy (ed.), Science, Hegemony and Violence (Delhi: Oxford University Press, 1990), pp. 257-288.

25. Vandana Shiva, "Reductionist Science as epistemological violence" in Ashis Nandy (ed.), ibid., pp. 232-256.

edge. But, apparently there is no `scientific method', no single procedure or set of rules because scientists revise their standards, procedures, their criteria of rationality. The properties of a particular element or resource that are studied are determined by priorities and values.

It is not scientific to separate one group of people, the specialists, who adopt a reductionist way of knowing the physical world. That this is done indicates the politics of the situation. Science claims that since scientific truths are verifiable, they are justified beliefs and are universal regardless of social context. It is argued in defence of modern science that it is not science but the political misuse of science and the unethical technological application of science that leads to violence. Today science and technology have become inseparable and their control and misuse by vested interests -- economic and patriarchal in nature -- the norm.

(i) Nature Vs. Culture

Women are associated with animality and animality with a lower form of human life and both these are associated with Nature. Nature is differentiated from culture. Science's relationship to Nature is one of manipulation, control and domination, the relationship of man to woman, of Culture to Nature.

According to Sherry Ortner, there is something common in every culture that places a lower value on women. It is culture's project to subordinate Nature and as women are considered part of Nature, it subordinates them. Why are women seen as closer to Nature? It is because of their bodily functions of reproduction, their social roles of child rearing etc.[26] Men move about more widely in social and geographical space and thus are more aware than women and are considered closer to culture.[27]

According to Simone de Beauvoir, women reproduce and since men cannot they assert their creativity through the medium of technology and symbols. Men create lasting objects and women create perishables. This is the reason women have been universally subordinated.But the truth is that ".... both men and women are nature and culture and there is no logic compelling us to believe that at an unconscious level women, because of their naturalness, are opposed and subordinate to men."[28]

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26. Sherry B. Ortner, "Is female to male as Nature is to Culture?" in M. Z. Rosaldo and L. Lamphere (eds.), Women Culture and Society (Stanford: Stanford University Press, 1974), pp. 67-87.

27. Carol P. MacCormack, "Nature, culture and gender: A critique" in C. MacCormack and M. Strathern (eds.), Nature, Culture and Gender (Cambridge: Cambridge University Press, 1980), pp. 1-24.

28. ibid., p.17.

If we take a look at the Nature vs. Culture debate that is women as natural and men as cultural then we need to look at the connections between science and sexuality. Sex roles are constituted in a scientific and medical language and the natural sciences and medicine are suffused with sexual imagery. "Science and Medicine as activities were associated with sexual metaphors which were clearly expressed in designating Nature as a woman to be unveiled, unclothed and penetrated by masculine science."[29]

The relationship between women and Nature and men and Culture must therefore be examined through the mediations of science and medicine. There was a complex language in medical writings in the second half of the eighteenth century which employed the Nature/Culture dichotomy in relation to gender. The attributes of women ranged from ignorance and superstition to civilizing wisdom.

Women's bodies as objects of medical enquiry as well as of sexual desire became the focus of a physiological literature which expressed a refined aesthetic of women's natural beauty and found in their bodies an expression of their social condition. To understand women was thus a scientific

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29. L. J. Jordanova, "Natural facts: A historical perspective on science and sexuality" in C. MacCormack and M. Strathern (eds.), ibid., pp.42-69.

and medical task which involved revealing the manner of physiological functioning.

Feminists equate science and industry's destructiveness with maleness and men's social control and dominance over women. Science, it is argued, is like language, essentially male. Science silences women and alienates them from the truth of their experience, cutting men and women from Nature. Science's investigation of Nature is often identified with men's sexual and social control of women.

Science and development are not universal categories of progress but are projects of modern western patriarchy.[30] Violence towards Nature and women forms the basis of current development strategies. The Scientific Revolution was `reductionist' in nature. It reduced the capacity of humans to know Nature by excluding other knowers and other ways of knowing. It reduced the capacity of Nature to renew itself. The metaphor of Nature as a machine sanctioned the domination of Nature and women. Science is thus violent against women and Nature and subjugates them.

(2) Medicalization of Social Life

The World Health Organisation introduced a definition of health in 1953 that makes everybody feel diseased and

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30. Vandana Shiva(1988), op. cit., p. 14.

hence in the need of diagnosis and treatment. The WHO health concept is a "progressive annexation of non-illness, and we are going to get more diseases, as our expectations become more expansive and sophisticated. Every hospital admission, by WHO requirements, carries the diagnostic label. The result is a global epidemic of diagnosis."[31]

As a result of codifying patients by numerals, the person in the patient is forgotten and only a diagnostic tag remains. False positive results lead to `the Ulysses Syndrome'[32] which is a label given to mental and physical disorders which follow this false positive result. This syndrome is a side effect of investigations. Detailed investigations tell us a lot about the disease but help little in altering the course of the disease.

The patient's mind, body and soul encounters the expertise of the physician who in turn violates his/her well being and puts him/her ill-at-ease. This is what Ivan Illich described as `medicalization'. *`Medicalization' of life means the dependence on professional health care*. The health care system produces a situation which renders society unhealthy and removes an individual's capacity of self-

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31. Kothari and Mehta, "Violence in modern medicine" in Ashis Nandy (ed.), op. cit., p. 202.

32. M. Rang cited in ibid., p. 204.

healing and restraint. Over medicalization is the result of over-industrialization. "The unwanted physiological social and psychological and therapeutic progress have become resistant to medical remedies".[33]

Death, pain and impairment have been transformed from a personal to a technical problem. The measures taken to counter the damage to the patient by the treatment tends to result in more damage making it a vicious cycle. This results in a "self-reinforcing loop of negative institutional feed back", which he calls "medical nemesis".[34]

The definition of ill health was widened so the scope of medical care had to be widened and the tolerance towards disease reduced. Another reason for the medicalization of life is the raising of health expenditure by governments. With this, the cost of medical care increases and the individual becomes a "passive medical consumer". The doctors have a grasp over the individual's whole life as s/he goes in for `check ups' irrespective of whether they are needed or not. The obsession with body maintenance to keep fit leads to further medicalization and consumption of health care.

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33. Ivan Illich, Medical Nemesis: The Exploration of Health (New Delhi: Rupa, 1975), p. 27.

34. ibid., p. 28.

The purpose of early diagnosis is not beneficial to the patient (in many cases) but helps the medical scientist in research. The only reason people go in for early diagnosis or life-extension technology is because they are fascinated with `medical breakthroughs', high technology care and death under medical control.[35] All diseases today are managed by engineering interventions.

It is argued that there is over prescription in capitalist economies. Multinational pharmaceutical companies exert pressure on clinicians. The doctor prescribes a drug with side-effects and then goes on to treat the side-effects. The treatment thus goes on.

Sick-roles have multiplied due to over `medicalization'. People adopt the sick-role as they are excused from social roles and obligations.

Over-medicalization occurs due to over industrialization. " Therapeutic relationships infiltrate and colour all productive relations. The medicalization of industrial society reinforces its imperialistic and authoritarian character".[36]

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35. ibid., p. 52.

36. ibid., p.60.

Health policies of the government, instead of helping people stay healthy, make them unhealthy by encouraging an industrial organization that leads to an unhealthy society. The remedy suggested is to increase medical control. This makes the situation worse. Only a political programme aimed at the limitation of professional medicine enables people to recover their own powers for health care.

Due to over medicalization, stress and psychological problems have been on the rise though the threat of life-taking diseases was controlled as a result of the rise of the germ theory (in the late 19th century). With the availability of state support and technical changes in the nature of medical practice, medicine became professional. The growth of the medical dominance in the first half of the 20th century was associated with urbanization, further improvements in medicine and the expansion of the hospital and the clinic.

The doctor became important and powerful because of the body of knowledge he possessed. Social medicine and community medicine increased regulation of social life. Medicine then came to be deeply embedded in the culture and social structure of human societies.[37]

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37. Bryan S. Turner, Medical Power and Social knowledge, (London : Sage Publications, 1987), p.37.

To conclude, medicalization of social life has led to the development of a number of unhealthy trends. This has serious implications for women. Doctors are trained into a medical culture which emphasises and highlights the health problems of women. Women's behaviour is more easily accepted as neurotic. The medical ideology disqualified women as practitioners (midwives etc.) and qualified them as patients.[38] The professional development of medicine has been closely associated with a patriarchal culture where the sexuality of women has been a crucial issue in the definition of their moral and medical problems.

As we have noted, many crucial focuses for scientific contestation have involved the female body. The body whether masculine or feminine is entangled in the matrices of power at all levels but the feminine body is "the prime site of sexual and/or racial difference in a white, masculine, western political and sexual economy ....."[39]

To explore the above theme of the subjugation of women by medicine, one needs a closer look at the ideology and processes at work that leads to the situation. One such theme is the influence of the `machine metaphor' in modern medicine .

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38. Ehrenreich and English in ibid., p. 110.

39. M. Jacobus, E. Keller and S. Shuttleworth (eds.), Body/Politics: Women and the Discourses of Science (New York: Routledge, 1990), p.2.

(3) The machine metaphor

Medicine is shaped by and in turn helps to shape its cultural milieu. Cultural understandings become incorporated into medical models to explain the workings and treatment of the body.

The view of the body as being merely a machine allows a degree of emotional distance between doctor and patient. The body could now be regarded as a separate "thing" outside the patients self. In other words the patient's body was objectified. A mechanical view of the body had a strong emphasis on:

"1) the parts of a whole curriculum;

2) a reductionist approach to the human body:

3) the central role of instrumentation in diagnosis and therapy and sub specialization of the physician; and

4) an emphasis on efficiency and standardization with relative inattention to the social context of treatment."[40]

The body began to be conceptualized in terms of systems unrelated to other systems of the body. Specialization under

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40. Samuel Osherson and Lorna Singham "The machine metaphor in medicine" in E. Mishler, L. Amara Singham, S. Hauser, R. Liem S. Osherson and N. Waxler (eds.), Social Contexts of Health, Illness and Patient Care (Cambridge: Cambridge University Press, 1981), pp. 227-228.

scientific medicine began to emphasize individual systems or organs to the exclusion of the totality of the body.

There are three dimensions of a machine metaphor:

(*) Machines are without emotion, they do not feel.

(*) Machines are instrumental and not guided by considerations of value.

(*) Machines are reducible to their component parts. The whole is not more than the sum of its parts.

Thus, the dimensions of the metaphor of "the body as machine" are the body as spirit free, affect free and value free.[41]

In the elaboration of the themes above , we have seen the role of science and medicine in promoting patriarchal interests. To pursue this theme further, we need to consider one more area, albeit an important one which follows from the notion of the `machine metaphor'.

(i) The Mechanization of Child Birth

In the 19th Century women were defined as passive beings. Especially upper class women who were encouraged to depend on their doctors who focussed attention largely on

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41. ibid., p. 239.

the vulnerability of the reproductive organs.[42] The doctor patient relationship took a submissive form. The mechanization of birth was attractive to women who wanted a painless delivery and "guaranteed results".

The removal of birth from the moral sphere in which pain, success or failure were indications, both of moral status and of individual character, gave women a chance to view their bodies more as objects. Mid-20th century women had gained a sense of control over their bodies at the same time giving the actual control of birth to doctors.

Radical changes in the management of birth culminated in birth being defined in terms of efficiency and impersonality. Even the modern medical management of death means attention to mechanical functions on the part of the doctor and an emphasis on an acceptable style of dying.

From the beginning of the medicalization of child birth in the 19th century we are now faced with a situation where all aspects of reproduction have come under the command of science. Pregnancy, childbirth and reproduction are controlled by the latest technology.

In this chapter, we noted a connection between patriarchy, medical science and social control. As a patriarchal institution, medical science exerts control over the body,

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42. Ehrenreich and English in ibid., p.234.

specifically the female body in various ways. The aim of the next chapter is to explore how social constructions of the body are connected to the relationship of dominance.

Understanding The Body

(I) INTRODUCTION

In this chapter, we will try to understand the `body' from a sociological perspective. This I shall attempt to do in two ways. First, I shall explore major theories of the body. This treatment will however be selective. After having completed this, I shall attempt to locate the body within a patriarchal social order. In trying to do this, I shall explore one major social context in which the body in general and the female body in particular is implicated. This is the social context of medical science. I shall do this by considering three themes. They are the `body metaphor', the `dietary regulation' and the
`body as understood by the medical professionals'. I hope to link up the former section with the latter and the latter with the next chapter.

Historically situating the emergence of Sociology of the body is important. Most of Sociology accepts a rigid mind/body dichotomy because any reference to the body brings to the Sociologist's mind Social Darwinism, biological reductionism or Sociobiology which do not contribute to the development of a sociology of the body.

