FAMILY FORMATION AND FERTILITY CHANGE AN ANTHROPOLOGICAL INQUIRY

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

N. NAKKEERAN

CENTRE FOR SOCIAL MEDICINE AND COMMUNITY HEALTH
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110 067
INDIA
1993

SCHOOL OF SOCIAL SCIENCES JAWAHARLAL NEHRU UNIVERSITY

New Delhi-110067

CERTIFICATE

This is to certify that the dissertation entitled FAMILY FORMATION AND FERTILITY CHANGE: AN ANTHROPOLOGICAL INQUIRY is in partial fulfilment of requirement for the Degree of Master of Philosophy of this university. The dissertation has not been previously submitted in part or full for any other degree or diploma of this or any other university and is his own work.

Who recommend that this dissertation be placed before the

examiners for evaluation.

Dr.S.K.Sahu (Supervisor

- A P (

Dr. Mohan Rao

(Supervisor)

Dr. Imrana Qadeer

(Chairperson)

Chairman Centre of Social Medicine & Community Frenich SSS
Jawaharlal Nebru University
New Delhi-110057



Acknowledgements

I thank Dr. Mohan Rao and Dr. S.K. Sahu, my supervisors who offered all the possible help they could. I am greatly indebted to Dr. Mohan Rao, without whom this dissertation would not have definitely taken this shape and Dr. S.K. Sahu for the kindness and patience he has shown on me in course of my work. Indeed it was a fine experience to work under both of them simultaneously.

I am indebted to other faculty members, fellow students and friends of my centre for their valuble suggestions they gave when progress of this work was presented for discussion.

I am thankful to the office and documentation unit staff of my centre for the timely assistance they rendered during this work.

I am specially indebted to my wife Santhi who stood with me througout my course and for the pains she took to make my manuscripts legible.

Finally I should thank Mr. C.K. Rejimon for typing the final manuscripts carefully and patiently in a short time.

Dearch!

(N.NAKKEERAN)

:-: iii :-:

CONTENTS

(i)	Certificate	i	
(ii)	Acknowledgements	ii	
1.	Scope of Anthropological Studies in Demography.		1
2.	Family Formation and Fertility Change Contribution of 'Conventional' Anthropology.	2	28
3.	Family Formation and Fertility Change Contribution of 'Critical' Anthropology.	ć	5 2
	Summary and Conclusion	9	9 5
	References	10) 2
	Bibliography.	11	. 4

- CHAPTER I -

SCOPE OF ANTHROPOLOGY IN DEMOGRAPHIC STUDIES.

- CHAPTER I -

SCOPE OF ANTHROPOLOGY IN DEMOGRAPHIC STUDIES.

Out of necessities arising in their respective areas of enquiry anthropology and demography overlap and seek mutual reinforcement from each other. This has resulted in a discipline of its own namely demographic anthropology.

Anthropology due to its ambitious claim as a total study of man, no doubt had to deal with aspects related to demography. Early ethnographic monographs in anthropology contain, although they are not replete with, demographic data on the populations studied. These often included information on agespecific population, mortality, causes for mortality, fertility rates, indigenous contraceptive practices etc... However, unlike in demography this knowledge was significant for its theoretical insights rather than their statistical value.

Demography on the other hand, had to enter into anthropology, as it had to expand its field of study from western societies to non-western underdeveloped societies, as well as in reconstructing the population structure of pre-historic and historic populations.

The overlapping was subsequently enforced by the mutual appreciation and the exchange of methodology from each other.

(Howell 1986)

For instance demography appreciated the fieldwork tradition of anthropology, which was felt could improve upon in certain places, the large scale data collection methods originally used by demographey. Anthropology has put in to use, tools used in demography like life-tables, stable population theory etc... to estimate and describe vital parameter of populations studied. The demand for census data of colonies during the period of colonial rule, for 'efficient' administration, brought together demography and anthropology in terms of exchange of methods of data collection.

Demographic concern in anthropology was basically related to marriage, residence and household size. In anthropology there was a need to pay attention to aspects like sex ratio, mortality and fertility to account for existence of various forms of marriage, size of local groups in hunting-gathering societies, etc.

The major areas of interest in demographic anthropology would include study of non-human primate population, palaeo demography, historical demography, fertility, fertility control and mortality in pre-literate societies, nutrition and fertility, population growth and cultural evolution.

Keeping in mind our general line of discussion in subsequent chapters, the present discussion will focus more on the latter topics like the demographic processes in pre-literate

societies, the relation between nutrition and fertility and the relation between population growth and cultural evolution. Other topics mentioned will hold our attention only minimally.

Towards the end of the discussion there is a need to make a note on theoretical and methodological aspects of traditional anthropology that would act as limitations in studying demographic processes, particularly fertility change, in the underdeveloped areas of the world. This will be a kind of prelude to the following chapters. A note on the need for critical anthropology, to over come the limitations set by traditional anthropology would serve to end this discussion.

NON-HUMAN PRIMATES

In the early 1950's studies on non-human primates came up with an aim of extending Malthusian ideas to non-human primates. One significant point of interest in these studies is that the comparative study of the demography of primate species can possibly suggest important insights to understand human biological and cultural evolution. (Howell, 1986)

These studies are based on evidence from contemporary primate populations and prehistoric skeletal evidence.

The studies that came up in the early 1950's were contered around propositions such as the population size of

primates are controlled by food supply; species specific genes determined the social organisation of primate groups and that the basis of social organisation is derived from the sexual receptivity of female primates. However, subsequent detailed field study revealed that such over simplified propositions cannot be made as the order primate is not a homogeneous category. It was observed that social and demographic characters of different groups within primates varies enormously. (Bakar and Sanders, 1972)

PALAEODEMOGRAPHY

It is a study of the demography of pre-historic population. These studies depend on evidence left in skeletal remains, village lay outs, burials and in garbage. These studies enable the reconstruction of the demographic history of human races. The fact that population growth remained low before the advent of neolithic revolution involving domestication of animals and plants have been the central focus in this field. These studies also shed light on the basic question of the origin of mankind. (Lovejoy, 1981)

Basically palaeodemographic studies are based on ethnographic analogy with contemporary hunters-gatherers. It is

assumed that population processes and the basic population structure of past populations are closely aproximated by the ethnographic present. Though it is often not true that existing features of a population are always the survivals of the previous times, this "uniformitariansm" is a useful and inevitable tool in palaeodemography. (Howell, 1976)

Howell (1986) enumerates recent developments in the methodology of palaeodemography like mortuary behaviour, study of deposition of bones and the microscopic analysis leading to evaluation of age, health and nutritional status of individuals whose skeletal remains are recovered.

Steward (1968) attempt at determining the number of children born to a woman from the condition of pelvic joints is demographically of immense importance.

Apart from statistical uncertainties, other shortfalls of this field are the difficulty in ascertaining the age and sex of skeletal specimen, possible under representation of juveniles due to faster decomposition of juvenile bones and decreasing chance of finding undisturbed skeletal remains.

HISTORIC DEMOGRAPHY

This field is closely related with palaeodemography in terms of its objective of reconstructing past population structure. It relies on materials like census, ethnographic records and other kinds of written records on wars and conquests. Keeping the data available from these information as the skeleton of the frame work, the gaps left out are filled in by plotting population curves either by comparison or by negative projection. Crucial significance of historical demography is the possibility of evaluating the impact of colonial expansion on the demographic structure of the aboriginal populations.

NUTRITION AND FERTILITY

Research on nutrition and fertility is another area drawing more attention currently. This area is of particular importance as it is opined (Frisch, 1975, Bongaarts, 1978) that a minimum amount of body fat is necessary for ovulation. This point is significant as the level of nutrition is an indirect measure of economic status. Krishnaji (1983) arguing against the view that poor reproduce more, points out that poor people with low nutritional level have relatively lower fertility due to late menarche, increased period of lactation and early menopause.

Kamat and Kamat (1959) based on their study relating diet and fecundity in an industrial area of Bombay, found among low income group with lesser nutritional intake, a lower frequency of sexual intercourse, higher average age of menarche, longer average spacing between births and longer delay in postpartum onset of menstruation than the corresponding figures for high-income group.

It has been attempted to extent this argument to hunting—gathering societies by anthropologists and demographers who are in line with the demographic transition theory. However, as pointed out by Boserup (1965) and Sussman (1972) hunters—gatherers were not actually under nourished but their subsistent activity demanded an inevitable birth spacing mechanism.

DEMOGRAPHIC PROCESSES IN PRE-LITERATE SOCITIES

Pertility Regulation

This is one of the most widely covered areas in demographic anthropology. This area gained significance with the advent of modern family planning in the developing countries.

However, one can sight works like that of Bloch and Carr-Saunders

which came up as early as 1908 and 1922 respectively. Bloch maintained that "among primitive races measures for the prevention of conception are widely employed". Carr-Saunders in his full-length study on use of contraceptive techniques among pre-modern societies, opines that mankind had always controlled its members. Prolonged abstention from intercourse, abortion, and infanticide were the main customs which were practiced by primitive races and there is "ample evidence that one or more of these practices are recorded for almost every people"

Himes (1936) on the other hand maintained that "infanticide and abortion were much more frequently practiced than conception accounts."

Firth (1963) in his work on Tikopia enumerated the different fertility regulation methods practised. The list included infanticide, lack of marriage among younger males,

^{1.} See Caldwell (1987) P. 27

^{2.} Ibid P. 26

^{3.} Ibid P. 27

coitues interruptus, abortion, sea voyage and war. Birdsell drawing his data from Australian aborigines. Eskimos and !kung-Bushmen concluded that systematic infanticide had been "a necessary mechanism from bipedalism to the development o f accounting for birth control advanced agriculture". in primitive societies. However, Shostak (1981) points out that among the ! Kung infanticide is rare and is done "in case of congenital deformity, of too short birth spacing or of twin, Other major works which lend births regardless of sex. " support to this view of pre-modern practice of birth controlling would include, among others, Lindenbaum (1972) Nardi (1981), Nag (1973), Musallam (1972), Lorimer (1954), Polgar (1972),

A related and complementary argument to the above discussion is that among pre-modern populations, especially hunters and gatherers, there are mechanisms which naturally enable spacing of birth. Bongaarts enlisted five major facts that influence birth spacing and regulation. These are postpartum infecundity, waiting time to conception, intrauterine mortality, permanent sterility and delay in entry into reproductive span. Of prime interest in anthropology is the factor of post-partum infecundity. This

Handwerker (1985) and Scrimshaw (1981).

^{4.} See Birdsell (1968) P. 239

^{5.} See Shostak (1981) P. 66

factor has a physiological relation with lactation which subdues ovulations in females. Among hunters-gatherers, in the absence of stored food and other food substitutes, lactation period is relatively prolonged. This increases the period of post-partum infecundity. This physiological birth spacing mechanism adds as advantage to their kind of life style. which needs easier mobility, which will be hindered if it is necessary to maintain more than one fully dependent child simultaneously. Sussman (1972) writing about child spacing in populations of neolithic period states that "child transportation" was the prime for child spacing among hunters and gatherers of pre-agricultural period. A woman has to carry along for years until the child can walk on its own. This period, he speculates, came to a span 3.5 to 4.5 years. He draws support from contemporary hunting and gathering societies. Lee and Devore find a spacing of four years among Australian hunters. Lee gives a spacing of 4.3 years between live births for the !kung. With roughly four years of spacing between two live births and with reproductive span 16 or 17 years to 33 or 34 years. Sussman estimates that a woman pre-agricultural period can produce only four children. Similar results are arrived at by Neel et al for Xavents, size of 3.1 ± .5 live births. Carr-Saunders and Krzywicki give an average of 4-5 recorded births.

Shostak (1981) writing about !kung of Doab, says that "!kung sibligs are likely to be about 4 years apart in age- an un usually long birth spacing for a population without birth control". She feels among !kung, spacing is very important. If spacing is unnaturally short, either the newly born baby will die or the elder would die. Though, their food is nutritious enough, it would be difficult to feed two child simultaneously. Older children have to be weaned and have to depend fully on wild foods, as no other sources of milk is available. It is quite difficult for even two year old child to survive with this kind of food.

Shostak further notes that as the !kung Bushmen got access to other source of milk as a result of contacts with neighbouring herders the pattern of child spacing became relatively shorter. Now they could keep away from gathering wild foods, hence child transportation and child spacing, was no more a necessity.

In many contemporary pre-literate societies, the period of post-partum abstinence and lactalion goes along with elaborate sanctions in form of cultural practices against intercourse.

^{6.} Ibid

Fecundity and Sterility

Fecundity is attached great social importance in almost pre-literate societies. While children are considered as gift of God, childlessness is a punishment of God. Barrenness is a sin and is associated with lechery and as personification of death, while fruitfulness is associated with virginity and modesty. Barrenness is often associated with witchcraft among the Gonds and Bhumias of Eastern Mandla (Fuchs 1968). Barenness due to the evil power of ghosts of witchcraft or due to sin committed in previous birth. For instance a witch may be reborn a barren woman. Among the Hos of Kolhan (Majumdhar 1937) it believed that barren woman have secret connection with malignant spirits and they are witches; barrenness is attributed to bad morals and to sin committed in the previous birth. Andaman Islanders, it is considered that barren woman was a man in previous birth and will be born as a man in the next birth (Sanyal 1980). Among the Baiga (Elwin 1936) childlessness believed as a punishment for an incest in the barren woman's family or due to witchcraft. Some societies have belief in cure for barrenness. Santals believed in herbal treatment as well a magical cure for barrenness (Verma, 1977). Among Angami Nagas (Hutton, 1969) certain rites are included in procession related to offering 'genna' for promoting fertility.

Institutionalisation of Sex

Concurrent with the importance given to fertility is the institutionalisation of sex. Sex is institutionalised in different societies to a lesser or greater extent. In many preliterate societies neither it is taboo to exchange views about it nor it is an area of obsession as portrayed by early anthropologists. There are societies in where there is the institution of dormitories, which often functions as a place of education and training activities including sex. For example in gothul found among muria "senior girls often train younger boys in the sexual act.." and "senior boys also instruct the juniors verbally and by mimetic acts.... as regards the intricacies of sexual congress".