Biologism held that human behaviour could be explained causally in terms of human biology. But Sociology is inter-

ested in the social meaning of human interaction. Feminist critiques show that biological determinism is not without its political uses as a tool for justifying sexist and racist assumptions about "human nature".[1] On the other hand Sociology did have connections with positivist biology and medical science. To Sociology the social world was more important than the human body. "The primary dichotomy of sociological theory was not Nature / Society but Self/Society."[2]

(II) UNDERSTANDING THE BODY AS SOCIALLY CONTROLLED

It must also be noted that "any sociology of the body involves a discussion of social control and any discussion of social control must consider the control of women's bodies by men under a system of patriarchy."[3]

It would not be very fruitful to discuss what Bryan Turner suggests should be the subject matter of sociology of the body in toto. I would like to include only what is relevant to this thesis.

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1. Peter E.S. Freund, "Bringing society into the body: Understanding socialized human nature", Theory & Society Vol. 17, 1988, pp. 839-864.

2. Bryan S. Turner, The Body and Society: Explorations in Social Theory (New York: Basil Blackwell, 1984).

3. ibid.

Turner equates the study of the sociology of the body to the study of the problem of social order which can be organised around four issues. They are the regulation and reproduction of populations in time and space and the restraint and representation of the body as the vehicle of the self.

The body can be a threat to social order and this threat is neutralized through mechanisms of social control. Social order has to be achieved through reproduction, restraint, regulation and representation. All these four processes can be led by the body to social disorder. This has to be controlled by controlling the body.

Since every society has to reproduce its members, uncontrolled sexual activity or unreproductive sexual activity are threats to social order, therefore populations have to be 'controlled' (in reference to threats of both over population and under population). 'Deviational' practices like abortion, homosexuality and masturbation affect the reproduction of populations and need to be controlled. This is also achieved through institutional means like celibacy, delayed marriage, monogamy and patriarchy. The growth of urban centres encouraged a large urban population posing a threat to social order.This results in a need to regulate populations in social space. Representation of the self

(through the body) is an important aspect of social order for such representation `can define one as "normal", healthy and successful'.[4]

The problem of social order is restated to include the control of the female body which is central to the understanding of the 'sociology of the body'. Reason i.e. instrumental rationality maintains social order whereas desire i.e. sexuality, poses a threat to it. *A `sociology of the body' must include understanding social control of women's bodies as their bodies are a threat to social order.*".... any sociology of the body will hinge ultimately on the nature of the sexual and emotional division of labour. The sociology of the body turns out to be crucially a sociological study of the control of sexuality, specifically female sexuality by men exercising patriarchal power."[5]

Turner thus proposes another way of looking at women's subordination, which is to look at control of sexuality through control of the body to achieve social order instead of keeping the concentration on arguments like the Nature/ Culture argument and the property argument.

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4. ibid.

5. ibid.

It is understood that with the growth of Christianity, concern with another's body shifted to one's own body and virginity was the ideal state. "Attraction to other people, which brought the individual face to face with his own desire, was not seen by the philosophers as a purely positive impulse. Passion for another's body disturbed, obsessed and obstructed reason and the freedom of the mind."[6]

The fact that the relation between the social body and the physical body has not been articulated well in sociological theory has led to contemporary interest in the body. There are sub-disciplines in the Social Sciences (such as Medical Anthropology, Medical Sociology and Health Psychology) in which the body is very important.

(III) UNDERSTANDING THE BODY AS SOCIALLY CONSTRUCTED

To study the `sociology of the body', it is essential to look at other perspectives which border on the "social construction of the body." It is believed by some theorists that the body is simultaneously a physical and symbolic artifact, both naturally and culturally produced and securely anchored in a particular historical moment.[7] Freund believes that a mind/body dualism which was to be avoided in

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6. Aline Rousselle, Porneia: On Desire and The Body in Antiquity (New York : Basil Blackwell, 1988), pp.24-46.

7. Freund, op. cit.

theorizing a `sociology of the body' still exists in many of the writings on the body.

How social constructions of the body are connected to relationships of domination is one of the aims of the `physiology of repression' or a social 'physiology of bodily regulation'.[8]

Since we assume here, following Turner, that social control is related to the study of the body, it is to be noted that Freud had also argued that bodily instinctual repression increases with more pervasive and elaborate `civilized' social constraints.[9]

Among the lesser known theorists to talk about the relation between social control and bodily functions was Norman Elias. He argued that changes in bodily control are part of a 'civilizing' process with the ascendance of the modern nation state.[10]

The human body is socially constructed in changing settings of production and consumption. Modes of social control as well as power relationships based on class, age, race, ethnicity and gender play a significant role in the

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8. ibid.

9. ibid.

10. Norman Elias cited in ibid., p.844.

body's social construction.[11]

Social controls in the form of the social organisation of time, space and human motion have an impact on the muscular and skeletal structure of the body. For example a study conducted on the relation of work time and "stress" hormone activity concluded that overload and underload (of work) can increase the production of such hormones.[12]

Social contexts may affect neuro-endocrinological physical systems (such as the "fight or flight" stress response) adversely.[13]

Some innate gender differences are socially constructed and are used to justify beliefs about natural differences in physical strength, performance and mental abilities. Women learned patterns of movement such as how to occupy space, to walk and appropriate posture. Women also develop a certain body structure showing physical ability is connected to socialization and not merely biology.[14]

"To understand the social construction of bodies is to understand how differences that are often taken to be natural are in fact socially constructed in nature".

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11. op.cit., Freund, p. 851.

12. ibid., p. 852.

13. ibid., p. 853.

14. ibid., p. 854.

Thus the social construction of the body is understood by looking at "the relationship between our bodies and work, time and motion; the physiological consequences of self - presentation and effects on the body of social structure; and the construction of socially "appropriate" bodies. All these are illustrations of possible relations between social control and the construction of our bodies"[15]

(IV) UNDERSTANDING THE BODY AS SOCIALLY DISCIPLINED

It is Michel Foucault whose work has most influenced the study of the body. My purpose is to review those ideas of Michel Foucault which are relevant here. Foucault's later writings showed interest in changing forms of power and their relation to the body. The new form of power that had emerged from the 16th century (Europe) operated on the 'body'. The body became surrounded and invested with various techniques of details which analyzed, monitored and fabricated it. Architectural space became governed by the need to assign particular places to particular individuals (and conversely, individuals to particular places). The individual was no longer placed in a fixed place but in a rank which stressed relations of positions.

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15. ibid., pp. 855-856.

Bodily activities were temporally ordered. The timetable for a long time used in monastic communities to preclude idleness, was more widely introduced to establish rhythms, impose particular occupations and regulate the cycles of repetitions in schools, workshops, prisons and hospitals. These different ways of seeing bodies seemed to establish a true political economy of the corporeal in which time, detail and gesture were broken down into their component parts, analyzed and reconstituted to exact from coordinated and disciplined bodies more than the sum of their separate contributions.[16]

Disciplinary control involves a secluded existence and a high degree of self control over bodily expression. This was common, but the new control which was associated with the ascendance of Industrial capitalism paid attention to the individual body, to movements, gestures and attitudes. The individual began to be penalized for absence, lateness, negligence, lack of zeal, impoliteness, disobedience, incorrect attitudes, lack of cleanliness, impurity and indecency.[17]

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16. David Armstrong, Political Anatomy of the Body: Medical Knowledge in Britain in the Twentieth Century (Cambridge: Cambridge University Press, 1983), p.3.

17. Freund, op. cit., p. 845.

'Disciplining bodies' is central to Foucault's understanding of power. Disciplining "involves attention to fine detail, to strict monitoring and to the object of disciplinary regime - the individual body - being trained to function with coordination and efficiency: through discipline, surveillance fabricates a manipulable body. Discipline is a mechanism that invests the body of whoever is observed, transforming on unorganized and incoherent being into an efficient structure....".[18]

Discipline transforms an unorganized being into an organised one. It was not important who was undertaking the task of disciplining but the 'gaze' that is the 'strategic relation' in society was important. The individual became the object and effect of this 'disciplinary gaze'.

Foucault suggests that the particular configuration of an individuated, analyzed body and a disembodied gaze found its near perfect representation in Bentham's plans for an ideal prison, the Panopticon.[19]

As improvement in the efficiency of individual bodies became important, the Panopticon as an architectural model

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18. Armstrong, op. cit., p. 3.

19. The design of a Panopticon was of a building arranged as a ring, at the center of which there was a tower. The peripheral building had cells with windows. Through the windows of the tower the guard could observe every action of the inmates.

was used. Schools, hospitals, prisons and barracks emerged with high walls and people in them were no longer crowds, they were separate individuals. Their bodies through the Panopticon scheme could be repressed into which ideologies could be inscribed.

It is important to note that the inscription of power on the body brought to light the linkage between power and knowledge. The individual body became the target and effect of an calculating gaze. It became possible to imagine a docile workforce, a disciplined army and a medicine that analysed and investigated bodies.[20]

"In modern societies power had a special focus namely the body which is a product of political/power relationships. Power over the materiability of the body can be divided into two separate issues - the discipline of the body and regulation of the populations. Foucault regards medical science as the crucial kink at the level of knowledge between the discipline of individual bodies by professional groups (of psychiatrists, dietitians, social workers and others) and the regulation of bodies by panopticism (in the form of asylums, factories, schools and hospitals). The administered society involves the control of persons

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20. ibid., p.4.

through the medicalization of bodies".[21]

(1) The body in medical knowledge

Medical knowledge describes and constructs the body as a biological reality. For Foucault the concept of the body which emerged at the end of the 18th century, discrete, objective, passive and analysable was the effect as well as the object of medical enquiry.[22] In the 20th century the deepest recesses of the body became transparent to the medical eye as a result of new clinical techniques of observation. The modern body of the patient which has become the unquestioned object of clinical practice had no social existence prior to clinical techniques being exercised on it. The language used in the medical sciences, its assumptions and the techniques used by it give the science authority to make the human body observable. Certain mechanisms of power, according to Foucault, have taken over the body and it has become the object of power.[23]

When doctors started subjecting patients to physical examination of their bodies, the seed for a power relationship was sown. The body could be used, transformed and im-

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21. Turner(1984), op. cit., pp. 34-35.

22. Armstrong(1983), op. cit, p. xi.

23. ibid.

proved and bodily activities were temporally ordered. Time - tables ensured the disciplining of bodies. The body was analysed in detail, was surveyed. It was not just the detailed anatomy of the body which the 'medical gaze' established but it identified diseases.

Besides identifying disease, relations between people were controlled through this scheme. Comparison between people in terms of their physiology was made and dichotomies of ill/healthy, abnormal/normal emerged. Then the gaze was diverted to the abnormal to check their `deviant bodies'.[24]

The concept of health moved from being one of private to that of social and relative. The old public health disappeared and the focus was on individual health. Contagious diseases were identified. For example, Tuberculosis which was established as contagious, was to be reported in the early 20th century and patients were to be kept under constant surveillance. Patients with TB had to reveal details of their social life, their familial and casual relationships were put down on medical record. Another example is that of venereal disease the discovery of which served as a channel to observe certain relationships which were earlier unobservable. The official health authorities now took

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24. Armstrong (1983), op.cit.

charge of promoting social progress and strengthening family values etc. The new kind of clinical examination made the individual body an effect and "object of power as well as effect and object of knowledge."[25]

The medical discourse was seen as a device to deal with the problematics of the doctor-patient relationship but it had the effect of constituting the very problems which it had set out to explore. New medical specialities emerged and with them new medical problems and the medical gaze was directed to new areas of concern. The mechanism of surveillance existed not only in the medical institutions but in the welfare state, educational institutions, prisons etc. What is important is that with the growth of medical technology and specializations, the gaze is focussed on even more detailed analysis of the body.[26] For example, millions are spent on AIDS research and medical researchers need to know personal details of the lives of affected individuals. The focus is on their social interaction via a focus on their body.

The medical gaze paralleled the development of a gaze directed towards the social. Social interaction and space became the focus of attention for sociologists. This was a

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25. Michel Foucault cited in Armstrong in ibid.

26. ibid.,p.111..

result of the emergence of a new power, new knowledge and a new concept of the body. "...that moment when the sciences of man became possible is the moment when a new technology of power and a new political anatomy of the body were implemented."[27]

The human sciences and the medical sciences shared an object: the body, its relationships and its surrounding space. In a patriarchal social order this body assumed a specificity: it was the body of the female.

(V) THE FEMALE BODY: SOCIAL CONSTRUCTION AND CONTROL

(1) The Body Metaphor

The body metaphor was a well established feature of medieval thought. In western thought, the human body was an ancient metaphor of political institutions. This metaphor was important in the theory of kingship. The king had two bodies - a material body and a spiritual body. An attack on the king was considered an attack on sovereignty. But the body was used as a general metaphor for the structure and function of society as a whole.

The body/politic metaphor expresses itself in terms like 'the body politic', 'the social body ', `the head of

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27. M. Foucault cited in ibid.

the state' and the 'body of the church'.[28] B. Turner uses metaphors like, 'the government of the body' and the 'anarchy of the body' when he explores the relationship between female diseases and patriarchy.

The growth of the theories of diet are connected to the idea that "the body is a machine, the input and output requirements of which can be precisely quantified mathematically".[29]

Biological metaphors for society have been important in Spencerian Sociology and Social Darwinism. The emergence of a scientific discourse of the body resulted in mechanistic metaphors of the body as mentioned in the previous chapter. The body was seen as a system of dynamic interactions with the environment. Male and female bodies were seen to be different in structure and function. Men and women were different because of differences in heat, men had excess heat. The active male was said to have bigger brains, more intelligence and females were said to be passive and sluggish.[30]

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28. Turner(1984), op. cit., p. 178.

29. Bryan S. Turner, " The government of the body: Medical regimens and the rationalization of diet", The British Journal of Sociology, Vol 33(2), June 1982, pp. 252-269.

30. Emily Martin, The Woman in the Body: A Cultural Analysis of Reproduction (Boston: Beacon Press, 1987).

Emily Martin looked at medical metaphors of the body with reference to menstruation, menopause and childbirth. In medicine, menstruation was considered a disorder, impure and having an adverse impact on the lives of women. Menopause was seen as a crisis likely to bring an increase in diseases. Menstruation is described in negative terms, because the egg implantation does not take place. It is `failed production'.[31]

Menopause is seen as a failure of the authority structure in the body and has negative connotations. Menstruation was seen as a waste product of an idle machine whereas the massive sperm production by a male is seen as positive.

The dominant image in overall descriptions of female reproduction is that of a `signalling system'. The information transmitting system with a hierarchical structure has an obvious relation to the organization of society.[32]

The uterus in childbirth was seen as a machine. This combines with the use of actual mechanical devices to make birth 'easier' which resulted in female midwives being replaced by male technicians. The metaphor of the body as a machine helped in the intervention of technology in medical

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31. ibid., p.45.

32. ibid., p. 41.

practice.[33] The physician was the mechanic who fixed the machine, the body. This metaphor reflects power relationships in birth technology. Medical imagery describes the uterus as a machine that produces the baby, the woman as the labourer and the doctor as the manager of labour.[34]

Let us look at a specific example. The orientation to the body in North India, Punjab is based on the concept of purity and protection of females. The bodies of the male and female child are not sharply distinguished. In some rituals ('Kanjak') the little girl is worshipped as the goddess as the feminine virginal body is considered the abode of the goddess.[35]

For the woman , menstruation marks a radical change in orientation to the body. The initiation rituals for females emphasise interiority unlike the ones for males. The girl is confined to a room, her movement is curtailed. In some regions the body is bound and covered. The woman is acknowledged as a 'concrete sexual being' for the rest of her life.

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33. ibid., p. 54.

34. ibid., p. 63.
Feminists have objected to production metaphors being used to describe reproduction and also to metaphors of menstruation and menopause as they fit well with the traditional roles assigned to women.

35. Veena Das, "Feminity and orientation to the body" in K. Chanana (ed.),Socialisation, Education and Women (New Delhi: Orient Longman, 1988), pp. 193-207.

She has to maintain laws regarding pollution and purity for life. When women go on to lead a sexually active life, they feel that their bodies are submitted and used and are a continuous source of pollution.

The Hindu texts "emphasize the woman's accessibility to the male, her return to purity and her obligation to increase the lineage."[36] This is usually put into practice by the women themselves without any coercion as they internalize the values patriarchy promulgates. The female body is believed to be constantly polluted by engagement with sex. The female body also absorbs sins of the husband and any danger to him. The woman thus satisfies her husband's sexual desires and embraces all his faults.

The maternal body is also symbolic of the regeneration of the material and social universe. The body of the woman absorbs sins of others and allows their bodies to be purified.

Women, it is said are close to Nature and men close to Culture. The Nature/Culture argument explains the origins of patriarchal attitudes and their universality. One of the deficiencies of the argument is that with the intervention of technology the natural reproductive function of women does not remain 'natural' anymore. But the proponents of the

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36. ibid., p. 200.

argument believe that since women produce 'perishable bodies' and new produce enduring symbols, men are superior and must control women.[37]

Similarly, women had to be controlled so that males could maintain their control over property. Thus the need to control female sexuality is felt very strongly to maintain the superior status of men.

Religion always had norms governing women's bodies - for example the Christian ideology of women. These norms served group interests like the conservation of domestic property and the perpetuation of the family line.[38] Inheritance was backed up by religious teaching which demanded female chastity, virginity in daughters etc. The practice of confession was also a method of control of women. This practice reinforced the prevalent beliefs about female subjugation. The Church encouraged female submissiveness and maximum fertility to guarantee male succession. At the same time, the decline of Catholicism meant that women could no longer appeal to the cult of Mary as an expression of the

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37. S.B. Ortner, "Is female to male as nature is to culture?" in M.A. Rosaldo and L. Lamphere (eds.), Women, Culture and Society (Stanford: Stanford University Press, 1974), pp. 67-87.

38. Turner(1984), op.cit., p. 120.

religious significance of women.[39]

Whether patriarchy is institutionalised or not, the belief about the inferiority of women maintains itself in society inspite of women having access to make a critique of traditional patriarchy. This is what Bryan Turner meant when he used the term `patrism'.[40]

(2) Regulation of the female body through regulation of diet

Diet is either a regulation of the individual body or a regulation of the body politic. In the 16th and 17th centuries England, because of the combination of leisure and luxury in life was hit by the 'English malady' which invested itself in virgin, unmarried women. Thus, the `government' of female bodies was linked via patriarchy with the `government' of the household. There was a hierarchy of political control descending from the state, through the patriarchal household, to the body and desires.

In other words dietary management led to a rationalization and secularization of food which ceased to be a stimulant of desire. But, the purpose of the modern diet of consumer society is the production of desire through maintenance of the outer body. Dieting for medical and religious reasons is sought to achieve control of the inner body

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39. ibid.

40. ibid., p.156.

whereas the consumer diet is to enhance the outer body to maintain youth, fitness and beauty.

The growth of cosmetology in the 19th century (Europe) as a `science' was to achieve just this. Cosmetics in the modern times represent individualized sexuality. There is a relationship between female diseases, diet and patriarchy. Anorexia Nervosa and Bulimia result as a consequence of a desire to maintain the outer body. Since the sexuality of the body is considered a threat to family authority and social order, these diseases are considered individualized forms of protest which employ the body as a medium of protest against the consumer self.[41]

From another angle Anorexia is seen as the manifestation of the contradictory expectations of beauty for women in society which are dictated by men. From yet another angle, Anorexia is seen as the expression of middle class girls' control over their own bodies and their lives. Control here is used in a different sense. It is control by the woman over her own body. Not eating is a symbolic protest against the patriarchal system.[42] It results in some cases because of an over protective family and a conflict between

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41. ibid., p. 181.

42. ibid., p. 197.

the mother and daughter. "Anorexia symbolises control of the body in a patriarchal system....To control women's bodies is to control their personalities, and represents an act of authority over the body in the interests of the public order organized around male values of what is rational".[43]

The use of the Corset tells a similar story. It symbolised dependence on the male, affirmed female beauty but denied sexuality because it reduced fertility due to associated medical problems. Its use was also a result of patriarchal values and institutions.

The idea of slimness has two aspects: one is the norm of sexual attractiveness and the other a denial of sexuality. Wearing corsets and jogging are part of a `medicalization' of society whereby surveillance and discipline are self-imposed by the individual. It represents a `sexualization' of society in which one has to be sexually acceptable to be socially acceptable.[44]

Anorexia, obesity, addiction etc. are political phenomena. Anorexia is part of a symbolic struggle against forms of authority and an attempt to solve the contradiction of the female self.[45] Men are supposed to represent reason and

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43. ibid., p. 197.

44. ibid., p.200.

45. ibid.

women, desire, this being the basis of patriarchy. Anorexia is a reaction to dichotomies of reason/desire, body/self.

(3) The medical professionals and women's bodies

Doctors perpetuated social control on female patients as they had a hold over their private lives. They exert considerable amount of power over familial relationships by virtue of their knowledge. They base their advice to women on assumptions about the domestic role of women.

Medical science has been responsible for the description of women as emotional and neurotic. "The myth of female hypochondria supported the idea of women as sick persons and qualified women as patients".[46]

Medical science is also responsible for defining women healers as witches and eliminating them from the field of medicine. It was then taken over by male professionals.[47] Women were the unlicensed doctors, anatomists, abortionists, nurses and counselors of western history.

The suppression of women health workers and the take-over by male professionals was to gain control over the power that medicine gives, its profits and prestige. The

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46. Ehrenreich and English cited in ibid.

47. Ehrenreich and English, Witches, Midwives and Nurses. A History of Women Healers (CUNY,New York: The Feminist Press, 1973).

`takeover' began with witch trials of women in medieval Europe who were healers and were portrayed to be witches by the Church. In America folk healers, midwives and other practitioners were taken over by male, white middle class professional doctors in the 19th century. Women then had no role left in medicine except for nursing. This `takeover' again was not a question of science vs ignorance but a question of class and sex struggles for power in 19th century America.[48]

Thus male doctors and male technologists took over medical science. In other words, whatever new technology was invented, it was mostly by males and this includes the new reproductive technologies.

The body has been subjected to a long historical process of rationalization and standardization. The concept of the medical gaze resulted out of the growth of institutional regulation and control, the institutions being the clinic and the hospital. The problem of sickness began to be looked at the level of the individual body and the emergence of the State as important in the life of the ordinary citizen. The State through its local and national agencies intervenes in

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48. ibid., p.21.

the production and reproduction of life.[49] As a result of secularization, the medical profession replaced the Church as the manager of normal social relations even to the extent of managing a woman's sexuality and reproduction.

The theme of the body is also reflected in the next chapter. The female body is socially/culturally constructed by defining women's roles as mainly reproductive. The social control theme is brought out in the experimentation with women's reproductive capacities by male medical professionals. This experimentation is in the form of the New Reproductive Technologies.

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49. Bryan S. Turner, Medical Power and Social Knowledge (London: Sage, 1987), p. 218.

The New Reproductive Technologies

(I) INTRODUCTION

In the previous chapters, we saw how bio-medicine developed as an exclusively male profession until the end of the 19th century. We also saw how female midwives were replaced by the modern obstetrician transferring the control of reproduction from women to men. This was the beginning of the medical take over of childbirth. Men developed knowledge of the female reproductive system with the help of science and soon knew more than women about their own bodies. Both science and its application to reproduction were developed by men.

In this chapter I propose to look at the implications of the New Reproductive Technologies(NRTs), the problems they create, protests made against them, their positive aspects and what they mean for the future.

The implications of NRTs are many and at times disconnected. This is because the NRTs threw up a lot of issues which can be debated separately. Some issues have a direct connection with the others, some are indirectly connected. *What I am attempting here is to 'tie up' the control of the female body by a masculinist science with the new technological interventions in the reproductive process.*

Most importantly, it is to show that these RTs are dangerous for women's health and that feminists have expressed fears about the future of women and have suggested that RTs can lead to the possibility of `farming' babies.

While discussing this, one needs to keep in mind the difference between women in the First World and those in the Third World, particularly in India. For women in the West, the concept of motherhood is redefined as they employ these technologies and make them part of their reproductive lives. The same cannot be said of most Indian women as the basic facilities for childbirth are not available and daily hardships do not make child bearing and motherhood a positive experience. But, these technologies create a different sort of problem in India. Sex determination tests like Amniocentesis/Sex Pre-selection have caused a furore because they have been used for female foeticide. As a result, the sex-ratio might or might not get disturbed but it seems that combined with discrimination against the girl child and maternal neglect, its consequences could be fatal for the population of women as a whole.

It is argued that discrimination against women in India is perpetuated by women. Besides the fact that women are socialized within a patriarchal social order, we shall see

that it is not a battle within the female gender. Other factors are important include class interests and the role of the State. The control of female fertility is linked to control over people's sexual behavior. The ideal of chastity helps in controlling the birth of children. According to Foucault, sexuality is a transfer point for relations of power. Socialization of procreative behaviour led to concern about the population and debates about birth control. The power element needs to be considered in sexual relations. This led to feminist struggles for autonomy in the area of sexuality and reproduction with campaigns being waged in such areas as contraception, abortion, childcare, genetic engineering and the NRTs in recent years.In the West, sex is divorced from fertility and it is free and open, there is no virginity cult, whereas in Asia fertility is valued but only within marriage, and sexuality is limited by virginity cults, sanctions against adultery, purdah and other institutions.[1]

After describing briefly what these technologies are, I will discuss the sociological, ethical and moral questions they pose and how will affect kinship and marriage. `Does

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1. See "Introduction" in Pat Caplan (ed.), The Cultural Construction of Sexuality (London: Tavistock, 1987), pp. 1-30.

infertility treatment serve women rightly and it is required?', 'why is infertility a problem?', are questions to be asked.