Although pre-marital sex is not barred in many preliterate societies (Elwin, 1936, Hutton 1969) children born out
of unions prior to marriage are not accepted as a normal members
of their communities. Pregnancy before marriage is looked down
upon. Most often such a pregnancy is terminated prematurely or
the child born is killed immediately after the birth. This
explains the wide spread prevalance of abortion and infanticide
in pre-literate societies. (Elwin 1936, Hutton 1969,
Carr-Saunders 1922, Fuchs 1968)

^{7.} See T.N. Madan, D.N. Majumdar (1986) P. 132

^{8.} Ibid.

is a tendency in earlier anthropological literature to over estimate the prevalence of pre-marital and post marital sexual relationship in pre-literate societies. Davis in 1891 Assam census writs that among the Nagas "it was very rare for a girl not to have atleast one lover". This kind of generalization gives a picture of free sex which is far from reality. Countering Davis' argument, Hutton (1969) points out that pre-marital relations varies greatly among different Naga tribes or even within a tribe. Further among all Nagas it is most probable that the male who has a relationship with a female is one who is a potential spouse and often marries her later.

There was also a tendency to relate alleged high fertility among the poor with high frequency of coition among the earlier campaigners of the birth control `mission'

Mortality

Assuming that the advent of modern medicine, especially

^{9.} See Hutton (1969) P. 169

^{10.} See also Nag. M (1972) P. 233. He quotes from Sarvapalli Radhakrishnan who says "The poorer we are, the more ill nourished we are. Sex is the only indoor sport open to us and larger families are produced" and Vogt who says "While economic and sanitary conditions were improved the Indians went their accoustomed way, breeding with the irresponsibility of cod fish..."

prevention and cure for epidemics, has reduced mortality level considerably in pre-industrial societies, implicitely it is taken that mortality level among hunters-gatherers was high. Related with this argument is that hunters-gatherers were subsisting marginally during pre-agricultural period. This is a line of argument forwarded by demographic transition theory, according to which mortality and fertility were precariously balanced in this period.

Anthropological studies (Sussman 1972, Lee and DeVore 1968, Lee 1969, Carr-Saunders 1922) show that mortality level was in fact lower among hunters-gatherers than among sedentry people, as the latter have higher risk of loosing more life due to epidemics. The subsistence level was also not low for hunters and gatherers. (Sussman 1972, Boserup 1965, Shostak 1981). Further, it was not mortality that primarily chequed the population growth, but it was through birth spacing.

However, with colonial expansion mortality level of hunters and gatherers shot up dramatically. This was due to a continuous process of alienation from their land and hence driving them to relatively restricted, unfertile regions. Colonial rule also led to influx of novel diseases against which they did not have any natural immunity. Radcliffe- Brown notes

that the major cause for rapid dwindling down of tribes of Andaman islands was introduction of new diseases like syphilis, measles etc. Carr-Saunders includes diseases like tuberculosis, malaria, measles, whopping-cough, chicken-pox, venereal and pulmonary infections among the Pacific Islanders; dengue fever, small-pox, plaque, cholera, syphilis in Africa as new diseases

introduced by the Europeans.

POPULATION GROWTH AND CULTURAL EVOLUTION

Boserup (1965) in her study treats population as an independent variable and relates growth of agricultural technology with population pressure. The process of invention, rate and the speed of transmission of agricultural technology is influenced by the size and distribution of population. This transmission is, however, possible only if both the societies involved have comparable population. She opines that even the motivation to invent is determined to a great extent by the demographic structure. She sights evidences to show that often societies which were technologically advanced, have reverted to a lower technological stage after a decrease in population through

^{11.} Carr-Saunders notes that in Fiji in 1879, measles alone took a toll of 40.000 lives

war or epidemics. She feels that urbanisation did not take place till the end of first millennium A.D., as only after that period population reached a level which permitted widespread urbanisation. In societies where population density is low, an extensive system of cultivation is done. A shift from extensive shifting hoe cultivation to settled intensive plough cultivation took place, for only one primary reason, and that is to increase the yield for a given period to support a denser population. She concludes that socities that have shown steady and slow increase in population have shown faster improvement in technology related to subsistence strategy. Her most important contribution is that she shows "changes in the pattern of cultivation are social 12 changes".

Boserup's work triggerd off many related studies, like that of Steward (1970), Carneiro (1967), Dumont (1965), Stevenson (1968). These studies tried essentially to focus on the basic questions why is a large society formed? and what necessitates the advent of complex political-economic and kinship institutions from a relatively simpler ones?. The central argument was that as the demographic size of a society increases, older social relations based on kinship and moral grounds gets weakened and newer social relations comes into grip to organize better the

^{12.} See Nell, (1979) P. 468

process of resources exploitation. Increase in population density increases pressure on resources resulting in change of relations from informal to formal and to a more authoritarian order. The economy changes from a relatively self sufficient one to a more competetive one with unequal access to basic goods and increased specialization of economic activities. Carneiro (1965), Stevenson (1968), Netting (1971) attempt to show a relationship between population size of a community and prevailing political institution. To explain differential rate of evolution of political systems, Carneiro makes a distinction between circumscribed and open environment. In a circumscribed area wherein it is difficult for a population to spread around, population density increases faster and hence the faster evolution of complex political—economic systems.

Works of Goodenough (1968), Rappaport (1967) done along similar lines have however much more limited objectives like establishing relationship between population pressure and residence, descent, land tenure, etc. They express a strong relationship between lower population density, unilineal descent and unilocal residence. As population pressure on land increases these corporate groups tend to get loosened to shift into more flexible cognatic or bilateral kinship groups. However, Harner concludes that cognatic descent group results from condition of lowest population pressure.

Lorimer concludes, reversing the argument, that extended kin groups based on consanguingal as well as affinal relationships need not necessarily stimulate higher fertility but unlineal corporate groups tend to be a motive for a higher fertility.

Polgar (1972) opines that these studies "assume that patterns of family organization and social norms can fully explain differences in reproductive behaviour" ignoring the "historical changes in economic and political relationships".

Further, he proposes to show that unilineal inheritance systems are better seen as a consequence of population growth than as its cause.

The fundamental assumption of all these studies is that they keep population growth as an independent factor. The fact that population growth gets influenced by other economic and cultural factors have been either left behind or ignored for analytical purposes. Further it is also clear that population density per se does not induce change in political and cultural institutions. But it is competition on resources that often does so. By stressing on population pressure one tends to homogenize the effect felt by different groups of people.

^{13.} See Polgar (1972) P. 203

Further, this orientation "fails to account for the causes of population change including feed back from cultural 14 development". Birdsell's work (1953) on Australian aboriginal population primarily deals with size and density of local groups and their relationship with marriage pattern and utilization of resources. Works of Birdsell and Yengoyan (1968) and Tindale (1940) are in the line of human ecology. They try to bring out a relationship between population density, local group size, rain fall and availability of food supply.

Tindale notes that "the size of the tribal territories varied in inverse proportion to the amount of rain remaining on 15 the ground after evoporation". Birdsell established a positive correlation between rainfall and population density for a sample of 123 tribes (Godelier 1975), Yengoyen also finds a correlation between social structure of a tribe and rainfall. He concludes that as one goes from more humid areas to interior desert areas in Australia, one finds an increase in size of tribal territories and tribal groups, with bands which are separated more in terms of time and space. There is an increase in moities, sections and subsections of the tribe correspondingly. Thus a tribe gets

^{14.} Ibid P. 204

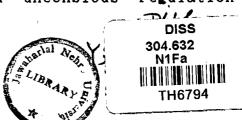
^{15.} Godlier (1975) P. 8

spread over a wider geographical area but maintains reciprocal relations through kinship ties. This serves as an economic security needed more in drier areas.

This discussion on basic issues in demographic clear many of miconceptions anthropology makes held bу Firstly, questioning the validity of the narrowdemographers. meaning given to rationality, anthropological work tries redefine it and assert that pre-literate societies rational in their fertility behaviour. Caldwell (1977)differntiates between rationality exercised to maximize economic utility, most often operating at individual level, predominating in 'modern' societies what he calls "economic rationality" with the rationality exercised by a society as a whole, through its institutions, predominating in socio-cultural pre-modern societies which he terms as "soceital rationality"

TH-6794

The fact that almost all societies in human history have consciously regulated fertility for one or other reasons, disproves the myth of 'unregulated population growth' in underdeveloped countries as compaigined by the family planning 'lobby'. This fact of consious and unconsious regulation of



^{16.} Caldwell (1977) P. 38

population hints that population responds to necessities demanded by living conditions.

Secondly empirical studies in anthropology do not lend support to the notion that all pre-modern societies experience high mortality rate and food shortage. On the contrary, the living standards of hunters and gatherers were relatively better than that of other 'advanced' communities, as long as these hunters-gatherers were occupying their original territories. It is also significant that general mortality were low among them and in particular mortality out of infectious diseases and epidemics was quite low (Dunn 1968). These two facts of regulated fertility and lower mortality question the basic assumption of demographic transition theory according to which all pre-industrial societies experienced high mortality and high fertility rates. These studies also lend plausible explanation understanding the evolution of social and for cultural institutions and the physical origin of man.

Our immediate objectives in the forthcoming discussion is to understand the process of family formation in relation with demographic aspects. The subsequent discussion in the chapters will be centered around considering how the process of family formation has been analysed in demographic and anthropological studies. Some of the studies that are to be discussed may not qualify to be anthropological in a strict sense. However, these studies focus on family formation especially in agricultural

communities. Hence they can be very well placed within the ambit of demographic anthropology.

To start with, it is aimed to bring out the basic arguments of major theories like labour theory, security and insurance theory which may be grouped together as rationality theories, followed by Caldwell's wealth; flows theory. All these theories are grouped within the rubric of conventional anthropology. 'Conventional' in the sense that these explanations have roots in conventional anthropological tradition based on functionalist and structural functionalist approaches. The economic explanations that are put into use in their arguments are basically drawn from neo-classical economics. instance, the notion of 'rational man' and the implicit method of methodological individualism - in which it is believed that the concepts and phenomena which refer to groups or collectivities can in principle be expressed as description of the individual actors - are inherent features of neo-classical economics.

Another equally important reason is, it is conventional because there is 'critical' tradition that follows. Critical tradition is critical of conventional anthropology's, functionalist ideas and its rootings in neo-classical economics.

The critical tradition in anthropology began to come up in 1950s and 1960s as it was felt that British and American anthropological traditions with functionalist paradigm had failed to analyse the structure of western imperialism and its impact on the non-western world. The rhetoric of 'value-free' analysis has led to a state of dissatisfaction with theory and practice in anthropology (Copans and Seddon 1978).

It was felt as Firth says as late as in 1954 that "we are hardly yet on the threshold of any general theory of a dynamic kind which will enable us to handle comprehensively the range of material within our normal anthropological sphere".

This was largely attributed to the functionalist and structural functionalist thoughts that held sway in the early decades of this century. These approaches, "have tended to produce essentially factual accounts and remain at a very low level of theoretical ellaboration (and produced) only limited hypothesis regarding the impact of 'the outside world' on local communities". Gough suggest that "the excessively empiricist approach of anthropology is related to its failure to consider

the total system of which its traditional object - primitive

^{17.} See Copans and Seddon (1978) P. 10

^{18.} Ibid P. 15

society - was an integral part, when the anthropologist first

19
studied it". The critical tradition developed out of the discontent felt about traditional functionalist anthropology.

In its methodology critical tradition shares a great extent with historical materialism. However, in terms of objectives and theory it is quite away from the writings of Marx. One of the most important theoretical insight subsumed by critical tradition and not dealt by Marx is the process of social reproduction. Critical tradition gives central importance to aspect. A discussion of social reproduction will necessarily include discussion of the concept of reproduction labour, allocation of labour potential in relation with means production and the component of ideology which perpetuates this relation. It will also inevitably force us to discuss how the role of biological reproduction and its control is important perpetuating the process of social reproduction.

In the second part of our discussion, it is attempted to bring out how critical tradition in anthropology gives an

^{19.} Ibid

insight in to an existing link between biological reproduction and social reproduction. It is argued that biological reproduction is an important component by controlling which the perpetuation of existing social relations is enabled. The discussion is mainly around these two aspects. Firstly it is attempted to show how, with the growth of capitalist economy, the process of extended reproduction has got separated from subsistent reproduction and has subordinated the latter. This is of our interest, as it is implicit that the process of biological reproduction, a component of subsistence reproduction, is also subordinated by extended reproduction.

The second aspect of focus is to show how, control of reproductive power of women by men was established in the course of human history. It is argued that control of female sexuality by men was a historical necessity to establish and sustaine the patriarchal order. The hold on this rein has been effectively utilised to maintain social stratification in a society. Thus demographic process and family formation are seen as a part of perpetuation of social stratification, gender relation and social reproduction.

- CHAPTER II -

FAMILY FORMATION AND FERTILITY CHANGE:

THE CONTRIBUTION OF 'CONVENTIONAL' ANTHROPOLOGY

- CHAPTER II -

FAMILY FORMATION AND PERTILITY CHANGE:

THE CONTRIBUTION OF 'CONVENTIONAL' ANTHROPOLOGY

'Family formation' narrowly, would include those acts related to an individual's marriage with his of her spouse, begetting children out of this wedlock, enculturing the children into their broader social group and enabling them to carry on social and economic activities for their survival and reproduction.

A family find its origin in marriage. It consists of a man and a woman, and the children born out of their wedlock. Its members are bound together by social and economic rights and obligations. As a residential unit, this family may often include other lineal and collateral kin of the spouses. In this sense, a family can come into being as a result of a split from a

larger residential unit. However, even this split occurs as a

^{1.} Origin of a family here refers to a stage in the developmental cycle of a family. It does not refers to the origin of the family as a social unit, as treated by a early evolutionists like Morgan, McLennan, Bachofen, etc....

^{2.} The definition given takes into consideration only the more prevalent form of monogamous family with neo-local, patrilocal or matrilocal residence and not other infrequent forms like polygynous families, polyandrous and consanguineous families.

result of a marriage, either immediately or with a delay after marriage.

Family formation is a process taking place perpetually in a society. A family in order to sustain and to perpetuate itself has to endure the external forces acting on it. For some sections of people, fertility is the only aspect left fully at the disposal of their families, which could be altered to facilitate a better chance for enduring these forces. This is the basic argument on which theories relating family formation and fertility are founded.