I shall attempt to look at all the above mentioned arguments briefly. All the arguments are equally important because they reveal the extent and seriousness of the problem.

Sexuality is constructed in such a way that it is related to control of fertility by men. It is said that men want to control the reproductive process. I have dealt with this question by looking at two explanations, one psychological and the other Marxian.

(1) Control of Reproduction: Psychological Explanation

Why do men want to control female sexuality and reproduction? Mary O'Brien has an answer. She believes that men try to possess the creation process because they feel alienated from reproduction and creation. For women, reproduction is a continuous experience but for men it is not. Because man has a different reproductive consciousness, he lacks a sense of continuity and therefore he tries to appropriate the process.

Oppression has psychological manifestations. It results from anxieties which lead to the desire to control. Ashis Nandy believes that insecurity of males leads to the

domination of women by them. Men are jealous of the biological power of women. "...the evolutionary and biological primacy of women has given way to an institutionally entrenched jealousy of man on her part".[2] Therefore one could say that since men are jealous of women's procreative powers and are in control of medical techniques, they have devised these new RTs through which they can control the reproductive process.

(2) Control of Reproduction: Marxian Explanation

In contrast to O'Brien's psychological explanation, a Marxist view is given by Maria Mies. According to Maria Mies, "these technologies have been developed and produced on a mass scale not to promote human happiness, but to overcome the difficulties faced by the present world system in continuing its model of sustained growth, of a lifestyle based on material goods and the accumulation of capital. The female body has been discovered as a new area of investment and project-making for scientists, medical engineers and entrepreneurs. These technologies have been developed not because women need them, but because capital and science

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2. Ashis Nandy, "Woman vs womanliness in India: An essay in social and political psychology" in Rehana Ghadially (ed.), Women in Indian Society (New Delhi: Sage, 1988), pp. 69-80.

need women for the continuation of their model of growth and progress".[3]

Technological innovations within exploitative and unequal relationships lead to an intensification of inequality of the groups concerned. The processes which subordinate Nature, women and the colonies and treat them as spiritless and passive matter that can be dissected and recombined as the male of the human species wishes, is the optimization of human labour for the production of material wealth.

Science and technology are not neutral as I have argued in chapter one. Reproductive technologies propagate the selection of desirable elements and the elimination of undesirable ones. There is a desire to promote a type which is considered more valuable than the others. The eugenic principle of selection and elimination means that the whites in Europe and U.S.A are encouraged to breed more and the 'blacks' and 'browns' in the underdeveloped world are put under heavy pressure to diminish their populations. This Mies calls genocide.

In the underdeveloped and developing countries women are prevented by all means from having children. The myth of overpopulation serves as justification for the development

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3. Maria Mies, "Sexist and racist implications of new reproductive technologies", Alternatives, Vol.II(3), 1987, pp. 323-342.

of even more anti-fertility technology. The blatant disregard for human rights and dignity inherent in population control technology can be demonstrated in a number of instances, for example during the Emergency in India from 1975 to 1977 when millions of people were forcibly sterilized.

By looking at fertility and sterility as a disease, the possibility of looking at them as socially and historically influenced phenomenon is barred. They are defined as totally biological categories to be handled by medical experts.

The conceptualization of Third World women's fertility as an epidemic means that the State must intervene in peoples reproductive behaviour. Poor Third World women are treated not as persons but as numerical entities in demographic statistics. All that counts is a fall in the fertility rate, irrespective of the long term side effects of harmful contraceptive technology. These governments are put under pressure by credit giving agencies to perform in the field of population control. The Intra-uterine Device (IUD) programme in India was formulated under foreign pressure. Many of these countries have been turned into laboratories for transnational drug companies. Drugs manufactured in the West are tested on these women.

The development of RT, both contraceptive and conceptive took place in a climate when a sharp distinction is

made between man and Nature, Culture and Nature. Man must control nature (which is women and non-white males). These technologies work on the principle of selection and elimination and are sexist, racist and fascist.[4]

(II) A FEMINIST ASSESSMENT OF RTs

A feminist assessment of RTs is needed because they deal directly with the female body. These technologies change the social relations between the sexes, they change the concepts of maternity and paternity and they are the key to the age of genetic engineering of the human body and human race.

The natural environment and women's bodies are natural sources that have been exploited by men throughout history, a theme which we have dealt with in chapter one. To prevent the exploitation of technology by aggressive patriarchy from developing further, a critical feminist vision of RT is required. This critical vision can be categorized in the following ways:

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4. ibid., p.340.
This explanation is convincing but a cautionary note is necessary. It is not true that population control measures are restricted to Third World countries whose policies are governed by the capilalist First World. For example, China is a country which implements severe population control measures inspite of not being capitalist.This shows how adapative the system of patriarchy is. It can establish and strengthen roots in all kinds of social structures: pre-capitalist, capitalist and socialist.

(*) Medicalization of the female body - defining normal bodily functions like menstruation, pregnancy and birth and rape and violence as medical problems requiring medical solutions.

(*) Male dominated medical hierarchy - Men are in the decision making positions and women are in the lower ranks.

(*) Medical authority - the medical profession has authority.

(*) Women as providers of health care - women are not given credit for traditionally providing unpaid health care.

When a technology is introduced the existing power structures are affected. As no technology is `neutral' but is a means of control of processes and in this case human biological processes, control of technology gives control over lives - `biopower' as Michel Foucault called it, as I have argued in chapter two. Investigating changes in power relations is important.

An ethical debate is also a necessary supplement to technology assessment in the area of reproductive technology. The ethical model should reflect the experience of both sexes. At present a male code of ethics exists. "The entity to be debated is the woman, her body and her soul, her

person as a whole."[5]

(III) WHAT ARE NEW REPRODUCTIVE TECHNOLOGIES ?

(1) Introduction

Reproductive Technologies are designed to intervene in the process of human reproduction. They fall into four groups:

(*) The first and the most familiar group includes those concerned with fertility control: with preventing conception, frustrating implantation of an embryo or terminating pregnancy i.e. Contraceptive Technologies.

(*) A second group of RTs is concerned with the `management of labour and childbirth'.

(*) Third are those concerned with improving the health and genetic characteristic of foetuses and of new borns with the search for the `perfect child'.

(*) The fourth group includes conceptive technologies, directed to the promotion of pregnancy through techniques for overcoming or bypassing fertility.

All these have one thing in common i.e. they control the female body, which is the central theme of this thesis.

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5. Lene Koch & Janine Morgall, "Towards a feminist assessment of reproductive technology", Acta Sociologica, Vol. 30(2), pp. 173-191.

The debate on Reproductive Technologies is taking place across the globe though differently in the West (Britain, Australia and North America) and Third World. The feminists in the West are concerned mainly about technologies for infertility treatment and harmful effects of contraceptives.

The Third World feminists are however concerned mainly about what technologies which help in controlling fertility would do to the health of women, and what it means to be used as guinea pigs for new drugs and methods developed in the West. In addition, there is concern about the increasing rate of female foeticide.

By the late 1970s, the market for the `pill' in many western countries was saturated and pharmaceutical companies now devote much of their research efforts to finding new ways of administering contraceptives that would open up markets in the Third World. Most women use some kind of contraception in the West ranging from diaphragms, intra-uterine devices (IUD), sterilization and abortion and males use the condom. The hormone suppressing drugs are used more by the Third World women.

The nature of the management of childbirth and labour has changed in the last hundred years or so. It has changed from a home based activity undertaken primarily with the

assistance of female healers and friends, to an activity defined as the province of medical professionals. A range of technologies for monitoring and controlling the progress of labour and delivery - instruments to assist delivery, caesarian sections, ways of inducing labour, epistomies, techniques for measuring foetal heart rate and movement have been applied on a routine basis.

There are also technologies for monitoring foetal development in the early stages of pregnancy (for example, Ultrasound). The focus is also upon perfecting new techniques for neo-natal care and upon research that might eventually enable the modification of inborn 'defects' through human genetic engineering.

The sophisticated technologies involve genetic manipulation of human germ cells and fertilized eggs which may have irreversible effects on future generations. The procedures are expensive, there are unknown risks and the consequences are far reaching. The treatment of infertility in this century started with Artificial Insemination(AI) in the 1930's followed by fertility drugs and now In-vitro fertilization (IVF). Conceptive Technologies are highly varied from Surrogacy and Artificial Insemination (which require simple medical intervention) to IVF which requires very

sophisticated medical surgical and laboratory procedures.[6]

My concern here is to look at the social and political consequences of the new RTs (the new ones being AI and IVF for treatment of infertility, Cloning, Ectogenesis, Embryo Transfer, Amniocentesis, Sex-preselection, hormonal injectables and implants etc. The earlier technologies included the oral contraceptive (the pill), IUD (Intra - uterine Devices), Diaphragms, abortion and female and male sterilization).

(2) The New Reproductive Technologies

New Reproductive Technologies comprise of technologies associated with artificial insemination, in-vitro fertilization, embryo transfer, sex preselection, artificial wombs, cloning and surrogate motherhood.[7]

Artificial Insemination involves partner's or donor's sperm. This is placed into a `gun' and the gun is inserted into a rod. The rod is inserted into the womb for insemination.

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6. Michelle Stanworth, `Reproductive technologies and the deconstruction of motherhood' in M. Stanworth (ed.), Reproductive Technologies: Gender, Motherhood and Medicine (Cambridge: Polity Press, 1987), pp. 10-11.

7. Patricia Spallone, "The Warnock report: the politics of reproductive technology ",Women Studies International Forum, Vol. 9 (5), 1986, p. 543.

In-vitro Fertilization involves fertilization outside the female body. The egg and sperm (which could be the couples' or donor's) are placed in a culture medium in a Petri dish where fertilization occurs. When the technique is used for infertility treatment, the resulting embryo is transferred to a woman's uterus.

The technique of **superovulation** causes the release of more than one egg during one menstrual cycle which requires the administration of hormones to stimulate a woman's ovaries.

Cloning can be used to duplicate either sex. It by-passes sexual reproduction by using one of a number of available methods: Nuclear transplantation, chemically-induced self-replication, development from blastometers or egg-fusion.

The **surrogate mother** carries her pregnancy for another woman. She may provide the egg and be artificially inseminated or she may receive an IVF embryo if another woman's egg is used.

Embryo evaluation is the inspection of embryos under dissection microscopy, eliminating those considered unfit for transfer and ranking the acceptable ones according to quality.

Ectogenesis is the possibility of the growth of the foetus outside the human body in an artificial womb without the need of the natural womb at any time.

Uterine Lavage or Surrogate Embryo Transfer (SET) - In this technique a fertile donor woman is inseminated with the sperm of the infertile woman's partner. She conceives and the embryo is flushed from her body and placed in the infertile woman.

Sex-determination tests are carried out during pregnancy. Amniocentesis can be used to assess the sex of the foetus. This is a procedure in which a needle is inserted into the cavity of the womb and the amniotic fluid from around the foetus in withdrawn. It was developed to help women detect genetic abnormalities and terminate the pregnancy if necessary. The sex of the foetus can also be detected successfully by Ultrasound at 15-16 weeks.

Pre-conception sex-selection technology was developed by an American, Dr. Erikson in 1984. It is used for selecting male ofspring. By a filter method, the sperm containing Y chromosomes, which are responsible for a male child are separated from the X chromosomes and are concentrated. The doctors are able to select 80% of sperm containing Y chromosomes which are then injected into the woman.

Contraceptive Technologies help in preventing pregnancies. They vary from Intra-uterine Devices to sterilization to abortion to hormonal contraceptives like the oral-pill, Net-en, vaginal rings, Norplant-6 and Depo-Provera. Net-en is an injectable contraceptive (hormonal). Its effect lasts for two or three months. Norplant-6 is administered by a surgical procedure. Six rods, approximately the size of a match stick are planted under the skin. They release a steroid levonorgestrel over a period of 5 years which acts like a contraceptive device. These hormonal contraceptives have not been cleared for use in some countries in the West, but Third World women are used for their trials and later for their use.[8] These technologies have been governed by a profit motive and have been commercialized.

(IV) COMMERCIALIZATION OF NRTs

Though these technologies offer pleasure of parenthood to some people, a chance to know genetic and chromosomal abnormalities in a child, they extend the possibility of a medical and scientific practice that outreaches human under-

8. The above mentioned operations on the woman's body are managed by a male-dominated community of specialists like the obstetricians, gynaecologists, embryologists, biochemists, molecular biologists and pharmacrats among other reproductive engineers. This is true of the western countries but in Asia most gynaecologists are women. This does not make a difference as these doctors are well integrated into ideology of the `male medical science'.

standing and public control. They turn the precious gift of a baby - an extremely rewarding emotional experience - into something which money can buy.