Explanations like labour theory, insurance and security theory and wealth flows theory can be included in to conventional anthropological explanations, on family formation and fertility

change. All these theories are basically founded on the idea that the fertility level of a family is not arbitarily set, but rationally determined by the benefits and burdens that a family would expect to obtain from children. It is important to note, however, that they do not attempt to study decision making processes at the level of the family. Labour theory and Insurance and security theory locate a family within an economic class and presume similar demographic response from all the

These are actually collection of explanations rather than a unified theories in the real sense.

families of this economic class, exposed to similar economic conditions.

Studies related to labour theory and insurance and security theory came as a critique to those arguments based on neo-classical macro-economics which tried to establish a positive correlation between fertility decline and economic growth in poor societies. The argument here is that under the conditions of high fertility and declining mortality, there is an increase in the proportion of population in non-working age group. This, it is said reduces the rate of savings. Further, this increase in population also requires a diversion of a share of resources, which are less productive investments. That is to say, that with reduction in fertility the per-capita income and savings of the people would increase leading to an increase in rate of investment and hence a faster economic growth.

A study which was undertaken in support of these arguments and which was directly instrumental in promoting studies against these arguments was the Khanna study. This study was a long term field study conducted by Wyon and Gorden (1971) in the Ludhiana district of Punjab. It was the first major filed study in India "aimed at devising methods that could later be employed to control and solve the 'population problem'. The

^{4.} Sea Mamdani (1972) P.25

study was spread over a span of six years from 1954 to 1960 and a follow-up study in 1969. To start with the study was `action' oriented, with the basic objectives of determining the efficiency of a specific method of contraception - foam tablets - and the effectiveness of family planning in general. It was also aimed at determining the effect of population control on the health and social status of the people, (Mamdkani 1972). But later by mid 1958 the study got confined to analysing and explaining the existing fertility related behaviour. "The study was conducted in seven 'test' villages, with a total population of 8,000 This study was done in five phases. "Explanatory investigations" I and II and a pilot study were conducted to test the level of acceptibility of the particular method contraception among the study population. The definitive study" conducted over a span of four years, aimed to achieve "a significant decline" in the birth rate of the Khanna population. Both in the pilot study and in the definitive study, foam tablets were supplied door-to-door, with substantial 'education' regarding birth control, to people of one set of villages, while no contraceptives were supplied to another set of `control' villages. The follow-up study was conducted to evaluate the efficiency of the contraceptive and that of the programme as a whole. However, it showed that "the birth-control programme had

^{5. &}lt;u>Ibid</u> P. 24

^{6.} Ibid P. 27

been a failure". It revealed that there was no significant difference in birth rates between 'control' villages population and 'experimental' villages population. Although there was a decrease in birth rate in the experimental villages from 40 per 1000 in 1957 to 35 per 1000 in 1968, it could not be traced to the birth control programme but to a general rise in female age at marriage (Mamdani 1972).

These arguments which try to establish a positive relation between fertility decline and economic growth, start with the notion that households are units of only consumption and not production. This assumption could be true for a society under fully developed capitalism, where the family is no longer the unit of production, but not for rural agricultural communities in any of the developing countries.

In calculating per capita income, savings, GDP etc. the population of a nation is assumed to be homogenous in nature in terms of its interest towards saving and accessibility to nation's resources (Mamdani 1976, Rao 1976). This is an ideal typical construct of a family in relation to society not grounded in empirical reality. Mason (1988) based on survey evidence from industrialized countries, several Latin American and Asian

^{7.} Ibid

countries concludes that though reduced fertility, lower population growth and low dependency ratio have contributed to higher rates of savings in some countries, "population growth may have a negligible effect on savings and may even lead to lower aggregate savings rates." Some studies "have been inconclusive about the relationship between number of children and savings".

Thus a simple, unilinear relation between savings and population

The Labour theory argues that the poor reproduce more as for them children are a source of labour, therefore a source income and positively contribute to the family. Not too differently the insurance and security theory contend that for sections of people who do not have a source of permanent income children are a source of security and insurance in times of misery and old age, and this acts as a motivation for higher fertility. The wealth flows theory centres around the argument that direction of the net wealth flow between parents and children determines whether a society will experience high or low fertility. Caldwell expostulated this theory in an attempt to restate demographic transition theory. (Caldwell-1977). In this chapter, we examine the contribution of these theories towards understanding family formation and fertility change. We shall

growth is fallacious.

^{8.} See Andrew Mason (1988) P. 137.pa

first examine the basic argument of these theories before subjecting the concepts, methods and data involved to a critical scrutiny. In the process we hope to attain an insight into the strengths and weaknesses of the arguments adduced.

LABOUR THEORY

The notion that production of children can be measured in terms of costs and values to the family came into limelight when Leibenstein (1957) noted that parents have a rough estimation of the costs and the benefits of children in deciding to have a child. Explanations that can be grouped within the rubric of Labour theory basically try to link labour value of children with fertility level. Powerful arguments in support of this theory comes from Mamdani (1972, 1976) and Nag et al (1978). Other authors like Cain (1977, 1978), Nadkarni (1976) also subscribe to this theory although they maintain differences with Mamdani.

Mamdani's study (1972) came as a critique to the Khanna study. He visited Manupur, one of the seven 'test' villages of Khanna study, two years after the earlier study. He based his work primarily on interviews of people who were working as field level workers, assistant field directors and some of the

9

respondents of the Khanna study . In Manupur and in the whole of the Punjab, state intervention in terms of writing-off most of the debts and providing financial aid for agricultural purposes, according to Mamdani, has greatly changed the traditional economic relations. Brahmins who were mostly money lenders were severely affected. Jats and the service castes were freed from the clutches of these money lenders. Although improvement agricultural technology and the accompanying changes in social relations rendered the traditional services of the servicing castes superfluous, they were mostly absorbed gradually into agriculture. There was no decline in the need for agricultural labour despite these changes. He concludes that invariably, in all sections of people, except the numerically insignificant brahmin caste and the large farmers, there existed a need to increase family labour. Increase in family labour would fetch, for a landless labourer, more wages. For an owner cultivator, it would reduce hired labour or might enable them to rent more land for cultivation. Under these conditions to limit one's family "to willfully court size would mean for them

10 disaster"

^{9.} Apart from interviews of "mysteriously selected and seemingly small number of men" (Hawthron (1978, P.4) he depends only on published and unpublished works of Wyon and Gordon related to Khanna study.

^{10.} Mamdani op. Cit. f.n. 4 P.5

At a conceptual level he argues that in the case of rural landless labourers, small peasants and urban migrant labourers children are a potential source of labour and income. They become net economic producers in their early teenage. Children may contribute to their family economy either in terms of direct production activities or by doing household activities thereby releasing adults to carry out productive activities. For a small farmer, "given, a very small income, to have to hire even one farm hand can mean disaster. If such a farmer is merely to survive, he must rely on his family for necessary labour 11 power".

"The only means by which the individual production unit, the family, can increase the physical product at its disposal is by increasing the labour-power at its disposal i.e.

12
through high rates of reproduction ". Moreover, given that

there is always a need for additional labour, among the poor peasants and labourers " with each additional child the cost of

having a child declines and the benefit rises".

^{11.} Ibid P. 76

^{12.} Ibid 1976 P. 1145

^{13.} Ibid

Cain (1977) notes from his study of a Bangladesh Village that "male children appear to become net producers by the age of twelve and compensate for their accumulative consumption by the age of fifteen". In addition, children even when they are young, get involved in activities like fire-wood collection, cattle grazing, fetching water, taking care of younger children etc.

Mueller (1976) arguing to the contrary, maintains that there is always a surplous labour force in peasant agriculture. For a major part of the year either children or women are out of market production. "Where labour force participation by children appeared to be relatively high it was exceptionally low for 15 women". Children consume substantially more than they produce until they reach fifteen to nineteen years of age. The aggregate cost of supporting people aged fifty five and older is much lower than the cost of supporting children. She concludes that in

^{14.} See Cain (1977) P. 224. It is important to note that in the village Char Gopalpur in Bangladesh, rice cultivation is predominant and arable land constitute the bulk of the total wealth of the village. It is possible that this gives higher employment opportunities for everyone including 33 percent of households who do not have any land.

^{15.} See Mueller (1976). P. 119. The data on labourparticipation by age she gives for India is from 1961 census covering only the states of Bihar, Punjab, Himachal Pradesh and West Bengal (Table 4.3 Page 109).

peasant agriculture, children have negative economic value. But it has to be noted that Mueller takes into account only the activities directly related to market production in measuring the amount of labour participation by children.

Nag and his colleagues (1978) studying two peasant villages one in Java which was "until recently..a relatively isolated village" and the other in Nepal "situated in relatively in accessible region" point out that Mueller fails to acknowledge the fact that in almost all peasant societies there exist a multiplicity of occupations like animal husbandry, non-agricultural wage labour, fire-wood collection etc., apart from agriculture.

"Although agricultural labour brings in the greatest economic return, the major portion of time of most people is spent in non-agricultural activities in which return per hour is

relatively low". Thus there is only under-

^{16.} See Nag et al. (1978) P. 294

^{17.} Ibid

^{18. &}lt;u>Ibid</u> P. 300

productivity but non unemployment or under-employment. "Even in peasant villages of high population density, households with a relatively large number of children ensure themselves a lengthy

period of economic 'success'.." Apart from explaining the persistence of high fertility among the poor the theory also tries to explain the decline of fertility. It is maintained that with the advent of 'modernisation' and mechanisation of farming, the need for a large labour force will not exist any more. This would reduce the desire for more children. (Mamdani 1972 Nag et al 1978) Nag for instance argues that the economic value of children to their families is higher in agricultural societies than in industrial societies; it is also higher in farming households than in that of non-farming households.

INSURANCE AND SECURITY THEORY

The main argument of this theory is that children for the poor act as source of security and insurance in old age. Given that they do not have a regular income and savings which would help them in times of need and emergency the only possible source of security is children.

^{19.} Ibid P. 301

If parents can see that at least one or two children, preferably sons, will survive when they themselves are old, that would be the best and the only source of security for them. Since infant mortality is high, it is pointed out that (Gould 1976) in many societies, in order to ensure living heirs who would earn them bread, parents need to "stock pile" children. If there are many children, parents can depend on one or the other; or children can divide among themselves the responsibility of taking care of their parents. Rao (1976) advances this arguement very strongly through a theoretical model. In fact he goes further to argue that "as survival rate improve birth rates might remain flat and growth rates rise up to a point; after that birth rates fall more than proportionately and growth rates

decline". He analyses the strength of motives for having children across four different classes viz. workers; peasants and petit bourgeoisie; capitalist farmers, industrialist, big traders etc.; and professional classes. He takes in to consideration direct and indirect cost of bringing up children as well as motives like labour and insurance against old age in arriving at desired number of children in the families of these four classes. Although he arrives at a curvilinear relation between economic status and the desired family size he speculates that the two motives for having children are stronger in the first two classes.

^{20.} Rao (1976) P. 1153

The motive of insurance against old age is strongest

among the workers, who generally have low income level with high uncertainity and a high dependency on others for daily income. "This motive become weaker as property status increses " and it 21 is "lowest among the owners of means of production " Another related argument is that of 'son-preference' Proponents of this argument maintain that there is a higher preference for sons than daughters. It is argued that sons contribute more than what daughters can and sons begin to contribute to the family from a relatively younger age than daughters, (Cain 1977, 1978). these conditions every family would like to have at least one or two sons, irrespective of the number of daughters they have. Thus in the course of ensuring a few sons a couple might finally have more children than they actually desired. This is more probable in the case of "workers", "peasants and petit bourgeoisie" (Rao 1976)

The insurance and security theory appears to be subsumed by labour theory and can ultimately be converted in to labour "theory" (Krishnaji 1983) However, in terms of its arguments based on 'son preference' and 'high infant mortality',

^{21.} Ibid P. 1157

^{22. &}lt;u>Ibid</u> P. 1153

it tends to allow space for some uncertainity of family size and to acknowledge the view that a family might often end up in having either too many or too few children than they decide to have. This also gives room for the possibility of accepting that there is really a surplus population among the poor which labour theory does not allow.

Both labour theory and insurance and security "theory" plausible explantions for persistence, of high fertility. They cannot be proved wrong for all societies. However, it is, equally true that it cannot be proved right for all societies. Perhaps the most encouraging point of these explanations is they do not adopt a typical middle class notion of costs and values of children and child bearing, presuming an industrial economy (Michaelson 1981). On trying to establish the fact high fertility among the poor is economically rational behaviour, these theories question and of puncture proponents traditional enthnocentric "Oriental" constructs developed

occidental scholars.

The relevance of these theories, argues Krishraji "to poor countries at the macro-level cannot be questioned. But

23

^{23.} Usage used by Edward Said in his book titled "Orientalism" (1978)

their uniform applicability to all families and social classes is

24
doubtful..."

economic theories often ingnore the "These differentiated nature of peasant classes. The attitude towards having children and fertility rates varies enormously between 25 societies with the same agricultural technology." For instance Macfarlane points out that "Japan and China in the early twentieth century had contrasting fertility patterns, 26 though both were wet-rice cultivating communities..." Hawthorn countering Mamdani's argument says that "even within the Indian Punjab the effect of agricultural modernisation and the supply of labour from outside are so complex and that no generalisation can be made. Another reason why generalisation can not be made easily is "that conditions of child labour are extremely variable from society to society" .

^{24.} See Krishanji (1983) P. 865

^{25.} Ibid P. 869

^{26.} See Macfarlane (1978) P. 102

^{27.} See Hawthorn (1978) P. 5

^{28.} Krishanji op. cit f.n. 24. P. 871

The applicability of these theories basically rest on

important aspect and that is the availability of employment in the community. It is possible that people of similar economic status might have differential motive for having children dependent on employment opportunities. For instance studies like that of Monica Das Gupta conclude quite contrary to that of Mamdani, Nag etc.... Das Gupta concludes that with a steady increase of population there is a change in traditional economic organisation. To cope up with increasing population pressure, traditional economic relations are altered in such a way that the landless and small peasants are made to bear the brunt of the problem. The rich farmers put into use more of their own family labour thereby cutting down hired labour. Under these conditions large families do not improve the economic conditions of the Das Gupta's study hints that "under different conditions much the same kind of 'development' can have quite opposite on the felt demand for children". Effect effects 'development' may also vary over period of time. For instance Nag (1982) who studied Manupur twelve years after Mamdani notes that economic value of children has got considerably reduced.

This is due to "a reduction in remunerative work by children; a

reduction in children's work time due to change in the nature of

agricultural and household activities as well as (due) to higher

30 enrollment of both boys and girls in school".

^{29.} Hawthorn op.cit P.5

^{30.} Nag. 1982 P. 670

Even studies that support the idea that labour act as a motive for higher fertility do not categorically link it with the poorest of the community. For example Cain (1977) who says that children contribute considerably from young age to family income, finds that "the medium ages at which male children become active in crop cultivation, live stock care and other activities that utilise assets are uniformly lower for the wealthiest class

than for the landless". For activities not requiring assets the media age of active participation is lower for small owners than large owners and landless. Nadkarni who argues "the poor find their man power an asset - the only significant asset that provides them income - rather than an liability", concludes that "factual evidence does not support the hypothesis that poor

households have excess or surplus population". Further he notes "the poor households tend to have smaller number of persons than the big farmer households".

Arguing that the economic value of children would get reduced by modernisation or mechanisation of agriculture, these explanations invariably get enscounsed in the demographic transition theory which contends that industrialisation is a prerequisite for fertility decline.

^{31.} Cain (1977) P. 213

^{32.} See Nadkarni (1976) P. 1163

^{33.} Ibid P. 1167

Another important question that cannot be eluded by these theories is that do the poor actually reproduce more?. Before answering this question, one has to consider who indeed are the poor? and which are the groups of people who constitute 'the poor'. As per economic statistics one relies completely on per capita income and percapita expenditure which are actually measures of mean. These measures actually conceal information than they reveal. Per capita income and per capita expenditure of families may vary from year to year as a result of birth, death, migration, marriage and partition in a family. Hence, using per capita expenditure or per capita income as a measure of economic status and relating it with fertility will prove erroneous (Krishnaji, 1983). Thus it is necessary to go in to details like land holding, family income and wealth to estimate the economic status of a family.

Mamdani includes among the poor, the working peasantry 34 and the unemployed or the "appropriated masses". Nadkarni, Cain and Nag analysing only peasant communities on the other hand, include the entire peasantry irrespective of land holding and conclude that a need for labour power induces higher fertility. This difference in groups of people they take into consideration is vital point to be noted. The studies which

^{34.} Mamdani op. cit f.n. 12 P. 1145

contrary to that of Mamdani etc. also argue take into consideration the entire peasantry and aim to show differences in motives like labour, insurance and security in different sections of peasantry like landless labourers, small farmers, large and capitalist farmers. In other words all the peasant communities are assumed to be homogenous in nature and it is attempted to demonstrate a unilinear relation between economic status and fertility level. These studies (Krishanji 1980, 1983; Hussain 1970; Jain 1939; Driver 1963; Dfurfeldt and Lindberg 1980) arrive at the conclusion that fertility is found to be narrowly or positively associated with economic status. However, it is equally erroneous to conclude that there is always a positive corelation between economic status and fertility.

We are, in line with Hawthorn and Macfarlane, in saying that it is impossible to make a generalised unilinear relation between economic status and fertility. Studies which provide empirical support to relate economic status and fertility (showing positive or negative correlation) are micro-level studies. One cannot expect that implications derived from one study can be proved right for other also. These studies group together different groups of people under the rubric 'the poor'. Further even among one particular section of people, say the landless labourers or small peasants of different region, it is possible that there will be differential motive for having less or more children according to the need for labour which in turn

would depend on size of land holdings, type of land -wet or dry-kind of economic relation between different groups, non-agricultural employment opportunities etc. This explains how Mamdani and Das Gupta studying similar village of the same region

35

come to conflicting conclusions

WEALTH PLOUS THEORY

In an attempt to restale demographic transition theory, Caldwell points out major lacunae in demographic transition theory, which he feels, has to be addressed in order to improve the applicability of the theory.

Firstly, there is a problem in demographic transition theory's understanding of rationality as it asserts that rationality comes only with industrial urban society and regards traditional agrarian societies as essentially brutish and superstitious. The theory relates high fertility with irrationality.

^{35.} Das Gupta points out two major differences between Manupur and Rampur though she says that both the villages are similar. Firstly, in Rampur average size of holding was lower as 83.7 percent of holdings are below 10 acres as compared to Manupur 89.3 percent of holdings were below 16 acres. Secondly, the use of tractors is more prevalent in Rampur. Even small farmers hire tractors unlike in Manupur where only a few wealthy farmers use it.

It is assumed by the theory that it is always rational for a man to maximize the expenditure on the individuals in his or her family. But one can cite any number of societies from anthropological literature in which greater pleasure is expressed in spending on some relations outside the nuclear family.

Demographic transition theory maintains that "industrialization" or more broadly "modernization" is a prerequisite for demographic transition. It never allowed the possibility that the new way of life and consequent new fertility behaviour might be generated in the urban industrial setting and be exported to non-urban or non-industrial area. The theory also fails to indentify whether it was "modernization" or a specific

form of "social westernization" that was exported and that led to behavioural change and fertility decline.

Caldwell points out that part of failure to advance the 'theory' is undoubtedly to be blamed on inadequate research. The fundamental problem, he opines, is not inadequate methodology but the poor application of methods in cultures other than those for which the theory was developed. This problem, in other words, is basically the problem of ethnocentrism, which in fact predetermines the range of findings and the appropriate answers in any related research.

^{36.} See Caldwell (1977) P. 10

"The fundamental issue in demographic transition" for Caldwell is the "direction and magnititude of inter-generational wealth flows, of the net balance of the two flows - one from parent to children and other from children to parents".

"Wealth flows" includes "all the money, goods, services

38
and guarantees that one person provides to another". Caldwell
analyses the direction and magnititude of wealth flows in
"primitive", "traditional" and "transitional" societies. By
primitive society he basically means a society which is organized
in the form of a tribe, or a clan, or a family, with nearly
everyone continuing to be living among the people of their
origin, with minimal security from outside the group. In a
"traditional" society there is an increased role of the state or
church and influx of monetary transactions, but it continues to
be a pre-modern and a non-urban society.

A "transitional" society refers to society undergoing rapid change in the way of life, especially change in the role of the children and in the possibilities available to parents for limiting the number of children. Most of the areas of the contemporary third world countries belong to this category.

^{37.} Ibid P. 81

^{38. &}lt;u>Ibid</u>, 1982, P. 333

In primitive and in almost all the traditional societies, net wealth flow is from children to parents. Here the only economically rational response that holds good is an indefinitely large number of children.

There is a point of "great divide" after which there is a change in the direction of the wealth flow and the net wealth-flow is from parents to children. This change in direction of wealthflow leads to a change in the economically rational response also. Now the economic rationality that would hold good is stated to be childlessness.

Thus "there is not a whole range of economically rational levels of fertility in different societies, but instead only two situations, the first, where the economically rational response is an indefinitely large number of children and the second where it is to be childless ... however (the) maximum and minimum family size in these societies are determined by personal, social and physiological reasons" and not by economic reasons alone.

The "great divide" which marks the change in the direction of the wealthflow, is not mechanically determined by economic conditions. It is a social phenomenon, which occurs

^{39. &}lt;u>Ibid</u> P. 116

when the nuclear family is economically isolated from the extended family. This economic nucleation occurs only after emotional nucleation of the family has taken place.

Caldwell situates most of his work in Africa, Australia and in rural South India in attempting to determine the major forces of change that causes that the emotional nucleation of family.

The crux of his argument is that "for reasons that lie deep in its history, the family was increasingly economically nucleated in Western Europe centuries ago ". A "direct effect of this is that Europe's population growth rate was lower than it would otherwise have been" The west was able to export western social structure which includes "the nuclear family as the basic unit of society" and a "range of values associated with it", to other parts of the world. This was possible merely because of the "over whelming economic strength", the west derived consequent to the industrial revolution.

^{40.} Ibid P. 153

^{41.} Ibid

^{42.} Ibid

^{43.} Ibid

The most important social exports have been the concept of the premdoinance of nuclear family with its strong conjugal tie and the expenditure of one's income on one's children than on another relative outside the nuclear family. Other related exports have been the greater importance of sexual relations between monogamous spouses, the increase in the age at marriage, the practice of contraception or abortion before or after marriage and convergence of decision making power from a larger kin group to the nuclear family.

The major vehicles by which these social exports are carried out are education and the mass media and to some extent also the family planning programme and health services. Caldwell lays great stress on the extension of 'modern' education. The educational system in much of the third world countries are essentially a reflection of the modern west, both in their origin and messages. It directly makes the students imbibe the western social values regarding family, marriage, etc.. Education acts indirectly by way of increasing the cost of raising children in terms of direct educational cost, clothing, food and health as required by school going children.

Sending children to school increases their dependency on parents which once again, adds to the cost of children. But despite these increase in the cost of children brought in by schooling, the availabilty of non-agricultural employment and

diminishing employment in agriculture encourages parents to send their children to schools (1980).

Another marked change brought up by schooling is to increase the female age at marriage. This, Caldwell feels is an important determinant of fertility. "A deferment of marriage from under nineteen to over twenty three years of age, may reduce the size of the completed family by as much as a third". Availabilty of extended training and the pursuit of higher salaries, facilitated by full time schooling, to a greater extent delays the female age at marriage. Caldwell finds that among the new urban elites of the Ghana higher education is associated with "lower occurance of unstable marriage and polygyny", "more frequent" and "more efficient" use of contraceptives and easier acceptance of innovations.

Caldwell also emphasises the role of mass media including newspapers, cinema etc... (1976, 1982) in bringing in western social values. To explain the high and the stable fertility in most of the developing countries which are "pretransition" societies, Caldwell resorts to the concept of "familial mode of production". "The conditions of stable high

^{44.} Ibid 1968 P. 172

^{45. &}lt;u>Ibid</u> P. 180

^{46.} Ibid 1982 P. 159

fertility and of subsequent destablization, lie largely in nature of economic relations within the family" The traditional, rural, peasant economy is a family based economy with a familial mode of production. This mode of production is characterised by relation of production between kin. different family members enjoy different advantages according to their position in the family structure. More "powerful" or the decision making members always have material advantage over others. There is always inter-generational as well as nonintergenerational wealth flow within a family from younger to adults or from females to males. Thus "family economic relationships are exploitative and there is potential 48 conflict and change". Caldwell also feels that "the all important internal economics of familial production has been almost entirely ignored, while great emphasis has been placed on marketable surplus and on non-familial economic the relationships" ... merely because they are "closer to those of capitalist society"

The way Caldwell deals with the concept of "familial mode of production" can serve as a valid point to start a critical discussion on his entire theory of "wealth

^{47.} Ibid P. 157

^{48. &}lt;u>Ibid</u> P. 159

^{49.} Ibid P. 165

^{50. &}lt;u>Ibid</u>

Caldwell straddles uncomfortably, anthropology on the one hand and marxism on the other. Perusing demography Caldwell keeps track of neither his anthropological heritage nor the neoclassical economics that has modulated him. On the one hand he points out how earlier proponents of demographic tranistion theory have dealt with family in non-western societies with enthrocentrism and that the idea of profit maximization will not be applicable in these societies. On the other hand he says, within a family in a pre-industrial society the "decision-makers" struggle to maintain their position of material advantage by maintaining high fertility.

Economic relations within a family among its members are based on reciprocity rather than on profit maximization. For Caldwell "wealth" includes "all the money, goods, services and guarantees that one person provides to another". One problem is with the quantification of all these forms of wealth so as to conclude that familial economic relation is exploitative in nature.

Selecting and emphasizing intrafamilial production relation, ignoring other non-familial economic relations closer to those of capitalist society, is clearly an epistemological

^{51.} Ibid P. 333

sleight of hand. One is reminded of the illustration of `a man crossing the road', given by E.H. Carr in dealing with "causality

in history". Caldwell's analysis, is based entirely on individual families, as if they exist without any relation with each other. The interaction taking place among the family members and all individual families are equally placed in a society. Caldwell clearly subscribes to 'methodological individualism' (Bharadwaj 1980) of neo-classical economics. Here all the families in a society are assumed to be uniform in nature, and the society is considered as an array of slots into which these unifrom 'units' are distributed all over uniformly. Uniformity of the 'units' and the homogeneity with which they are distributed gives no place for any kind of stratification in the society. The concepts like class and class conflict are completely left unexamined.

A family is a social entity. It cannot exist in isolation, without interacting with one another. In the course of its existence, it inevitably enters into a definite relations with another leading to unequal exchanges and distribution of wealth and power.

^{52.} See E.H. Carr (1961) P. 104-5

The crux of Caldwell's argument balances on the idea that preponderant existence of nuclear family in a society is always related to low fertility. There are two problems in this argument. Firstly ethnographic and historic evidence does not permit this kind of generalisation. There are studies for example which have concluded that fertility in households with 'nuclear structure' is often higher than that in 'joint' households. (Myrdal 1968; Freedman 1961) Some have not found any simple correlation between form of household and fertility (Kaplan 1976). Lorimer specifically argues that "cohesive groups such as extended families do not necessarily stimulate high

fertility" but they only "tend to enforce social norms". Secondly, even if one can ascertain the association between the two viz. nuclear family and low fertility, it does not necessarily mean that the former caused the latter. Either, both these aspects may be dependent on some other more fundamental aspects or the latter may be the cause and the former the consequence.

Another crucial point in Caldwell's analysis (1982) is that he selects a few aspects of modernization like education (schooling), 'mass media', 'modern' health services etc. and not many other which are perhaps more important.

^{53.} Quoted in Nag (1973) P. 62

All the aspect of modernization he has listed are aspects which are directly moulded by economic development. These aspects are only visible indicators of economic development or underdevelopment. It is more appropriate to argue that economic development directly effects the level of fertility rather than by these aspects alone. It actually becomes tautological to fix causal links between these aspects and fertility.

It is encouraging that all these rationality theories agree that reproductive behaviour among peasant communities and workers is rational and moulded by their economic motives and not due to superstition or fatalism as is frequently adduced. However, it appears too unrealistic to imagine that all families take in to consideration the pros and cons of an additional child before giving birth to one. This view of 'rational' man owes largely to the contestable vision of neo-classical economics of man and society.

Questioning this assumption is not to question the idea of rationality or maximization. But, it is only to suggest that they are not homogeneous and universal.

The idea of homogeneity is extended by these theories even to their units of study. For instance Caldwell dealing with the concept of familial mode of production assumes all families

to be uniform in nature and as units within homogenous community. Similarly these theories assume that peasant communities are homogenous in nature and what holds good for one community is assumed to hold good for other also. These lacunae in these theories can be traced to their rootings in a neo-classical micro-economics of individual consumption and household production.