The booming of `reproductive supermarkets' in the United States is one model example of misuse of the RTs for pure financial gain. Scientists have vested interests or work for organizations that are dictated by the profit motive. Such a situation is a great obstacle to public scrutiny of something as widely used as RTs. Commercial interests control public access to information.

The child is now viewed as a `product' which must be perfect and consumer designed. Issues of race and class are implicated in this process. Access to these technologies is severely limited to those who can afford it underlining the factor of class. Surrogate agencies are exploiting poor women and are involved in the importing of Third World women for the purpose of producing white babies for the American market.

The result of allowing this technological process to go unchecked could mean the elimination of women's reproductive roles and the development of artificial wombs. This of course is not possible in the near future but it could be possible in the distant future. Techniques like Cloning and Ectogenesis could create social and psychological problems.

For example technologies for viewing the interior of the womb like X-rays and Ultrasound have not proved to be safe and effective and reduce women to the status of a reproductive object. The impact of Ultrasound extends beyond its medical risks or benefits for individual women for it is significant in presenting a powerful visual image - that of the foetus as free-floating, self-sufficient and independent of the woman who carries it. Ultrasound images mesh with the attempts of anti-abortion campaigners to make the foetus a public presence. Ultrasound tends to discredit women's felt experience of pregnancy in favour of `objective' data. But, some women want to see `their' baby by this method, thus proving that there is no common reproductive consciousness.[9] New kinds of technologies are being researched. Some of them are even being used in India.

Another way these technologies could be commercialized are by using the farming and brothel model to produce babies.

(1) Farming and Brothel Model

There are two models which have been proposed to

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9. Rosalind P. Petchesky, "Foetal images: the power of visual culture in the politics of reproduction" in M.Stanworth (ed.), op cit., 1987, pp. 57-80.

understand the control of women's reproduction. The first is the farming model where men plant the women with their seed and then harvest the crop of babies. Under the second brothel model women are sold as sexual commodities. The women sell parts of their bodies the same way prostitutes sell their sexual parts. These women will sell wombs, ovaries and eggs.

This brothel model at present exists in animal farms. Many animal farms are reproductive brothels. Over centuries women and animals shared a common legal status. It is not difficult to imagine some women in such a farm breeding babies.[10]

The unease created by such uncontrolled advances in science is prompted by memories of the eugenics movement and of the experiments carried out by Nazi scientists and by futuristic novels like `Frankenstein'.[11]

(V) NEW REPRODUCTIVE TECHNOLOGIES IN INDIA

"Infertility treatment for a baby boy" reads a classified advertisement in a Gujarati women's magazine. Infertility treatment, AI and IVF have arrived in India. Clinics

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10. For a detailed description see Genoveffa Corea, "How the new reproductive technologies could be used to apply the brothel model of social control over women", Women Studies International Forum, Vol. 8(4), 1985, pp. 299-305.

11. Cris Shore, op cit., p. 297.

have sprung up in Delhi, Bombay, Madras, Jaipur and Gujarat. Gynaecologists, andrologists, urologists, endocrinologists, microsurgeons to even some general practitioners are now equipped to test various aspects of the problem. Doctors tailor the treatment according to the couple's capacity to pay. Many drugs have been wrongly prescribed. Specialists often advocate IVF when a simpler treatment would have sufficed.

As far as infertility is concerned, investigations reveal that in 30 percent cases the problem lies with the woman, in 35% with the man, in 25% cases it is the combination of both factors and in 10% of the cases the reasons remain unexplained. While in the U.K. or U.S.A and in most developed countries, infertility treatment is carried out within the parameters of strictly laid down procedures and codes, in India, it is practised under a lot of secrecy. There are no laws in India on AI. The law makers prefer to overlook the legal, moral, ethical, emotional and demographic issues thrown up by RT and genetic engineering as a problem of the `distant future'.[12]

In India infertility is more of a social problem than a biological one because a childless woman is looked at as a

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12. Jaya Ramanathan, "You've come a long way baby", Pioneer, 21.2.93.

curse. This reinforces the belief of the woman as a reproducing object and brings about the commercialization of the body.[13]

As part of the IVF programme, the doctors to fulfill the demand for male offsprings would make sure that only the Y fertilized embryos are transferred to a woman's womb. This would add to the already existing problems caused by sex-determination and sex-preselection.

The debate on NRTs in India has just begun but as in the West it will gain momentum when the time comes. A woman oriented analysis is already emerging which attempts to conceptualize the problem of health without reducing it to specific diseases, but a look at the ethical and social issues raised by IVF and AI is important.

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13. It would be interesting to go back in time and look at the practice of `Niyoga' in Ancient India. Closely related to the practice of levirate, it allowed childless men to appoint a `surrogate father' to sire children for them with their wives and also allowed it after the death of the patriarch. This practice was tolerated because of the necessity in Ancient Indian society to produce sons who would perform the `Sraddha' rites.
The moral and legal uncertainities about `niyoga' which emerged are similar to the ethical and legal discussions about surrogate motherhood in America and Europe. The superior legal status with regard to claims of parenthood of fathers in Ancient India and mothers in contemporary society in the West are similar and complex. For an elaborate discussion refer to Gail Hinich Sutherland, "`Bija' (seed) and `Ksetra' (field) : Male Surrogacy or `niyoga' in the Mahabharat", Contributions to Indian Sociology (n.s.), Vol. 24(1), 1990, pp. 77-103.

In India as in many parts of the world, women's self worth and value is usually dependent upon their reproductive functions. Women themselves go to great lengths to ensure a number of children as a result of the pressure of family and the dominant patriarchal ideology. Barren women are socially stigmatised. The choices women make might not be what they really want to make but result from their powerlessness women and oppression.

Individual right and choice can easily be turned against women themselves, distorted or manipulated. Women's health and their social relations are not taken into consideration. Instead of using these RTs, adoption should be viewed as an alternative. Inspite of producing a male child naturally or through IVF or sex preselection, a woman's status in the family will still be the same. "Patriarchal power has appropriated women's fertility, their labour and sexuality and established unequal relations between men and women. Technology cannot reverse these relations".[14]

The availability of information and medical facilities for middle class and poor women differs. Reproduction is not only natural but is mediated by social and material condi-

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14. See "Recognising the right to health" in Nandita Gandhi and Nandita Shah, The Issues at Stake : Theory and Practice in the Comtemporary Women's Movement in India, (New Delhi : Kali for Women, 1992), p.139.

tions. An elaboration of the various material conditions which burden and constrain women's choices very firmly remove reproduction from the private and biological sphere into a political and social one.

Inspite of what the `good' technology has done in terms of helping mothers and children to stay healthy and safe, in India every year an estimated five lakh women die of complications of being pregnant and giving birth. Under nutrition, inadequate medical facilities, lack of control over fertility, overwork and discriminatory practices towards the girl child generally are the major underlying causes of high maternal mortality. Pre-natal care is an important component of safe motherhood. For this, adequate health services are required which are not available for most poor women in India. Even if they exist most poor women do not have access to them.

I would now like to discuss certain important issues arising out of the use of reproductive technologies.

(VI) A CONSIDERATION OF SOME KEY ISSUES

There are differences in implications of different RTs. Many of the routine technologies (contraception, abortion etc) offer indispensable resources upon which women seek to

draw according to their practices and circumstances. Thus one cannot outrightly reject or accept RTs in general.

When discussing their implications the fact that there are differences among women in their relation to reproduction must be noted. Pressures to mother have different impacts on people in different circumstances and women respond to them in varying ways, depending on their social circumstances, their health and their fertility and according to opportunities and meanings derived from ethnic and social class cultures. Thus the differential impact of these technologies on men and women needs to be researched and a position on motherhood has to be located which can clearly indicate what women want or need.[15]

Let us now look at the implications of infertility treatment for women as a whole.

(1) Implications of Infertility Treatment

Women have children because it brings them power in real terms, and also because for many it is the only power base they have from which to negotiate the terms of their existence. If they cannot have children, for many it is like grief after death. The attitude that RT is helping the infertile couple has allowed society to accept these medical

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15. M.Stanworth, op. cit., p.4.

'advances' without critical comment. Few people question whether this technology actually helps infertile people.[16] It causes enormous burdens and stresses on couples. Women bear most of the burden as it is their bodies which are superovulated. The IVF programme has a very high failure rate. But the people are ill informed. An uneducated community cannot make decisions about the application of this technology. This misinformation has led to an aura around doctors who are considered beyond criticism and not accountable to the public, which they are.

Society thus accepts these RTs as a solution to infertility through a manipulation of society's stress on the value of parenting. This process has led to the child becoming a product for the consumer. The values underlying the technology are not questioned.

The need of women for children is one explanation for motherhood. It could also be possible that this instinct does not exist in all women. Moreover women from different races/classes might not have exactly the same needs.

A male controlled medical profession has control over these technologies. To restate an important guiding theme of

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16. Robyn Roland, "A child at any price? An overview of issues in the use of the new reproductive technologies and the threat to women", Women Studies International Forum, Vol. 8(6), 1985, pp. 539-546.

this dissertation, *NRTs do not increase the choice for women precisely because women do not control them.* Very few women actually choose these, most are forced into using them especially if they happen to be of a particular class, race and culture.

Male medical researchers make reputations and male owned and controlled companies make money because of these. Women's bodies are used as living laboratories for the advancement of male careers. To make things worse, the foetus in scientific literature is discussed as a `patient' who has rights over and above those of the woman who carries it. This reinforces the attitude of the woman as a capsule. For example, the Catholic church supports the view that the foetus is all important and should be saved even if the mother dies.

Science and Technology are portrayed as `value-free'. But, these are permeated by the same values that dominate every other sphere of influence and power in society. Gena Corea uses the term `pharmacrats' for the physicians and scientists who are in alliance with the state to determine the future of women. She points to the `power abuses' by the experts who use these technologies on women.

Referring to the shortage of females in the Third World, Corea uses the term `gynicide' which is "the use of

deliberate systematic measures (as killing, bodily or mental injury, unlivable conditions, prevention of births) calculated to bring about the extermination of women or to destroy the culture of women."[17]

Women become more like men, their claim to maternity is weakened by splitting the motherhood experience into bits and pieces. (One women donates the eggs, another carries the child and a third one raises it.)

By altering the boundaries between the biological and the social, by demanding human decision where there was biological destiny, the new technologies politicize issues concerning sexuality, reproduction, parenthood and the family. There are ethical and legal questions raised by IVF and surrogate motherhood for example. Do these threaten bonds between mothers and children and weaken the institution of motherhood?

(2) Motherhood Reconsidered

For feminists the NRTs mean rethinking their attitudes towards motherhood, pregnancy and their right to exercise choice with respect to motherhood. In the 1960's many women considered motherhood an entrapment, but for many it repre-

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17. See Review Essay by Rita Arditti, "Reducing women to matter", Women Studies International Forum, Vol. 8(6), 1985, pp.577-582.

sents a power base from which to negotiate the terms of their existence and survival. In recent years a "re-evaluation of motherhood has begun which attempts to recreate the experience of motherhood and family in a non-exploitative way."[18]

The institution of motherhood is distorted and controlled at the expense of women for the benefit of men. It is the institutionalization of motherhood that is the problem not the experience itself. Men have divorced women from this experience because of the fears of the procreative power of women. Motherhood should be used as a starting point to redefine an understanding of gender relations beginning with reproduction. To celebrate `being female' women have the birth experience which they share with other women. This tradition has been broken by the intervention of medical technologies in the birthing process.[19] The emphasis now is on the new born and towards the relationship between the father and child. Men by law or by force control women and children.

According to Nancy Chodorow, women by and large want to mother because they find it gratifying. Mothering has

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18. Robyn Roland, "Technology and motherhood: Reproductive choice reconsidered", Signs, Vol. 12(3), 1987, pp. 512-528.

19. Mary O'Brien cited in ibid.

developed the qualities of thinking and caring in women. In order for men to develop these qualities they could participate in childcare but some women fear that they might take over even that from women.

These technologies do not `liberate' women from childbirth. IVF ties women's reproduction to marriage alone and its complicated and closed training programme for professionals excludes women from administering and controlling it. The high expenses incurred on it means that there are minimal expenses on health care for women who do not want it.[20]

The move to value positively women's role in reproduction has given `techno-patriarchs' within medical research a justification for the continuing control of and experimentation with women's bodies in the name of the power of mothering. Women have been associated with Nature because of their capacity to reproduce and their `mothering' role has been `naturally' assigned to them without taking into account that some women are not naturally inclined towards the mothering role and might not have the `mothering instinct'.

In the Indian context, childbirth/mothering is not always considered gratifying or romantic. Women's options

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20. Ruth Hubbard quoted in ibid., p.517.

regarding child bearing are linked to their location in the social structure. For example, Depo Provera was considered unsafe for women in Britain but has been used on Asian and black women. Infertility is common among low income group women in Britain but they do not have access to the expensive IVF. These are obstacles for women who are not in a stable relationship with a man, lesbian and disabled women who want to have a child (by using these technologies).