- CHAPTER III -

PAMILY FORMATION AND FERTILITY CHANGE
CONTRIBUTION OF THE CRITICAL ANTHROPOLOGY

CHAPTER III

CONTRIBUTION OF THE CRITICAL ANTHROPOLOGY TOWARDS FAMILY FORMATION AND FERTILITY CHANGE

Critical Anthropological tradition as a perspective overlaps to a great extent with historical materialism. It draws a great deal of its methodological aspects from the discipline of political economy.

Methodologically, the critical tradition strives for historicity, holism, interrelatedness and specificity in dealing with demographic and other related process. On pursuing in this venture, the tradtion cut-acrosses traditional boundaries of social sciences in general and anthropology in particular.

The demographic structure and processes of a society are seen as "embedded" within the "structures and process" of economic and social political institutions. The idea that any special mode of production has its own unique 'laws of population' is given importance but is taken with enough caution. It is only considered to mean that special conditions under which human life is produced and reproduced are grounded in the material base and the social relationship of production. It establishes the fact, there cannot be eternal and universal 'laws of population' implies "characteristic interplay of forces and relationship of fertility and mortality".

^{1.} Greenhalgh 1990, P. 87

^{2.} Seccombe 1986, P. 32

Demographic structure is an integral component of a social formation, functioning within the system. It maintains complex and dialectical relation with other components like kinship, economy, politics etc.. The forces shaping demographic structure of a society emanate from regional, national and global levels. The corollary of this is that, a dominant power of production reproduces itself through subsumption of other modes of production, wherein the demographic structures of the latter are to a great extend shaped by the former. This argument is central in analysing contemporary demographic regimes of colonial formations, peasant communities and other traditional social formations in developing areas of the world.

Interrelatedness of the demographic aspect to other aspects of a social formation and to broader global forces hints that, causality is fixed, not unilinearly and to a single factor, but to a complexly interrelated web of causes. The configuration of this web of causes is specific to any social group. Often, one particular attribute of these multiple causes say kinship, religion, politics, dominates in shaping this configuration. However, economy determines which particular institution would function as the dominant one (Godelier, 1984 Meillassoux, 1978.)

A major limitation faced by critical tradition in adopting the writings in traditional political economy is the

inadequate treatment of the concept of 'reproduction'. Marx when he speaks of reproduction restricts it merely to the process of successive repetition of the production cycle. i.e. the process of extended reproduction (Harris and Young 1981; Mies, 1980; Bennholdt-Thomsen, 1982).

The concept of 'social reproduction' is of central importance to critical tradition in dealing with demographic process. Social reproduction is "the overall reproduction of a particular social formation." It subsumes subsistence reproduction. However social reproduction is a much wider process and of a different level of abstraction. It also includes the components of "allocation" of individuals "to particular class positions standing in particular relation to the means of production" and the component of "reproduction of adequately socialised labour" which involves the component of "ideology".

The process of family formation is seen as a component of the process of reproduction of labour, which in turn is subsumed by social reproduction. It is argued that the process of family formation gets tuned with the process of labour 'allocation' to

^{3.} Harris and Young 1981, P. 103

^{4.} Ibid P. 24

different groups as well as the role of subsistence production vis-a-vis extended production in shaping social reproduction. Or in other words, the forces that operate to perpetuate a social formation also shapes the course of family formation. The rule of the game like allocation of labour in to different strata on the basis of class, caste, rank or gender and ideology are defined by the dominant strata. The perpetuation of social formation is ensured through socio-cultural and political instituion like marriage, kinship, law, education, religion, technology (like medicine) language etc.

further discussion in this chapter will Our be directed, basically towards two aspects. Firstly how the domain of biological reproduction is regulated and put into use for perpetuation of social formation. This would call for discussion on how the existing patriarchal order was installed by gaining control over female sexuality. Secondly how the process subsistence production got subordinated o f to extended This would highlight how demographic process gets production. shaped by broader socio-economic processes.

The critical tradition in anthropology, argues that the control of women by men is one of the most important aspects in perpetuating the social relations of production and hence the social formation. This is true of any society whatever be the

kind of stratification. (Harris and Young, 1981: Stolcke, 1978; Meilalassoux, 1972;). Control of women's sexuality by men has very immediate relation with the reproduction of labour society. Control of women's reproductive power was a necessity at a historical juncture of human evolution. It became "necessary or atleast inevitable for the further development of society." Engles "who sees the development of private property as producing the 'world historical defeat of women' and Meillassoux, for whom a combination of environmental and demographic constraints and the technological basis of production explain the inevitablity of women's subordination" seem to subscribe to this Meillassoux analyses "Social reproduction..'in terms of the reproduction of labour" and this in turn he identifies control over human reproduction : women" He further sees "control over women's reproductive power being the same as control over differential allocation of labour" and opines that control over women by certain categories of men is a necessary."

condition for the reproduction of social formation"

^{5. &}lt;u>Ibid</u> P. 110

^{6.} Ibid

^{7. &}lt;u>Ibid</u> P. 120

^{8.} Ibid

In the earlier periods of human history when the concept of fatherhood was not known, human relations and groupings were centered around women and motherhood. It is probable that the earliest social bond was the mother child bond. Earlier evolutionists' view of matriarchy preceding patriarchy lends support to this view point. The critical tradition although it does not accept the unilinear evolutionary scheme like that of Morgan, accepts the precedence of matriarchy over

Evidence in favour of this argument can be drawn from prehistoric cave paintings and other archaeological artefacts, mythology, folk traditions and from ethnographic data.

Malinowski in his "sex and repression in savage

10
society" writing about matrilineal people of Trobriand Island
says that among them "... husband is not regarded as the father

^{9.} Infact the tradition appears to adopt the implicit evolutionism of of traditional anthropology. Maurice Bloch writing about Engles "The origin"... says that Engles endoreses the idea of Bachofen that matriarchy preceded patriarchy. But he goes on to say that "the worst thing that has happened to Marxism is that of incorporation of Margon's five stages of evolution". Godelier and Terry view that Marxist Anthropology can begin only when this 'five stages' are abandoned.

^{10.} Malinowsky 1927, Title of his book, use of words like 'savage' was not uncommon among earlier accidental anthropological scholars.

of the child..; physiologically he has nothing to do with their birth.., children in native beliefs, are inserted in to mother's womb as tiny spirits, generally by the agency of the spirit of a deceased kinswoman of mother" and "... fatherhood.. is a purely social relation".

Graves (1955) notes from the earlier Greek myths that it was the Great Goddess who was regarded as immortal, omnipotent and was given central importance. Religious thought was centered around the Goddess, representing motherhood, During this period fatherhood was not known and motherhood was a mystery. While men feared and adored the matriarch, the matriarch took them as lovers for pleasure but not to vest them with fatherhood.

In fact the tribal Nymph-nubile queen-chooses an annual lover-a 'king'- to be sacrificed and his blood spilled in the field to enrich the fertility of soil and flock. Men were however assigned works of "weaker sex" like hunting, fishing, gathering, herding and safe guarding the territory from intruders. These activities were done under the supervision of women and subject to the rules laid by the matriarch.

^{11.} Ibid P. 9

^{12. &}lt;u>Ibid</u> P. 12, From their myths, the author observes that, the first ancestral groups appeared always consists of a women, sometimes accompanied by her brother or totemic animal but never by a husband. Myths also lay emphasis on "spontaneous procreative power of the ancestral mother" (P. 109)

One can draw lot of parallels from this situation to that of Nayars of south India during pre-British period. Among the Nayars, descent is reckoned through the female line. Young females before their puberty are 'married' to a ritual husband'. But after the 'marriage' no significant importance is attached to the 'ritual husband' The 'husband' does not enjoy any right from the girl and is also "excluded from any legal rights in respect to the women's children". The women, without any impediments from this marriage, bears "children to lovers of no particular All these lovers are addressed by her children 15 terms meaning "lord or leader". The notion of fatherhood is missing in a strict biological sense. Biological paternity iв not given importance instead 'social paternity' is attributed a man who comes forward to take care of the expenditure incurred during the pregnancy and child birth. Further, Nayar men "trained as professional soldiers" | and assigned with the of safeguarding the territory (Leach :1955; Graves, 1955; Gough. 1959;) However in course of time the powers vested in the hands female members were taken over by their consanguinal male

kinsmen.

^{13.} Leach, 1955, P. 75

^{14.} Graves 1955, P. 15

^{15.} Leach Op. Cit.

^{16.} Gough 1959 P. 25

In the case of ancient Greece, as interpreted from myths, the 'king' who was choosen by the queen as a lover and for subsequent sacrifice gradually lengthened his period of 'reign' to the whole summer and to whole one year and subsequently deciding to give only an annual mock death, during which a "surrogate boy-king" was sacrificed and his blood spilled enrich the field and flock. From then onwards the position of queen gradually got weakened and the king established himself permanently. This coincided with acknowledging the relevance coition to child-bearing and the importance of fatherhood. this period the status of men gradually increased and that of women came down. This change of dominance from female to males is braught out in the myths by greater reference to male Gods than Goddess. Male Gods who were earlier depicted as mere demi Gods, powerless and inferior, when compared to female Goddess were now given prominance and were depicted as immortal and more powerful and superior than the erstwhile powerful female Goddess. instance Zeus, a demi God in earlier myths, became an olympian deity in the myths of the laster period.

This weakening of matriarchy is attributed to Hellenic,

Achaean and Dorian invasion from early second millennium B.C.

Hellenic invaders were "small armed bands of herds men

worshipping Aryan trinity Gods Indra, Mitra and Varuna"

^{17.} Graves <u>Op. Cit. P. 18</u>

Achaean invasion caused serious weakening of matrilineal tradtion and with the <u>Dorian's</u> arrival "patrilineal succession became the 18 rule."

In the Indian context earliest written records do not lend any evidence in support of matriarchy preceding patriarchy. This is because these written evidences begins to appear only with the advent of vedic period which coincides with the Aryan invasion. Along with these invaders patriarchal order began to set in. Vedic and post vedic brahminical scriptures serves only as patriarchal ideology and does not throw any light on matriarchal order that prevailed earlier.

However pre-historic paintings from Kathotia, Bhimbtka and Kharwai (Chakarvarthy, 1993) and material evidance from Harappa indicate the important, if not superior, position enjoyed by women. These paintings show women taking part in hunting even big games equally with men. The paintings also suggest that in the "hunting gathering stage there was no rigid sexual division of labour" and " the role of women in the economy

was.. equal if not more than that of men". This point can also be substantiated with examples from the contemporary hunting

19

^{18. &}lt;u>Ibid.</u> P. 19

^{19.} Chakaravarthi 1993, P. 580

gathering societies and in societies that practise shifting cultivation (Boserup, 1970; Goody, 1976).

One can also draw support from other great traditions like the Dravidian tradition in which greater importance is given to female Goddess when compared to importance given by the 'great' tradition of Brahminism. Further folk female characters are projected as very powerful strongly built, dark and ferocious looking with multiple sets of limbs and heads unlike timid and soft built, mythical females of 'great' tradition who stand for Stridharma, or Pativrata dharma.

From vedic period onwards subordination of women assumed a severe form. This was done using religion as an instrument. Both reproductive and productive powers of women were controlled by men and put into use for the continuation of the social order. This period is related to the Aryan invasion (Chakravarthy, 1993), Chakravarthy cites evidence from the Rigveda to show that women of both Aryan and indigenous populations were controlled by Aryan men, the latter as chattels. Aryan women were confined within the household thus getting removed from economic activities. This lead to detoriation of status of both groups of women.

Subsequent brahminical and Buddist scriptures described women as wicked, treacharous, unfaithful "innately promiscuous" 20

embodiment of lust etc.. "According to Manu" the ancient giver of Hinduisam "their essential nature will drive women seeking satisfaction anywhere, anytime and with anyone " Thus it was felt necessary, so as to maintain the purity of a family lineage or caste and the control over private property, that women has to be guarded very carefully. This was essential as position of the family in caste hierarchy was not fixed by mere membership into it but also by the purity of the family upholded by its members. Control of women was established through Hindu law and custom which advocated that women have to be controlled day and night by the male of a family. Authority of the males was backed by right to use coercion and physical punishment. However, these controls were rendered redundant by the ideology which was floated. The rhetoric of Pativratadharma idealised "chastity and wifely fidelity as the highest duty of women". It was the only means through which a women could attain salvation (Rudra, 12981; Sen Gupta, 1991; Chakravarthy,

1993). ——

^{20.} Ibid P. 581

^{21.} Ibid P. 582

^{22.} Ibid P. 583

Religious ideology, however is not the only mechanism to control female sexuality and their production capacity. In an industrial society, ambience of patriarchal ideology is maintained through institutions like law, education, the field of medicine etc.

For example in England, from the late 18th Century, "Science was becoming the metaphor within which the existing social and sexual division of labour was justified and 23 reinforced".

This period saw a major transformation in the pattern of women's labour as they got more involved in wage labour. In this period of changing circumstances, it was necessary to reinforce and rationalise the subordination of women. As the earlier moral holds of patriarchal authority of father and priest got weakened, "the task of defining the position of women increasingly fell to the proponents of the new science and to doctors and biologists in particular."

This reinforcement was achieved basically by reinforcing the traditional sexual morality by "glorification of motherhood" and by spreading a belief in "female sexual

^{23.} Sea Doyal Op. Cit. P. 148

^{24. &}lt;u>Ibid.</u> P. 151

anesthaesia". The notion of sexual anesthaesia of females was spread not by avoiding discussion on sex but by bringing it into the idiom of 'knowledge' and 'science'. Sex as a part 'knowledge' pervaded all disciplines of science jurisprudence to medicine, from a psychiatric council to a public Being a part of 'knowledge' it also became a tool discussion. for social control. (Greer, 1984, Doyal, 1979). Jurisprudence and medicine (and psychiatry) collaborated to contribute to a vocabulary of sexual 'deviants'. These disciplines decided what is 'normal' and 'deviant' in sex, and as Sheridan (1980) writes from Foucault, in this period of "Victorian bourgeoise' .. "Sexuality was carefully locked away.." within the domain of

"conjugal family".

Medical ideology portrayed that "the status and the capacities of women were entirely predetermined by the nature of their reproductive organs... " and "a women's whole mental physical existence was assumed to be at the mercy of 27 reproductive system". . This process of "hysterization' female body "where by the women's body is seen as an organism

^{25.} Ibid P. 154

^{26.} See Sheridan (1980) P. 166

^{27.} Doyal Op. Cit. P. 151-2

:-: 76 :-:

saturated with sexuality, integrated into the field of medical practice and linked to the social body through regulation of birth and women's role in the family as biological and moral 28 guardian of her children" became inevitable.

The dominant medical ideology played a crucial role of bringing child-birth and related aspects into its fold and making it a 'super-specilized' aspect of modern medicine theory competently projecting female body as vulnerable. The picture of a group of highly specialised medical persons working on a female's body in helping her in giving birth sounds funny if not ridiculous when the same is done without any other's help except one or two kin of the women giving-birth among non-western 29 societies of the world.

This above discussion is significant in the sense that these aspects of controlling female's sexuality, 'medicalization' of the process of child-birth, glorification of motherhood leads to direct control of production capacities of females and hence taking control of subsistence production.

^{28.} Sheridan <u>Op. Cit</u> P. 187

^{29.} Shostak (1981) for instance writes that among the ! Kung "Soliltary child birth is the stated cultural ideal" and child birth is faced without any medical facilities, or birth specialists" P. 179

In a ranked society control over women is established through rules of kinship and marriage. Marriage which is one of the important mechanism of controlling access to means of production and to labour is a key factor in control of women's capacity for biological reproduction and their labour. Stolke says that "marriage by which women's sexuality is controlled is the key mechanism by which social differentiation is 30 reproduced".

In a self sustaining society direct control over the producer is the only way in which the product of labour is controlled. We saw this earlier in the transformation of indigenous women by the victorious Aryan invaders. Here "it is logical.. to control also.. the producer of the producer, i.e.

the procreative women". Meillassoux (1978) brings out how in a self-sustaining society control of "juniors" is established by the "seniors" by controlling access to nubile women. Though control over "juniors" could also be attained by having control over "vital knowledge" and "food stuffs", juniors in the course of time can acquire the vital knowledge and hence food stuff. Further, "fulfillment of these conditions" will only provide the

^{30.} Copans and Seddon (1978)

^{31.} Meillassoux 1978, P. 139

juniors "with a solitary independence"... and not "a position of 3.2 authority" within their group . Such a position can only be acquired if an young man can "take a wife and establish paternal 33 relation with her children". Access to nubile women is controlled chiefly through the mechanism of Institution of marriage is shrouded with rituals which include exchange of ceremonial goods. Most often this forms a part of bridewealth paid to the bride's family. Bridewealth is often composite in nature. "which testifies to the status of the person 34 able to collect it". The "amount" and nature of "bridewealth does not reflect the greater or lesser worth attributed to the women's personal qualities" but it sets "the bridewealth at a level inaccessible to the juniors".

Seniors who receive different kinds of commodities produced by the community as presentation do not redistribute some of them. These "prestige" goods are circulated only among the elders to "sanction access to wives" These goods" become the attribute of social age" and testifies the status of elders.

^{32.} Ibid P. 139

^{33.} Ibid

^{34. &}lt;u>Ibid</u> P. 145

^{35.} Ibid

^{36. &}lt;u>Ibid</u> P. 141

Thus a system is created "which will allow marriage at the junior level only through an agreement at the level of the 37 senior members of the communities concerned"

Whatever may be the basis of patriarchal ideology floated. it lays stress on regulating female sexuality. This regulation on sexuality of female could be seen as a kind control on fertility (Greer 1984). However, this need not always true. Greer (1984) opines that restriction on sex is way of achieving birth control. She quotes examples from Catholic. Buddhist and Hindu traditions wherein chastity idealised and acts as a form of birth control. But at least from the Hindu tradition one can argue that importance given chastity in no way is related to birth control: control sexuality is more a mechanism to control the 'ritual' quality of children than to control number of children born. is significant in this kind of regulation is that it ensures the barriers between different castes in tact and maintains the traditional economic and political inter-caste relations. in turn regulates accessibility to land, other forms of wealth and succession to office. This also helps to maintain an accessibility to the labour of other castes.

^{37.} Ibid P. 140

Industrialisation and capitalist expansion has lead to an increase in women's role in wage labour. However, despite this change, women continue to be largely responsible for domestic labour also. Actualy, "for the vast majority of women, working outside the home means a double shift of wage labour and

Boserup (1970) and Goody (1976) find a strong relation between status of women and the mode of subsistence in a society. In a population where farming is done with a hoe, shifting cultivation, women do most of the farm work. Ιn extensive plough cultivation, on the other hand, men do most the farm work. Boserup attributes a high instance of polygyny bride wealth in place of dowry in the former societies, latter, there is the institution of dowry and lesser the prevalence of polygyny. Thus Boserup holds that there is indisputable relation between sexual division of labour and the position of women in pre-literate societies. Goody subscribing this view, goes further to say that in population doing shifting cultivation occurrence of concubinage is rare when

compared to its occurrence in extensive farming population.

^{38.} Doyal 1979 P 216.

^{39.} Goody makes another significant observation. He notes that "Pastoral societies are almost exclusively patrilincal" P.4. The Hellnic invades described in the "Greek Myth" and the Aryan invaders of vedic period were also pastoral groups with patrilinial features.

Among the contemporary hunters-gatherers although there is a perceptible sexual division of labour they "have a high level of equality between the sexes- higher at least than that of Most agricultural or herding societies" Shostok (1981) based on narration of an old! kung women, brings out that among the !kung, men and women live together in a non-exploitative manner, displaying a striking degree of equality between the sexes.

The sexual division of labour that exist does not ramify into practices that threat the social and economic equality between the sexes. In fact the sexual division of labour "is not rigidly defined"; further "a division between domestic and public life... is largely meaningless.."

Right from the birth of children, their childhood to being groomed to adulthood, they are not differentiated on the basis of their sex. !Kung do not have any kind of preference of either male or female child.

!Kung women play a role of great importance in the family and in the economy. They bring in equal or even more amount of food material than what the males bring in. While the males contribute to the family economy by bringing meat from the

^{40.} Shostak op.cit P. 238

^{41.} Ibid P. 246

animals they hunt, females bring in head loads of vegetable food from the wild about two or three days a week for which they have to walk 2 to 12 miles two or three times a week. In this they are fully "autonomous" and men do not regulate their schedule. "From start to finish her labour and its product remains under her own control". Females are responsible for the major part of household activities. They decide about child birth, child care, getting their children married, etc... Further inheritance of "core membership" in a band and "ownership of water holes" are through both men and women equally.

This kind of evidence shows that subordination of women by men and the related sexual division of labour was a historically shaped event. Further it shows that "the extremes of subordination of women by men found in many of today's more socio - economically advanced cultures are relatively recent 43 aberrations in our long human calender..."

A significant point for our further discussion is that though "subordination of women... is not a creation of capitalism", it "intensifies and transforms existing forms of 44 gender subordination". Capitalism to expand itself, tries to

^{42.} Ibid P. 242

^{43. &}lt;u>Ibid</u> P. 238

^{44.} Harris and Young 1981, P. 118

maintain not only the subordination of women and the concomitant division of labour but also the kind of stratification that has

been existing. It gets an unrestricted supply of cheap labour by ensuring this. By retaining women within the household, giving them the role of 'house-wife' capitalism keeps itself away from the burden of producing and maintaining labour. Further whatever wage labour it extracts from women is done at a cheaper rate than it does from men.

"In all modes of production prior to capitalism,

46
subsistence production is also social production" thus the process of subsistence reproduction and social reproduction coincides with each other. Subsistence production includes "works related to pregnancy, child birth, nursing and education of the children,.... the work required in the production and transformation of food, clothing, housing and the psychical work of sexuality" It also includes "The subsistence production of peasants in the so called Third world.."

Subsistence

^{45.} For instance, in India, one can say that, whatever capitalist development has taken place, it has taken place without any serious change in the social fabric that has been existing. No significant change has taken place in stratification based on caste, Class stratification if it has at all has taken place, has actually got superimposed over caste hierarchy. See also Kosambi 1988.

^{46.} Benholdt - Thomsen 1982, P. 246

^{47.} Ibid P. 242

^{48.} Ibid

production involves production of use-values i.e. " appropriatin of work for consumption ". It is visible from the above given definition that subsistence production subsumes reproduction of labour force. Under capitalist mode o f production these gets transformed and redefined and they of subsistence increasingly get separated. The domain reproduction involving use-value production is however, made the integral part of the capitalist mode. Subsistence production takes place outside commodity production, but the use-value produced is appropriated by the capital. Use-value is transformed into exchange - value by means of prices. This way the labour power produced and reproduced within the domain of subsistence production is introduced into the domain of extended reproduction.

Material reproduction of labour force involves reproduction of labour on both day to day basis and generational basis. Reproduction of labour is the most vital and inevitable condition for the reproduction of capital. Both reproduction of labour and reproduction of capital maintain a dialectical relation with each other. However, of all the commodities, labour force is the only commodity which cannot be produced captitalistically "on the basis of wage labour and

^{49. &}lt;u>Ibid</u> . 244

50

extraction of surplus value". This explains why the process of reproduction of labour force is externalized from the sphere of extended reproduction into subsistence reproduction. Thus "capital itself requires the existence of non-capitalist forms of production in order to ensure its own reproduction on an expanded 51 scale".

Family and kinship are studied as the domain that takes care of subsistence production and reproduction of labour force. Godelier in his work related to Australian Aborigines and Meillassoux on West African peasant social organisation prior to colonization and the development of market economy, show kinship functions as an expression of relation of production. Godelier and Meillassoux draw heavily from Althusser in concluding that kinship operates as the dominant institution in a social formation but its dominance is determined, in the last instance, by the level of economy. Within the limitations of material conditions, kinship operates as the dominant institution and takes on the functions of relations of production. regulates marriage, controls access to conditions of production and resources; it also functions as a symbolic code of expression of relations.

^{50.} Dichinson and Russel 1986, P.7

^{51.} Harris and Young op.cit P. 117

Kinship helps to bring about a cohesiveness within a community say among the young and the old as well as with members of other groups. The cohesiveness and cooperation which brings about social order and enables the social organisation to carry out economic activities is inevitable for the reproduction of the productive cycle as well as for the survival of the group. Within a group kinship maintains a balance between the number productive and unproductive members, and between males and These ratios are maintained by the rules of alliance In other words, Kinship determines and residence. in such socieites the rules of production as well as it governs the of distribution (Meillassoux 1983).

In short as Godelier says, kinship relations "function simultaneously as infrastructure and superstructure." However. ideal case of above description is hypothetical. **A11** an contemporary social formation are articulated into capitalist system to a lesser or greater extent. As the degree o f integration of society in to market economy increases, the function of kinship gets reduced. But not all functions are curbed as capital needs for its survival other modes o f production.

^{52.} Godelier (1984) P. 10

With the advent of the market economy, the production process is removed from the domain of subsistence production and is carried out as extended production. As money gets more and more involved, aspects like wage relations, leasing, mortgage, share cropping and social investment grows. This happens at the expense of kinship relations.

Cohesiveness within a group and with other groups gets strained and turns to a rather impersonalised relations Breakdown of co-operation with other groups affects activities like harvesting and sowing for which wage labour is sought.

Further, market exchange and increased use of money in forms such as tax etc. forces the community to divert part of its productive capacity from domestic agriculture production to production for exchange. This is done either directly carrying out commercial agricultureor through sending part of its manpower to commercial sector for wage earning. Both these leads to severe cut in agricultural production, which once again leads to purchasing basic commodities, thus getting further entangled in to market exchange. (Meillassoux 1983)

Increased dependancy on money leads to more and more people entering from domestic production to commercial, wage earning sector. Rate of wage given by the commercial sector is

however, not high enough or regular enough to enable the survival of the wage labourers and their family.

At this stage, functions of kinship and family related to the production cycle is no more under its control. But the function of reproducing the labour force is within the domain of kinship and family. From the capital's point of view, these functions more related to individual family now-are:, firstly, carrying out subsistence activities to produce labour force in This includes biological reproduction, generational basis. feeding and bringing up children to the age at which his/ her labour may be appropriated by capital. Secondly, maintaining these members who are formally inducted into wage earning sector, but who can not ensure their survival without the aid of family and village community. This includes assistance to wage-earners in the form of not only domestic labour, but also economic from subsistence production sector. maintaining a large army of reserve labour force, who will never be included formally into commercial sector, but function as a force to keep the wage low.

All these activities are completely removed from the sphere of commodity production. The cost borne by capital to carry on these activities is minimal; capital only appropriates this 'ready-made' and maintained at free of cost labour force

which lends its labour at a competetive rate. Thus, under capitalism, the process of subsistence production is made subordinate to the process of surplus appropriation through capitalist production.

Biological reproduction of a group, thus is subordinated to the production process which is in the form of subsistence production in an ideal self-sustaining society and in the form of extended production in the capitalist mode. Biological reproduction of a social group never attains the maximum level of fecundity of the women. It is maintained at a level lower than fecundity level by the interventions of material and socio-political factors. These factors vary and have different effects on different classes of people as determined by the mode of production.

In self-sustaining peasant societies, agricultural productivity sets the upper limits of demographic reproduction (Meillassoux, 1983). The level of mortality and fertility are closely related with agricultural productive capacity and the current production of food. "Increase in the productivity of agricultural labour necessarily precedes any demographic 53

growth". Within the limits set by the agricultural productive

^{53.} Meillassoux 1983 P. 53

capacity kinship regulates, by the rules of alliance and residence the number of pubescent women compared to the whole group and a ration between productive and dependent members. Rules of alliance and residence in a way reflects the demographic situation of such a society.

Under the conditions of generalized commodity production of capitalism, population growth no longer depends on domestic agricultural capacity. But it depends on the needs of growth of capital. It depends on aspects like access to money, availability and duration of employment, level of wage and ultimately on the rate of exchange between cash and commodities. Shortly it is wage-work and capital that determine the 'law of population'.