Sex, marriage and parenthood are linked but these RTs separate parenthood from `the sexual act'. The new right in Europe and the United States ties sexuality and parenting more closely to the family. There have been attempts to prohibit contraceptives for young women, to restrict the availability of abortion and to restrict sex education in schools. Sexual expression is restricted to the heterosexual family and intercourse is tied to procreation. Even the Warnock Committee (to be discussed later) recommended that these technologies shall be available only to stable cohabiting heterosexual couples.

The object and effect of the emergent technologies is to `deconstruct' motherhood. It is believed that biological motherhood, through the introduction of artificial wombs will become redundant. Women will be merely reduced to `reproductive prostitutes'. On the other hand some women

in the West consider reproduction and mothering a natural right and any violation of it a control over their bodies. If reproduction (biological motherhood) is taken over by male technologists it results in a redefinition of motherhood. The experience does not remain the same.

Childbirth in India is not as romantic as it is considered in the West. Women have to divide their time between their work and childrearing (in rural north India). They have little spare time, freedom of mobility, reward from their labour or access to cash. These factors impinge on maternal and child health. Within a general context of poverty, gender and class inequalities inaccess to resources, good health is additionally undermined by the shift of young women's residence to their in-laws' on marriage, which further restricts their access to health care.[21]

There are distinctive patterns of fertility and child mortality (especially of girls) and women in the child bearing ages have higher death rates than young men. Males here outnumber females (The 1991 census shows the sex ratio at 929 females per 1000 males for the of India.) The sex ratio is low especially in the states of Haryana, Punjab, Rajasthan and Uttar Pradesh. Efforts to improve women's

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21. P.Jeffery, R.Jeffery and A.Lyon, Labour Pains and Labour Power: Women & Childbearing in India (New Delhi: Manohar, 1989), pp. 9-12.

situation have been only in the areas of the domestic sphere concentrating on the age of marriage, dowry and inheritance, maternal and child health services and female education. The maternal and child health services exist but on low priority. Most women do not use these government services especially during childbirth. The services of the `dai' (mid wife) are used, whose main work is to help in the delivery. She has little involvement in ante and post-natal care and does not administer remedies for infertility and abortions. The status of these dais unlike the Western mid wife is inferior and her duties are considered polluting.

Women fear childbirth as their pregnancies are risky and much of the female mortality is related to child bearing. For women in rural North India, child bearing is difficult with other work like making or collecting fuel, caring for animals, cooking meals etc. They are controlled and valued for their childbearing capacity but their needs associated with that role are given little weight.

Class and other interests tend to dominate State interests, the State is unlikely to implement policies that generate changes for majority of the poor rural women. Dramatic changes are required in patterns of landholding and employment, in women's work and access to property, in evaluations of their worth and in the systems of kinship,

residence and marriage.[22]

Going back to a discussion of child birth in the West, Germaine Greer explains that since it has been transformed from a personal and social event into a medical phenomenon, the woman feels alienated and this removes all the pride and dignity out of the birth process.[23] Even though she feels motherhood is a conflict ridden situation for some women, they still endure it. Men and women do not want to be sterile. Since fertility is very important, its 'management' leads to degradation of the species. The fertility of people should not be destroyed by force. Contraception should be safe and voluntary.

Since in our society 'barrenness' is considered a sin, the childless woman even in a society of millions of children, is made to feel miserable. Infertility she suggests, is an important problem even in our over populated country as it can lead to mental problems for the couple and may influence their economic and social status.

As a result of male preference, female foeticide, female infanticide and discrimination against the girl child is on the rise.

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22. ibid., p.225.

23. Germaine Greer, Sex and Destiny: The Politics of Human Fertility (London: Secker & Warburg, 1984), p.19.

(3)Female Foeticide and the Disadvantaged Girl Child

The low survival rate of girls in India is said to be a function of maternal neglect i.e. 'structural violence' towards women by women.[24]

It has been established that the juvenile sex ratio (the number of boys per 100 girls) in rural India is imbalanced in favour of boys, as a result of intra household discrimination against daughters in the allocation of food and medical care. Such discrimination lowers the health and nutritional status of girls and results in higher death rates for girls[25] (refer to illustration I).

Changes over time in the overall sex ratio (children and adults) show that the general trend has been towards masculinization. In 1971 there were 2 million fewer girls than boys.

The general discrimination between girls and boys becomes unconscious, part of a cultural set of values. The second daughter might be discriminated against more than the first one.[26] Maternal neglect results in discrimination in

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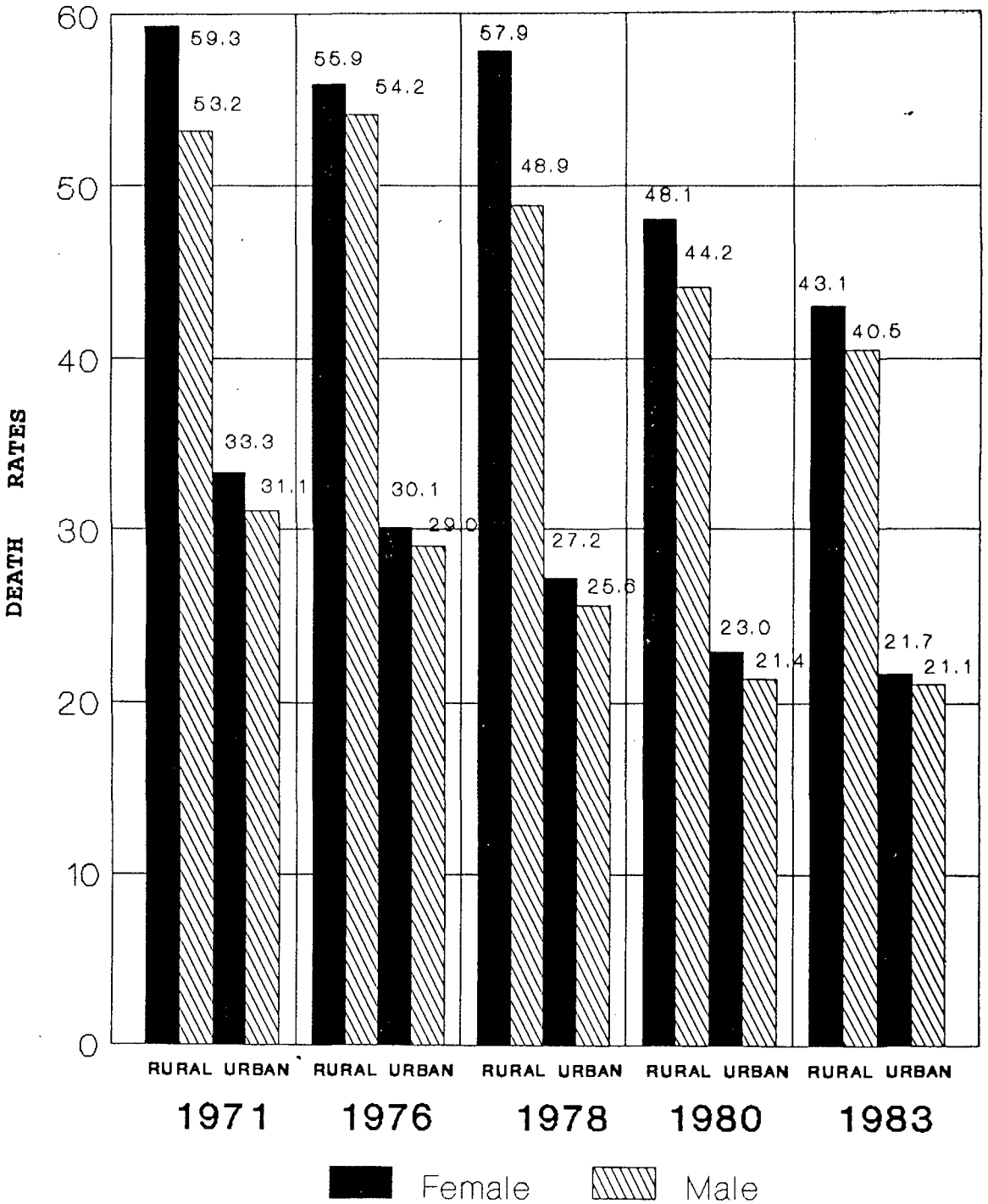
24. Ashis Nandy, op.cit., p.71.

25. Monica Dasgupta, "Selective discrimination against female children in rural Punjab, India", Population and Development Review, Vol. 13(1), 1987.

26. Barbara Miller "Changing patterns of juvenile sex ratios in rural India, 1961 to 1971", Economic and Political Weekly June 3, 1989, pp. 1229-1236.

Illustration I

Sex Specific Death Rates in India (0-4 Years) 1971-1983



Source: Office of the Registrar General of India

for clothing, food and medical care.

The reasons for this are manifold: patrilineal descent, patrilocal residence, dowry and low female work participation rates. Female participation rates are related to the pattern of cultivation - women work less in the wheat fields of the North than in the rice fields in the South. According to Barbara Miller, though this work can be performed by either sex, it is culture that defines sexual roles. In the north (Punjab and Haryana) inspite of the advances in literacy and age in marriage, little girls die. Marriage costs of girls are an important cultural motivation for strong preferences for sons. Many consider daughters a threat to the prosperity and strength of the family. This tendency is seen more in the North than the South.[27]

The idea of maternal neglect of girl children is internalized through socialization, is passed on from generation to generation. Women acquire the virtues of mother-love, self-denial and self control. The notion of entitlement of food for example is culturally constructed - men need more food than women. Women in India internalize such concepts very easily.

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27. Barbara Miller, "Female neglect and the costs of marriage in rural India", Contributions to Indian Sociology, Vol.14(1), 1980, pp. 95-129.

In a society like India which has son preference, maternal neglect leads to the loss of girl children and to a possible change in the sex ratio. With modern techniques of sex-determination, Ultrasound and sex preselection this elimination of girls becomes simpler.

Techniques such as Sonography, Fetoscopy, Needling, Chorion Biopsy, Ultrasound and Amniocentesis are used for this purpose. Though Bombay and Delhi are the major centres for sex determination and preselection, amniocentesis is even used in the clinics of small towns and cities of Gujarat, Maharashtra, Uttar Pradesh, Bihar, Madhya Pradesh, Punjab, Tamil Nadu and Rajasthan[28] (some of these states already show a juvenile sex ratio in favour of boys).

Amniocentesis which is supposed to be used to detect genetic abnormalities, is used for sex determination and thereafter extermination of the female foetus through abortion. The test - costing between Rs.200 to Rs.500 - is not very expensive and even the working class can easily afford it. A survey in Bombay showed that out of the 8000 abortions carried out after sex-determination tests, 7999 in-

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28. Vibhuti Patel, "Sex determination and sex preselection tests: Abuse of advanced technologies", in Rehana Ghadially (ed.), Women in Indian Society: A Reader (New Delhi: Sage, 1988), pp.178 - 185.

volved female foetuses.[29] It is believed that from 1978 to 1983 around 78,000 female foetuses were aborted after S.D. tests in our country[30] (refer to illustration II).

Some states in India have a legacy of female infanticide. Even today it is practiced in Western Gujarat, Rajasthan, Uttar Pradesh, Bihar, Punjab and Madhya Pradesh. As mentioned earlier little girls get inferior treatment as far as food, medication and education is concerned. When they grow up there is harassment for dowry. It is suggested that she die rather than be ill-treated.[31] This suggestion is rather crude. According to Kumar the economic logic of this idea is that sex selection at conception will reduce the supply of women, they will become more valuable, and female children will be better cared for and will live longer. He believes that the long term effects of sex selection are frequently exaggerated.

According to the economic logic, if the supply of women reduces, their demand and status will be enhanced but society treats women as sexual objects and a decrease in the number of women could lead to increased incidences of rape,

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29. The Times of India, June 1982.

30. The Statesman, 17th Dec. 1984.

31. Dharma Kumar, "Male utopias or nightmares?"' Economic and Political Weekly, 15 Jan 1983, pp. 61-64.

ILLUSTRATION II

SEX-DETERMINATION & ABORTION OF FEMALE FOETUSES

Period	Sex-determination Tests and Abortions
1978-1982	78,000 (estimated) female foetuses aborted after sex determination.
1986-1987	30,000-50,000 female foetuses aborted.
1984	In Bombay city out of 8000 abortions, more than 99% were of female foetuses.
1987	The Garbh Parkshan Virodhi Manch reports that 2400 sex determination tests were conducted in Baroda city.
1987-1988	13,000 sex determination tests were done in 7 Delhi clinics that were surveyed.

Source : Amniocentesis; Public Policy Division; VHAI;1991.

abduction and forced polyandry.[32] Women would be also valued only for breeding purposes some believe that overpopulated countries will be able to control their population and the status of women will rise and others say that male values will increase and women will be exploited, manipulated, oppressed and brutalized more than ever before. Another psychological explanation is that if the sex is pre-selected then the number of first born sons would increase. First borns have shown to be more assertive, motivated, independent and high in self-esteem. The (male) sex role stereotype would then get built into a biological determinism. Males would actually be more assertive and second born females more stereotypically feminine.

Could this trend lead to a change in the sex ratio? There has been a continued decline in the sex ratio between 1901 and 1971. Between 1971 and 1981 there was a marginal increase but in 1991 it decreased again (929 females per 1000 males). In 1983 many people could not afford this test,[33] but in 1993 it has been established that this test is not restricted only to the middle classes but also women from the poorer classes. Ultrasound testing too has become

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32. Patel, op. cit.

33. D. Kumar, op. cit., p. 63.

cheaper over the years.[34]

Sex preselection is a technique perfected by Dr. Ronald Erikson and is practiced in cities like Bombay and Delhi. In Erikson's method no violence or abortion is involved so the ethical issue gets solved for some. It is a `male order service', which has a very bright future in a male preferring society.[35]

(4) Family Planning In India

Due to mismanagement of the Family Planning programme in India, not only the health of women is affected adversely but also many unwanted children are born. Contraceptive methods are unsafe and sterilization programmes are mainly directed at women. Family planning services are usually not offered out of a desire to help people but out of a desire to help the State achieve its family planning targets. The government takes advantage of the desire for contraception for is own purposes through its family planning programmes.

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34. R.V. Baru, "Reproductive technologies and the private sector", Health for Millions (VHAI) Vol.1(1), Feb 1993, pp. 6-8.

35. Rekha Basu and Salil Tripathi, "Male order service", India Today, August 15, 1989, pp.100-102.

The debate on women's health in India has centered around the type of contraception, the liberalization of abortion, the State's population control policy and the rights of women.

When the `clinical' approach of providing information and advice to couples did not work, the Indian government launched target-oriented camps. Liberalization of abortion was also aimed at population control. So intent was the government (in 1988) in pushing its family planning policy that while the general health budget remained more or less the same, the Family Planning programme received three times the total amount allocated in the last three decades.[36]

Most men were against sterilization as they saw it as an assault on their virility. The family planning programme then concentrated on women. Hundreds of tubectomies were performed (refer to illustration III). The government placed before women (instead of relatively safer `barrier methods') hormonal contraceptives manufactured by foreign multinationals which run the risk of being fatal for the woman and her children. These hormonal contraceptives include, as mentioned earlier, the pill, injectables, subdermal implants and vaginal rings. Other methods like the morning-after pill, pellets, abortion-pill, etc. are still being developed

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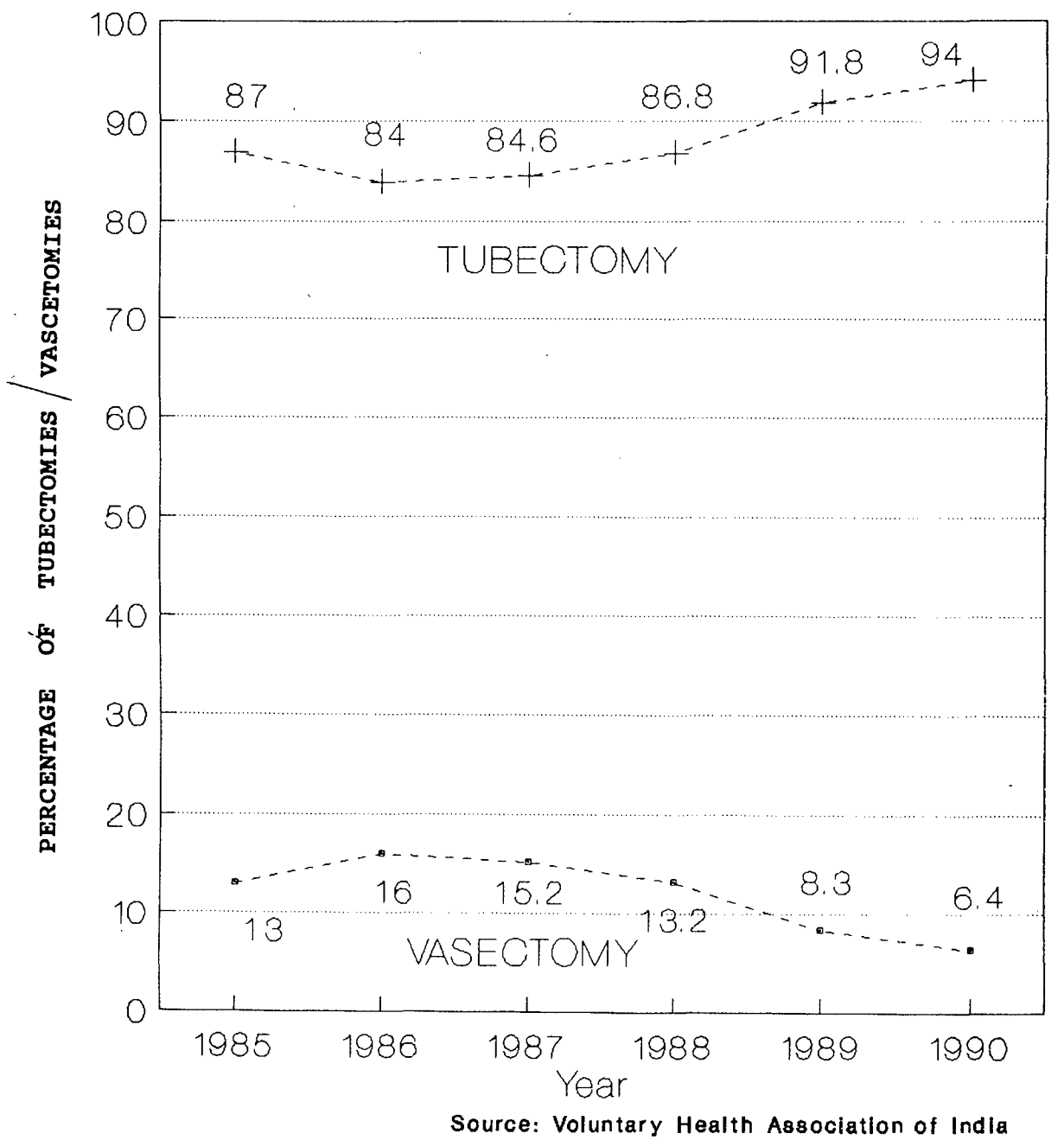
36. Nandita Gandhi and Nandita Shah, op. cit., pp. 102-159.

Illurstration III

Year-Wise Break-up of Sterllisation Procedures



Source: Voluntary Health Association of India

and could be brought to India for trials. The family planning programme is oriented towards using the incentive approach for the poorer sections of society than other classes.

There has been an attempt in India, to make a theoretical linkage between contraception and control of Women's fertility by men and the State the way it has been made in the West between conception techniques and control of women's ability to reproduce. The medical and social issues related to infertility and the use of technologies such as artificial insemination and IVF. These have not been taken up as part of a national campaign but there have been and are campaigns against injectables like Net-en and Norplant-6.

The administration of Norplant-6 requires the availability of a sophisticated health delivery and extension system because women suffering from a number of diseases cannot use it. This is not possible in India, yet the West propagates it as a safe method. Norplant - 6 can have disastrous consequences for the woman and her child. It is clear that its introduction goes hand in hand with renewed thrust on population control as opposed to family planning.[37] To add to the problem the Indian Council of Medical Research

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37. Kalpana Mehta, "Trials add new twist to Norplant - 6 Saga," Pioneer, 2nd Sept. 1992.

(I.C.M.R.) has cleared Depo Provera in August 1992, which is by no standards, safe.

The campaign against hormonal contraceptives challenged their safety and acceptability, but a decision has to be made on what a women oriented family planning programme should be and how women can regain control over their fertility.

There has also been a campaign against High Dose Estrogen Progesterone (HDEP) which is very unsafe and is misused for pregnancy testing. The campaign resulted in a ban on this drug but a decision on the low dose EP (which is used in the `pill') is yet to be taken.

Similarly, a campaign was launched against Sex-determination and sex preselection tests which tried to influence the attitudes of people towards the test, towards daughters as well as towards women in general and women who themselves showed a strong preference for sons. It was also aimed at the medical community. The campaign was successful in bringing in a new law and establishing a systematic linkage between different groups and between sex determination and women's oppression.

The deterioration of the health status of women, in several regions and a declining sex ratio calls for inter-

vention in several areas, contraceptive needs being one among several components in human welfare.

Birth rates are high in places where child survival is uncertain, where there is a compulsion to produce male children, an attitude described as "demographic fundamentalism" or a "craze for male children and relentless efforts at producing progeny to get a son, preferably two sons."[38] The discussion of the above key issues implicates ethical and legal issues which I shall address below.

(5) Socio-ethical and Socio-legal Issues

As a result of the debates on the New Reproductive Technologies the Conservative government in Britain requested a committee of inquiry to examine the issues and make recommendations. The report was published in 1984 and was known as the Warnock Report. The moral issues were not considered in the Report. The ethics of using women in experiments was not discussed. The Report displays the power of the state in society and the collaboration between the State and medical science establishment. Since control of population takes place through families as the reproductive apparatus of the existing order, politicized technologies

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38. Ashish Bose quoted in Mira Shiva, "Women: tubes, wombs and targets?' Health for Millions (VHAI), Vol. XVII(5), Dec. 1991, p.20.

can be utilized by the State to intervene in population control. This is the logic behind eugenics and the policing of women's sexuality via RTs.

What the Report revealed to feminists like Spallone was that the State and science require that women's bodies be available to serve the patriarchal nuclear family and the need of the scientists.[39]

The way in which the issues raised by the NRTs were debated as a result of the Report sheds some light on the conflicting and contested constructs of kinship, family and personhood. The moral, ethical and social issues raised by these are not resolved. These technologies have various social and legal implications. They challenge ideas about motherhood, paternity, biological inheritance and integrity of the family. Questions about RTs fall into the following categories[40]: (*) Ethical and practical questions arising out of experimentation on human embryos (*) those that emphasize the problems posed for parenthood for eg. who is the legal parent of a child born to a woman who is neither its genetic nor social mother. (*) Questions raised by feminist writers: what affect will these technologies have on women's lives in a society where women are defined mainly

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39. Patricia Spallone, op. cit.

40. M. Stanworth, op. cit.

in terms of their reproductive capacity. What are the health and gender implications of the use of female patients' bodies by a male-dominated medical profession? (*) What do current debates about fertility control and embryology reveal about attitudes towards social institutions such as marriage, parenthood and childbirth? What do the controversies surrounding infertility treatments and embryo research tell us about the structure of beliefs underlying current notions of descent, personhood and procreation?[41]

One of the many questions raised by NRTs is who is ultimately responsible for conception - God, the Church, women, the State or the medical profession? These technologies challenge conventional beliefs about the link between procreation, parenthood and blood ties, especially the idea that the nuclear family represents a natural, biological unit. What is important is not only what happens to proper motherhood or the natural family but who is responsible for conception?[42]

Scientific research on human embryos was seen as containing eugenicist ideas about improving the human race. It

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41. Cris Shore, "Virgin births and sterile debates: Anthropology and the new reproductive technologies", Current Anthropology, Vol. 33(3), June 1992, p.296.

42. ibid., p. 296.

was also seen as harmful to women, an exploitation of women's procreativity and women's loss of control over reproduction.

Techniques like Artificial Insemination brought a third party into the marital relationship, threatening the stability of the nuclear family. The stable social order is shaken when for eg. the biological father does not correspond to the social father. Surrogate motherhood too threatens traditional ideas about family integrity and the social order. Surrogate mothers become victims of patriarchy and commercialization. The most powerful objections against surrogacy are based on the resulting legal complications.

Ideas concerning fertility and reproduction are embedded in a wider social and economic context, particularly in systems of property and gender relations. Society still gives importance to blood ties, the nuclear family and paternity.[43] The NRTs are emerging at a time when there is a re-emphasis on fatherhood, and men's demand for control over children.

Every society has a vested interest in controlling reproduction. The most basic assumptions about parenthood, procreation, conception and the family will soon undergo a

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43. ibid., p. 301.

radical transformation.

The NRTs have separated sexuality and reproduction: a child can now be created without participating in the sexual act. The technologies which help cure infertility are part of technological advance which has international implications for women. They are being used differentially on an international scale to reinforce the oppression of women. The double edged sword of RT is a difficult one to grapple with. For example, women in the West had to fight for the right to abortion whereas in India it was almost imposed on them (for population control). The battle for abortion in the West is between `pro-lifers' and `pro-choice' believers. The pro-lifers are mostly Christian (Catholics) who believe that the foetus has a right to live. Ironically, in India, they have lent support to women's groups (who are pro-choice) to demonstrate against sex-determination tests which result in the abortion of female foetuses.

The unjust situation surrounding NRTs has prompted action from various quarters resulting in campaigns against them.