Capital accumulation needs in one way or another, a large mass of relative surplus-population. As a result of this the 'law of population' always depends on "contradiction between necessary labour and surplus labour". Capital by constant revolution of technology from labour intensive to capital intensive, "constantly endeavours to reduce necessary labour in favour of surplus labour". So whatever be the level of

^{54.} Bennholdt - Thomsen, <u>op.cit</u>. P. 244

^{55. &}lt;u>Ibid</u>

capitalist development there will always be a mass of surplus labour, who will never be absorbed into the formal wage-labour but are nevertheless subsumed under capital accumulation. In relation to capital, this contradiction between necessary and surplus population is the point of origin of superfluous population.

On making a note on limitations of this tradition one can say that, in a way they also emanate from its methodology of political economic heritage. Political economy as a science of methodological analysis, cut-acrosses boundaries of traditional social science. It demands for dismantling of the current fragment, ideological and inadequate social sciences and their replacement by a new integrated social sciences.

Critical tradition in anthropology, addressing this problem, clearly regrets the colonial heritage of anthropology and its positivistic functionnal moorings. Some like Godelier, saw structuralism of Claude Levi-Strauss as the connecting link

^{56.} Copans and Seddon (1978) P. 2

between Marxism and Anthropology.

People like Banaji and Meillassoux however feel that structuralism does not provide a solution to the problems posed by fragmentation and the theoretical inadequacy of social sciences. Emmanual Terray for example feels that there is a need to "annex the reserved domain of social anthropology to the field of application of historical materialism.."

If it is acknowledged that the perspective of this tradition cut acrosses traditional boundaries of social sciences, then how can it be claimed as a perspective within anthropology? It is very difficult to counter this. But as long as one studies the area which is traditionally within the fold of anthropology, with whatever perspective, anthropology can claim some amount of

^{57.} Ibid P. 8

certain concepts and methods of traditional anthropology. For instance, it has taken uncritically, that "societies" as conceded by traditional anthropology are relevant units for 58 analysis. It also adopts concepts like comparative method and evolutionism. Field work as method of collecting data is accepted and widely used. (Kann and Llobera 1981)

Other major limitation of this tradition is paucity of field data which anthropology expects copiously. A possible reason for this could be the reservation this tradition holds against the role of empiricism in anthropological data collection. The critical tradition, points out that the greater emphasis has been given to "superficial empricism" by traditional anthropology based on functional ideas, leading to a "conceptual blindness" never allowing them to analyse the "Underlying 59 structures' and latent relations.

With reservation on empricism, and striving to reconstruct the underlying structures, empirical field work appears quite incongruent with this tradtion. However, one can cite works like that of Meillassoux, (1978), Mies (1980), Macfarlane (1976) and Jairath (1978) which are based on exprical field-work.

^{58.} Kahn and L1obera (1981) P. 294

^{59.} Goddard (1977), P. 62

Coming to conceptual aspects it is necessary to evaluate, with what clarity this tradition explains the demographic process that takes place in different societies.

What is striking here is that although this tradition does not subscribe to a general, universal explanation, this tradition leans more on a broader, more of theoretical and less of empirical explanation of demographic process (once again pointing towards paucity of emprical studies).

SUMMARY AND CONCLUSION

SUMMARY AND CONCLUSION

In the forgoing chapters the primary concern of the discussion is to show the role of anthropology in understanding demographic processes taking place especially in non-western societies. More precisely it is aimed at understanding the process of family formation.

As a prelude to the discussion of different theories, it was necessary to describe basic issues in demographic anthropology. This short description of theories of demographic anthropology has helped to fix the possible role of anthropology in demographic aspects. Further it has also helped to note the basic orientation taken by traditional anthropological approach. Ιt is important to note that anthropology disapproved application of demographic transition theory to non-western societies, pointing out that the stage of high birth rate and high death rate can not be true for pre-colonial hunter-gatherer societies. Secondly anthropology provides ample ethnographic evidence to show that man has controlled his number for a major part of his history and hence the notion of 'unregulated birth' probagated by family planning campaigners is fallacious.

However in the following chapter, we find that traditional anthropology subscribing to theories like labour theory, insurance and security theory and wealth flows theory fails to explain satisfactorily the demographic processes

especially the fertility level and fertility change in nonwestern societies.

A11 the three theories agree in arguing that reproductive behaviour in pre-industrial society are economically rational. At a micro-level economic benefits from children are powerful motives in influencing fertility levels. But at a marolevel one cannot generalise and expect uniform causal relation between these motives and fertility for different classes of Evidence does not support the argument that the poor people. reproduce more. On the the other hand there are stronger arguments in favour of smaller family size among the poor. Empirical data in support of this argument is provided for example by the Mysore Population Study (1961) and by and Lindbergs study of a village in Tamil Nadu (1980).

Caldwells criterion of the direction of net wealth flows although seemingly convincing at a macro-level, like the other two theories, may not yield any generalisation at micro-level. His attempt to explain fertility reduction, in "transitional" societies with the advent of Western values, therefore, does not appear to carry weight. He does not establish any causal relationship between the two, but merely captures the processes that simultaneously take place.

We argue that the basic reason for failure of is their rootings in neo-classical economics. theories For instance Caldwell in his wealth flows theory considers an typical, construct of a family and tries to apply his argument uniformly across all the sections in the community. theory and insurance and security theory on the other hand depend too much on the notion of rationality and decision making which they derive from the neo-classical economic notion of rational By doing so although they drive the view that fertility man. levels are shaped often by economic factors, they fail to take in to account the broader macro-level forces outside the control of the family and the community that act to shape the demographic structure of a society.

This is mainly owing to failure of traditional functionalist anthropology to relate social processes taking place in a society to a broader political and economic forces, as pointed by proponents of the critical tradition in anthropology.

Our discussion on critical anthropology to understand family formation and fertility change in non-western societies is centered around the concept of social reproduction. The process of family formation and demographic process are located within the ambit of social reproduction. The main argument here is that family formation is an important component of reproduction of the labour force and control of this domain is vital for the

reproduction of social relations of production, control of this domain is ensured by establishing control over productive and reproductive power of labouring population in general and of women in particular.

It is noted that in any society, whatever may the stratification, it is necessary to control the reproductive capacity of women in the society to reinforce and perpetuate the social stratification that exists.

Further, in our discussion evidences in favour of the fact that existing patriarchal order are historically shaped is forwarded. Contingent with the stand of supporting this view is the idea that control of demographic structure of "self-sustainig society" or an earlier hunting-gathering societies were within their own control and was shaped completely by the needs of that community alone. With the expansion of capitalism and of the market, this control was lost to outside forces.

Subordination of women's reproductive capacity or subordination of subsistence production, basically implies that the process of subsistence production is shaped by the needs of capitalist expansion. That is to say, there are exogeneous, macro-level forces that shape the process of subsistence production and hence family formation.

As critical traditions draws its basic tenets from historical materialism, this methodology contribute to its positive aspects. Ita historical specificity. holism multicausality and interrelatedness of different levels enables explanations given by this tradition comprehensive at the same time specific. Comprehensive in the sense, by virtue of giving room for multicasual explantions, it can accommodate, various explantions given by different theories like insurence security theory, labour theory, mortality theory etc.. But accommodation of these multiple factors are not explaining the demographic process in all social formation, all times and for all classes. Here comes the aspect specificity; population is not seen as an abstract entity, but as a heterogeneous mixture of classes each experiencing a different effects on its mortality., fertility and migration-aspects shaped by endogenous and extraneous forces.

The critical tradtion neither tries to advances a universal law of population nor does it attempt to perceive demographic process taking place in different societies such as peasant societies, homogeneously. Instead it acknowledges the fact that the demographic structure of a society is shaped by broader macro-level, common, economic and political forces as well by parochial micro-level, economic and socio-cultural factors. This is not to suggest that Demographic processes

respond mechanically to economic factors, on the contrary, the cirtical tradition of anthropology throws light on the enormous complexity of issues that contour demographic processes historically.

Depending upon the role of macro-level forces, sometimes it is even possible that a particular aspect of micro-level say, kinship, caste or law may dominate in determining the configuration, within the limits set by economic forces. This accounts for the contextual and organisational factors thus explaining the specificity of the demographic process.

Centered around processes like reproduction of labour force and capitalist accumulation, the tradition accounts both for the origin as well as persistence of surplus population-surplus with respect to capital. It does not acknowledge a linear way of placing developed, developing and under developed nations. Instead it sees underdevelopment as a concomitant process with capitalist development. This is the vital argument which the tradition directs against unilinear, universal theories like demographic transition theory and wealth flows theory.

From the discussion in forgoing chapters our position gets surfaced clearly. Briefly it can be said that, we agree with individual arguments-such as children as source of income, labour, security and insurance-of rationality theories but do not

agree to the idea of uniform application of these arguments to all the situations. With caldwell we maintaine a greater difference especially in the way he establishes causal link between fertility level and socio-cultural aspects.

To a great extent we tend to subscribe to the theoretical argument of the critical tradition in addressing to the issue of family formation and fertility change.

One of the biggest stumbling-block that we have to face on subscribing to the critical tradition is paucity of ethnographic studies to substantiante the theoretical arguments adduced. In light of this point, it is strongly felt that the present work will gain significance only if the theoretical arguments adduced here are verified in an empirical situation. Thus it is necessary to construct a methodological model to realize the theoretical insight gained in the present work.

:-: 102 :-:

REFERENCES : CHAPTER I

- Ansari, R.A. "Family Size and Society in India: A Critical Review" Diss., New Delhi: JNU, 1982.
- Baker, P.T., and W.T. Sanders. "Demographic Studies in Anthropology." Annual Review of Anthropology 1(1972): 151-78.
- Birdsell, J.B. "On Population Structure in Generalized Hunting and Collecting Populations". <u>Evolution</u> 12 (1968): 189-205
- Birdsell, J.B. " A Basic Demographic Unit ". Current Anthropology 14 (1973): 337-56.
- Bloch 1908. Cited in Caldwell 1987.
- Bondestam, L., and Bergstorm, S. ed. <u>Poverty and Population</u>
 <u>Control</u> London: Academic Press, 1980.
- Bongaarts, J. "A Framework for Analysing the Proximate Determinats of Fertility." <u>Population and Development Review 4 (1978)</u>: 105-32.
- Caldwell, John.C.ed. <u>Persistence of High Fertility</u>; <u>Population Prospects in the Third World</u> Canberra: Australin National U, 1977
- Caldwell, John.C. et al. "Anthropology and Demography: The Mutual Reinforcement of Speculation and Research". Current Anthropology 28 1 (1987):25-43.
- Carneiro, R.L. "On the Relationship Between Size of Population and Complexity of Social Organization." South West Journel of Anthropology 23 (1967).
- Carr-Saunders, A.M. World Population Oxford: Oxford U, 1936.
- Cassan, R.H. <u>India</u> : <u>Population</u>, <u>Economy Socity</u> 1978. London : Macmillan, 1980.
- Copans, Jean and David Seddon. "Marxism and Anthropology: A Preliminary Survey." David Seddon. 1-47.
- Dumond, D.E. "Population Growth and Political Centralization." Spooner. 286-310.
- Dunn, F.L. "Epidemiological Factors: Health and Disease in Hunters-Gatherers." Man the Hunter Ed. Lee. R.D. and I. Devore. Chicago: Aldine, 1968.

- Elwin, Verrier. The Baiga, 1936. New Delhi: Gian 1986.
- Epstein, T. Scarlett, and Darrell Jackson, ed. The Feasibility of Fertility Planning-Micro Perspectives Oxford: Pergamon, 1977.
- Espenshade, Thomas .J. "The value and Cost of Children."

 Population Bulletin 32.1 (1977): 3-47.
- Firth, Raymond. "Social Organisation and Social Change."
 Presidential Address to the R.A.I. <u>Journal of the Royal Anthropological Institute</u> 84 (1954): 1-20.
- _____ 1963, Cited in Caldwell 1987.
- Frisch, R. "Demographic Implications of Biological Determinants of Female Fecundity." Soc. Biol. 22 (1975): 14-9.
- Fuchs, Stephen. The Gond and Bhumia of Eastern Mandala 2nd edn. Bombay: Asian Publishing, 1968.
- Gibaldi, Joseph, and Walter S. Actert. Handbook for writers of Research Paper 2nd edn. New Delhi: Willy Eastern, 1987.
- Goddard, David. "Anthropology: The Limits of Functionlism."

 Ideology in Social Science: Readings in Critical
 Social Theory Ed. Robin Blackburn. London: Fontana,
 1972. 61-75.
- Goldelier, Maurice. "Modes of Production, Kinship and Demographic Structures."1975 Marxist Analyses and Social Antrhopology Ed. Maurice Bloch, London: Tavistock, 1984. 3-27.
- Gough, Kathleen. E. "Anthropology and Imperialism " Monthly Review April (1968).
- Goodenough, W.H. "A Problem in Malayo-Polynesian Social Oranization." People and Cultures of the Pacific Ed. A. Vayda. New York: Natural History Press, 1968.
- Handwerker, W.P. <u>Culture and Reproduction</u>: <u>An Anthropological</u>
 <u>Critique of Demographic Transition Theory</u> Boulder, Colo
 : Westview, 1986.
- Harner, M.J. "Population Pressure and the Social Evolution of Agriculturalists". Soth West Journal of Anthropology. 26 (1970).
- Howell, Nancy. "Demographic Anthropology". Annual Review of Anthropology 15 (1986): 219-46.

- Huizer, Gerrit, and Bruce Mannhaim, ed. The Politics of Anthropology: From Colonialsm and Sexism-Toward a View from Below World Anthropology Series. The Hague: Mouton, 1979.
- Hutton, J.H. The Angami Nagas 1921. London: Oxford U, 1969
- Kamat, M, and R.G. Kamat. "Diet and Fecundity in India".

 <u>Procedings of Sixth International Conference on Planned Parenthood London: IPPF, 1959.</u>
- Kertzer, David I, and Dennis P.Hogan. Family, Political Economy and Demographic Change: The Transformation of Life in Casalechio, Italy, 1861-1921 Madison: U of Wisconsin, 1989.
- Kaplan, Bernice .A. <u>Anthropological Studies of Human Fertility</u>
 Detroit: Wayne State U, 1976.
- Krishnaji, N. "Poverty and Fertility: A Review of Theory and Evidence". Economic and Political Weekly 18.19-21 Annual (1983): 865-76.
- Leacock, Eleanor. "Women's Status in Egatitarian Society: Implications for Social Evloltuion". Current Anthropology 19.2 (1978): 247-75.
- Lee, R.B. "! Kung Bushman Subsistence: An Input-Output Analysis". Human Ecology: An Anthropological Reader Ed. A.P. Vayda New York: Natural History Press, 1969
- Levi-Strauss, Claude "The Family" Man Culture and Society Ed. Harry L. Shapiro. Rev ed. London: Oxford U, 1974. 33-7.
- Lindenbaum, Shirley. "Sorcery, Ghosts and Polluting Women: An Analysis of Religious Belief and Population Control".