(VII) CAMPAIGN AGAINST SEX DETERMINATION AND SEX PRESELECTION TESTS

In 1982 when national dailies published advertisements of sex determination clinics, women's groups and health and

science groups etc. protested against the tests. The Forum against Sex Determination and Sex Pre-Selection (FASDSP) was formed to create public opinion against these tests and female foeticide. The campaign concentrated on influencing the attitude of people towards the test, towards daughters and towards women in general. The group conducted seminars, public debates, poster exhibitions, television programmes etc. Later, the group concentrated on consciousness raising at the local level.

The campaign resulted in a law which regulated (and not banned) these tests through specially appointed bodies. The campaign group then decided to lobby for a national legislation. The new Act covered any test or analysis of amniotic fluid, Chorionic-villi or tissue and said that all other centres except those registered are banned from carrying out the test.[44]

Legislation against Ultrasonography has been demanded is it was discovered in a survey conducted by VHAI in October 1991 in Delhi, that the methods used for sex determination were mainly Chorionic villi biopsy (CVB) and Ultrasonography. The problem with Ultrasonography was that the doctors can use it under the garb of normal ante-natal

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44. Gandhi and Shah, op.cit., p.133.

care.[45]

Latest reports indicate that the government has proposed a bill in parliament banning pre-natal diagnostic techniques for sex determination including Ultrasonography (below 35 years of age). These tests can now be carried out only for locating genetic abnormalities.[46] The loophole here is that it is difficult to distinguish between those who want the test done for locating genetic abnormalities and those who want to determine the sex of their child. These legislations are restricted to the prevailing pre-natal techniques and do not take into account sex pre-selection techniques.Sex pre-selection poses similar issues of the misuse of technology against females.

It has been stated repeatedly that it is women who go in for these tests and who want male children. These women are socially conditioned to accept the male preferring patriarchal ideology and unless they produce one on more male child there is no social worth attached to them. These women could be deserted by their husbands if they fail to do

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45. See "VHAI News", Health for Millions (VHAI), Vol. XVII(5), December 1991, p.37.

46. The Times of India, 31st Dec. 1992.

so. Their `choices' are pre-determined by their fear of social ostracism.

The demand for `control over our own bodies' and the right to safe abortion by women in the West should be seen in a different light in the Third World. Population control agencies in these countries endorse the `women's rights argument' to distract attention from the real causes of the population problem which are lack of food, economic security and safe medical facilities which results in women wanting to produce approximately six children to have at least one surviving male child (who would provide economic security).[47] Less energy should be wasted in worrying about overpopulation, efforts should be made to understand how poverty is created and maintained.[48] Pro-technologists in the West too, use the language of rights and choices. According to them every woman has a right to express her motherhood and thus infertile women have the `right' to use IVF and AI. Other considerations are ignored.

(VIII) CONCLUSION

In this chapter I have made an attempt to look at the implications of the New Reproductive Technologies for women

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47. Patel, op.cit., p.183.

48. Germaine Greer, op.cit., p.418.

in the West and in India. As debated, the implications are different yet similar. The social, political and psychological consequences might be different but the underlying assumption that science is masculine and exerts control over women and their reproductive capabilities, is the same.

This of course does not mean that science should be rejected. If men and women have equal access to control over medical science and its use, it could be "used as a position from which women and their bodies can be defended."[49] It is not technology as an artificial invasion of the human body that is the issue, but whether we can create political and cultural conditions in which such technologies can be employed by women to shape the experience of reproduction according to their own choices.

Gena Corea argues that what we need now is the crystallization of health and well being of women as a value. Technologies that do not respect women's integrity and health should not be accepted. Women should speak out about the injustices done to them and against the abuse of power.

Men and women must begin to understand that they themselves have a responsibility for being fertile or sterile and that their generative power has something to do with the overall social and ecological climate they live in.

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49. M. Stanworth, op.cit.

The `choice' given to women between various RTs gives the medical profession more control. (Women campaigned in the West for the right to abortion but in India it was almost forced on the women because it would help in family planning.) The technologists talk in terms of the right to choose the sex of your child, the right over your own body to make these technologies seem `liberating'.

On the other side an overemphasis on the negative impact of these technologies distracts attention from the politics and organization of health care in general, from the legal system, from political struggles over the nature of sexuality, parenthood and the family and from the impact of the varied material and cultural circumstances in which people create their material lives.

The present development model destroys Nature, women's skill and the survival base of the poor. The sanctity of life has to be held above science, technology and its various offerings.[50] The logic of the present technological quest has to be questioned. People are attracted to these in the short term but their long term consequences seem to be very depressing.

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50. Vandana Shiva (1988), op.cit., pp.14-37.

Conclusion

In the previous chapters, I have attempted to make a connection between Patriarchy, Social Control, Medical Science, the Female Body and the New Reproductive Technologies.

Gender difference, gender inequality and gender oppression are central to the understanding of patriarchy. Various schools of Feminism have tried to understand gender difference, gender inequality and gender oppression. I have presented how some of these explain the unequal relations between men and women. I supported the position that women are disadvantaged at every level in society and that this is maintained by social control mechanisms. These mechanisms 'work' by defining women as 'deviant' and as a threat to the patriarchal social order. Society decides and `names' who the 'normal' woman is. The 'powerful' i.e. men, thus pursue their interests through this process of naming.

Similarly, the male medical establishment considers women's natural functions as diseases and labels them patients. Women, because of their reproductive capacities, were always considered part of Nature and men considered part of Culture. Nature was controlled and thus women were controlled. The mechanization of Nature by a masculine science resulted in the metaphor of the body as a machine

which facilitated the aggression against women. Medical science made women objects of enquiry. Science's hold over Nature began to be identified by men's sexual social control over women. The historical progression of science is seen as the destruction of Nature resulting in unchecked increase in the power of men and the oppression of women.

A forceful motive driving medical science is the motive to make profit. This results in the commodification of the health of women/men. Consequently the health of women/men is compromised with. Medical science is violent and `reductionist'. It manipulates facts to suit its objectives. Science's `vivisectionist' ideology is to further research interests, for example, the inhuman attitudes of doctors towards patients is revealed by many patients being taken for granted and put through endless procedures of testing and medication.

Doctors/medical technologists became important because of the knowledge they have of the human body. They have detailed information about the working of the parts of the body. With experimentation, they have come up with new innovations and technologies which would involve the human body. In this thesis, I have dealt with technologies which intervene in the reproductive processes of the female body.

The New Reproductive Technologies have been discussed within the frame work of patriarchal science. They were shown to control the female body by experimenting on it particularly the aspects of reproduction.

The `body' in Sociology has been seen as `disciplined' and as the object of the `gaze' in the past. This includes references to medical science and a history of the social construction of the female body. There has been a rigid mind /body dichotomy in the social sciences. Resulting from the feminist critiques of biological determinism in the social sciences, the Sociology of the body includes the social control of the female body by men.

The female body is considered a threat to social order and its reproductive and unproductive sexual activity has to be controlled. For example, there is a different population policy for countries with a different social climate. Some control the reproduction of populations and some encourage it. Society through the State thus defines what is `normal': In India, abortion as a right was not fought for but was given as a right by the State because its population policy was one of population control. In the West, women are still fighting to achieve this right.

Social control over the body revealed itself through `power' relationships in `disciplining institutions' like

the family, school, hospital, clinic, etc. The doctor for instance has `power' over the patient because of the knowledge he has of human anatomy and medical procedures.

Historically, the body became important in Sociology when medical science began conducting experiments on the inner recesses of the human body. New diseases were identified and the doctor could look closely into the patients' life and social interactions. This was in association with the State which has an interest in the production and reproduction of life.

The female body came to be controlled because of its natural reproductive processes. Women were to maintain a sexual code which was reinforced by an emphasis on virginity. A particular kind of body was considered `appropriate' for females. (For example, dieting led to Anorexia Nervosa which resulted out of the norm of sexual attractiveness. Anorexia was also a symbol for the denial of sexuality.)

Metaphors of the body as a machine emphasised the traditional role of women, metaphors of menstruation as impure and menopause as a crisis emphasised women as ill. Even today medical science treats these functions as such. Childbirth is mechanized and reproduction is under the control of male medical professionals. With basic processes of reproduction being mechanized, medical science advanced

to more complicated procedures in the field of reproduction which would `help' women in doing what they are naturally considered to do best - reproduce.

The New Reproductive Technologies which have been introduced will have varied implications for the social structure. The conceptive and contraceptive technologies besides creating health problems for women, create problems of other dimensions.

I have argued that men control the reproductive process because the doctors and the reproductive technologists are predominantly men. I have also argued that the female body is treated as an area of investment and profit-making by medical establishment, multinationals and the State i.e. agencies that promote the use of RTs. Some of these technologies are eugenicist for they propagate particular characteristics in a child. They are sexist and are misused for sex determination resulting mostly in the abortion of female foetuses. RTs for infertility treatment create problems within marriage and for parenthood besides raising ethical and legal questions, especially for surrogate motherhood. The stability of the nuclear family is shaken.

Implications of infertility treatment are many and most of them are negative but one cannot argue for their elimination altogether. The fact is that many women want to have

their `own' baby. Even in an overpopulated, developing country one cannot do away with these technologies as infertility can create mental and economic problems for a couple. One could instead argue for a humanistic method to cure infertility.

The reemphasis on motherhood in the West has resulted in many women accepting infertility treatment. In India, the infertile woman is cursed and rejected. Very few go in for treatment because it is expensive and many do not know about it. Other issues of fulfilling the basic needs of daily life are on their minds. Women in India do not understand motherhood the way it is understood in the West. It is true that the shared experiences of reproduction form a bond between women of different classes and castes, but for most women in India the experience is shared by sharing their fear of fertility and population rituals. Childbearing is not a comfortable and romantic experience for them. Reproduction as a human event may be common to all women but is never totally a biological experience.[1]

Women in India need basic health facilities and access to safe and voluntary contraception . Correlations have to be drawn between below average physical health, repeated pregnancies, harmful contraceptives, faulty and inadequate

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1. N. Gandhi and N. Shah, op. cit., p. 141.

food intake, poor work conditions and women's low status in the family and society, social practices, beliefs, and values.

The analysis of sex-wise data on death rates, life expectancy and morbidity patterns have shown that social factors (like male preference) rather than biological factors are responsible for poor health of women. Lack of food, economic security and safe medical facilities result in women wanting to produce many children to have at least one surviving male child.

Technologies like Amniocentesis and Sex-preselection have made the situation worse for the girl child. Government programmes like the `Year of the Girl Child' do not prove that much is being done to save the female foetus. If the government implements its laws against sex-determination and makes sure that there are no loopholes, it would be a step in that direction. Women who go in for these tests themselves opt for male children and are victims of socialization which make them internalise the present values of a patriarchal society. Even if the health services improve it is argued that women will not improve their own health because "the body is seen in their own perception as an instrument of wifehood, motherhood and the care of the

family".[2]

The problem of women's health in India is related to their reproductive health and has to be looked at within a general context of poverty, class and gender inequalities and unequal access to resources.

Since reproduction forms a central theme for women's health, male control of women's reproductive life limits women. Medical systems are shaped by professional values controlled by a professional elite who controls and directs the work of the large and relatively poorly paid care givers who are mostly women. The NRTs which are in the hands of these male professionals, it is argued, are then used to further profit and research motives. This is not to say that one is against these RT's and science. Modern science and modern biomedicine have given gifts of comfort, life and health. Without some basic technologies in the area of reproduction, birth control would not be possible. But one is against harmful technology which does not mean being anti-science or anti-development. *What is meant by development in science and technology has to be redefined.* `What is its use?', `How it is misused?' and `Who controls it?' are questions to be asked. RT perse may not be bad but if they are controlled by the male technologists/professionals

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2. ibid., p. 153.

for pursuing their own interests then the consequences could be negative and far reaching. So, the question really is a question of control. If women were part of the top professionals in medicine today, things could have been different (women have been healers in the past and still play a very important role in the production and processing of food, as organizers of safety and as negotiators). If they are in control of these technologies they could shape them according to their needs and they could decide for themselves what is good for them.

These technologies should be used cautiously for the good of society as a whole. *As far as India is concerned, the use of harmful contraceptive technology has to be dealt with by the State which has to maintain a balance between policy for family planning and women rights.* The question of discrimination against the girl child by using sex determination technology could be dealt with by learning a lesson from the state of Kerala which has become a `model' and has a sex-ratio of 1040 females per 1000 males. This has been achieved by social and economic factors like women's education and literacy, high age at marriage for women, greater decision making power for women within the family because of their greater earning power and equitable distribution of

health care.[3]

If the rest of the country could follow this `model' to some extent, may be we could find what we are looking for.....

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3. For details see Robin Jeffrey, Politics, Women and Well- Being: How Kerala Became A Model (Delhi: Oxford University Press, 1993).

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