 <u>Ethnology</u> 11 (1972): 241-53.
- Lorimer, Frank, ed. <u>Culture and Human Fertility Paris</u>: UNESCO, 1954.
- Lovejoy, C.O. "The Origin of Man" Science 211 (1981): 341-50.
- Majumdar, D.N. and T.N. Madan. An Introduction to Social Anthropology 4th edn. New Delhi: National Publishing, 1989.
- Majundar, D.N. A Tribe in Transition: A study in Culture Pattern London: Longmans Green and Co. 1937.
- Nag, Moni. "Anthropology and Population: Problems and Perspectives". <u>Population Studies</u> 27(1973): 59-68.

- Nardi, B.A. "Models of Explanation in Anthropological Population Theory: Biological Determinism vs Self Regulation in Studies of Population in Third World Countries".

 <u>American Anthropology</u> 83 (1981): 28-56.
- Nell, Edward .J. "Population Pressure and Methods of Cultivation: A Critique of Classless Theory ." Stanley Diamond. 457-68.
- Netting. R 1971. Cited in P.T. Baker and W.T. Sanders. 1972
- O' Laughtun, Bridget. "Marxist Approaches in Anthropology" <u>Annual</u>
 Review of <u>Anthropology</u> 4 (1975): 341-70.
- Patricia, Maria, and Fernandzkelly. "The sexual Division of Labour Development and Women's Status." Current Anthropology 22.4 (1981): 414-19.
- Polgar, Steven. ed. <u>Culture and Populations: A Collection of Current Studies Cambridge</u>; Schenkman, 1971.
- Polgar, Steven. "Population History and Population Policies from an Anthropological Perespective." Current Anthropology 13(1972): 203-11.
- Polgar, Steven. ed. <u>Population</u>, <u>Ecology and Social Evolution</u> Chicago: Aldine, 1975.
- Radhakrishnan, S. "Inagural Address" <u>Proceedings of the Third International Conference on Planned Parenthood Bombay</u>:
 Family Planning Association of India, 1952. 10-13.
- Rappaport, R.A. <u>Pigs for the Ancestors : A Ritual in the Ecology</u>
 of the <u>New Guinea People</u> New Haven : Yale U, 1967.
- Scrimshaw, S.N. "Infant Mortality and Behaviour in the Regulation of Family size." <u>Fertility Decline in the Less Developed Countries</u> Ed. N. Eberstadt. New York: Praeger, 1981.
- Seddon, David, ed. <u>Relations of Production: Marxist Approaches</u>
 to <u>Economic Anthropology</u> Trans. Helen Lackner. London:
 Frank Cass, 1978.
- Shostak, Marjorie. NISA : The Life and Words of a !Kung Women Harmondsworth : Penguin, 1981.
- Smapera, I. "An Anthropologist's Approach to Population Growth".

 The Number of Men and Animals Ed. J.B. Cragg and N.W.

 Pine. Edinbergh: Oliver and Boyd, 1955.
- Spooner, B. ed. <u>Population</u> <u>Growth</u> : <u>Anthropological</u> <u>Implications</u>. Cambridge : MIT, 1972.

- Stevenson, R.F. <u>Population and Political System in Tropical</u>
 <u>Africa New York</u>: Colombia U, 1968.
- Steward, Julian 1968- Cited in Maurice Godelier, 1975.
- Sussman, Robert .W. "Child Transport, Family Size and Increase in Human Popuation During the Neolithic." Current Anthropology 13.2 (1972):258-67.
- Swedlund, A, and G.J. Armelagos. <u>DEmographic Anthropology</u> Dubuque : Brown, 1975.
- Thomas, Neil. "Land, Fertility, and the Population Establishment". Population Studies, 45(1991): 379-97.
- Verma K.K. <u>Anthropo-Demography of the Santal and Birhor</u> Ph.D. Thesis, Ranchi, Ranchi U, 1970.
- Vogt, Willan. Road to Survival New York: Willan Sloane Association, 1948.
- Weiss, K.M. "Demographic Theory and Anthropological Inference".

 <u>Annual Review of Anthropology</u> 3(1976) 351-81.
- Yengoyan, A.P. "Demographic and Ecological Influences on Aborginal Australian Marriage Sections". Man the Hunter Ed. Lee. R and I. Devore. Chicago: Aldine, 1968.
- Zubrow, E.B.W. ed. <u>Demographic Anthropology</u>: <u>Quantitative Approach</u> Albuquerque: <u>U of New Mexico</u>, 1976.

REFERENCES : CHAPTER II

- Bharadwaj, Krishna. On Some Issues of Method in the Analysis of Social Change Mysore: U of Mysore, 1980.
- Cain, Mead.T. "The Economic Activities of Children in a Village in Bangladesh." Population and Development Review 3(1977): 201-27
- "The Household Life Cycle and Economic Mobility in Rural Bangladesh." Population and Development Review 4 (1978): 421-38.
- "Perspectives of Family and Fertility in Developing Countries." <u>Population Studies</u> 36 (1982) 159-75.
- Caldwell, John.C. <u>Population Growth and Family change in Africa:</u>
 <u>The New Urban Elite in Ghana Canberra: Austrlian National U, 1968.</u>
- Caldwell, John.C.ed. Persistence of High Fertility; Population Prospects in the Third World Canberra: Australin National U, 1977
- Caldwell, John.C. Theory of Fertility Decline London: Academic Press, 1982.
- Caldwell, John.C., et al "The causes of Demographic Change in Rural South India: A Micro Approach." <u>Population and Development Review</u> 8.4 Dec (1982): 689-728.
- Caldwell, John.C., et al. "The Determinats of Fertility Decline in Rural South India." <u>Indai's Demography</u>: <u>Esaays on Contemporary Population</u> Ed. T. Dyson, N.Cook. New Delhi: South Asian, 1984. 187-207.
- Carr, E.H. What is History ?" Harmondsworth : Penguin, 1961.
- Das Gupta, Monica. "Production Relation and Population: Rampur."

 Journal of Development Studies 14 (1978):177-85.
- Djurfeldt, G, and S.Lindberg. "Family Planning in a Tamil Village" L. Bondestan and Bergstrom. 102-23.
- Driver, E.D. <u>Differential Fertility in Central India</u> Princeton: Princeton U, 1963.
- Freedman, Ronald. "The Sociology of Human Fertility" Current
 Sociology 10/11 (2) 10961-2 Cited in Macfarlane, 1978.
- Gould, K.H. 1969. Sex and Contraception in Sherapur: Family Planning in a North Indian Village ". Economic and Political Weekly 4.29 (1969)
- Hawthorn, Geffrey. "Introduction" <u>Journal of Development</u> <u>Studies</u>
 14 (1978): 1-21

- Hodgson, Dennis. "Orthodoxy and Revisionism in American Demography". Population and Development Review 14.4 (1988): 541-69
- Jairath, Vinod.B. "Production Relation and Population: Ramdua".

 <u>Journal of Development Studies</u> 14 (1978): 165-76
- Kaplan, Bernice .A. Anthropological Studies of Human Fertility
 Detroit: Wayne State U, 1976.
- Krishnaji, N. "Agrarian Structure and Family Formation: A Tentaive Hypothesis." <u>Economic and Political Weekly</u> 15.13 March (1980): A38-A43
- Poverty and Fertility: A Review of Theory and Evidence". Economic and Political Weekly 18.19-21 Annual (1983): 865-76.
- Leibenstein, Harvey. "Economic Decision Theory and Human Fertility Behavriour: A Speculative Essay". Population and Development Review 1(1981): 381-400.
- Macfarlane, Alen. "Modes of Reproduction". <u>Journal of Development Studies</u> 14(1978): 100-20.
- Mamdani, Mahmood. The Myth of Population Control: Family, Cast and Class in an Indian Village New York; Monthly Review, 1972.
- "The Ideology of Population Control". Economic and Political Weekly Spl. No., Aug (1976) 1141-49.
- Mason, Andrew. "Saving, Economic Growth and Demographic Change". Population and Development Review 14.1 (1988) 113-44.
- Mueller, Eva. "Economics Motives for Family Limitation; A Study Conducted in Taiwan: <u>Population Studies</u> 27.3 (1972): 383-403.
- "The Economic Value of Children in Peasant Agriculture". Population and Development: The Search for Selective Intervention Ed. R. Ridker. Baltimore: Johns Hopkins U, 1976, 98-153.
- Myrdal, Gunnar. <u>Asian Drama</u> 2Vols. London : Penguin, 1968. Cited in Macfarlane, 1978.
- Nadkarni, M.V. "Overpopulation and the Rural Poor". Economic and Political Weekly Spl no. Aug (1976): 1163-72.
- Nag, Moni. "Sex Culture and Human Fertility: Indian and the United States". Current Anthropology 13.2 (1972):231-7.
- "Anthropology and Population: Problems and Perspectives". Population Studies 27(1973): 59-68.

- Nag, Moni et al. "An Anthropological Approach to the Study of the Economic Value of Children in Java and Nepal." Current Anthropology 19 (1978): 293-306.
- Nag, Moni, and Neeraj Kak. "Demogrpahic Change in a Punjab Village". Population and Development Review 10 (1984) :661-76.
- Rao, S.K. "Population Growth and Economic Development: A Counter Argument." Economic and Political Weekly Spl. No. Aug (1976): 1146-58.
- Said, Edward .W. Orientalism London: Routledge and Kegan Paul 1978.
- Tilakaratne, W.M. "Economic Change, Social Differentiation and Fertility: Althugma." <u>Journal of Development Studies</u> 14 (1978): 186-97.
- United Nations. The Mysore Population Studies Population Studies No. 34, New York: Deprt. of Economic and Social Affairs, 1961.
- Wyon, J.B. and J.E. Goron. The Khanna Study Cambridge: Harward U, 1971.

REFERENCES : CHAPTER III

- Bennholdt-Thomson, Veronika. "Subsistence Production and Extended Reproduction: A Contribution to the Discussion about Modes of Production." Journal of Peasant Studies 9.4 July (1982): 241-54.
- Bloch, Maurice. Marxism and Anthropology Oxford: Oxford Univ, 1985.
- Boserup, Ester. The Conditions of Agricultural Growth: The Economics of Agricultural Change Under Population Pressure London: George Allen and Unwin, 1965.
- Population and Technological Change: A Study of Long-Term Trends Chicago: U of Chicago, 1981.
- Chakravarthy, Uma. "Conceptualising Brahmical Patriarchy in Early India: Gender, Caste, Class and State." Economic and Political weekly April (1992): 579-85.
- Dharmalingam, A. "Agrarian Structure and Population in India." <u>Economic</u> and <u>Political</u> <u>Weekly</u> 25.26 June (1991) : A46-A62.
- Daimond, Stanley, ed. "Toward a marxist Anthropology: Problems and Perspective. World Anthropology Series. The Hague: Mouton, 1979.
- Dickinson, James, and Bob Russel, ed. <u>Family, Economy and State:</u>

 <u>The Social Reproduction Process Under Capitlism London:</u>
 Groom Helm, 1986.
- Doyal, Lesley, with Imogen Pennell. The Political Economy of Health London: Pluto, 1979.
- Faris, James .C. "Social Evolution, Populaton and Production."

 Population, Ecology and Socal Evolution Ed. Steven
 Polgar. World Anthropology Series. The Hague: Mouton,
 1975.235-71.
- Frank, A. Gunder. <u>Capitalism and Underemployment in Latin America</u>
 Harmondsworth: Penguin, 1972.
- Goddard, David. "Anthropology: The Limits of Functionlism."

 Ideology in Social Science: Readings in Critical
 Social Theory Ed. Robin Blackburn. London: Fontana,
 1972. 61-75.
- Godelier, Maurice. <u>Perspectives in Marxist Anthropoloy</u> Trnas.

 Robert Brain. Cambridge: Cambridge U, 1977.

- Goody, Jack. <u>Production and Reproduction</u>: <u>A Comparative Study of the Domestic Domain Cambridge</u>: Cambridge U, 1976.
- Gough, E. Kathleen. "The Nayars and The Definition of Marriage."

 <u>Journal of Royal Anthropoligical Institute</u> 89 (1959) 2334.
- Gough, Kathleen. E. "Anthropology and Imperialism " Monthly Review April (1968).
- Graves, Robert. Greek Myths 2 Vols. I. 1955 Harmondsworth: Penguin, 1960.
- Greenhalgh, Susan. "Is Inequality Demographically Induced? The Family Cycle and the Distribution of Income in Taiwan."

 <u>American anthropology</u> 87 (1985): 571-94
- Anthropological contributions". Population and Development Review 16.1 March (1990): 85-106
- Greer, Germanie. Sex and Destiny: The Politics of Human Fertility London: Seeker and Warburg, 1984.
- Harris, Olivia, and Kate Young. "Engendered Structures: Some Problems in the Analysis of Repoduction". The Anthropology of Precapitalist Societies: Ed. J.S. Khan and J.R. Llobera. London: Macmillan, 1981: 109-47
- Jairath, Vinod.B. "Production Relation and Population: Ramdua".

 <u>Journal of Development Studies</u> 14 (1978): 165-76
- Kahn, J.S. and J.R. Llobera. ed <u>The Anthropology of Precapitalist</u> <u>Societies</u> London: Macmillan, 1981.
- Kosambi, D.D. "On the Class Structure of India" Exasperating

 Essays: Exercise in the Dialectical Method 1957, New

 Delhi: People's Publishing, 1991. 19-31.
- Leach, Edmund.R "Polyandry, Inheritance and the Definition of Marriage". Man 54 (1955): 182-86
- Macfarlane, Alen. "Modes of Reproduction". <u>Journal of Development Studies</u> 14(1978): 100-20.

- Malinowski, B. <u>Sex and Repression in Savage Society</u> London: Routledge and Kegan Paul, 1960.
- Meillassoux, Claude. "From Reproduction to Production: a Marxist Approach to Economic Anthropology". Economy and Society 1.1 (1972): 93-105.
- Proletarianization of Rural Workers". Social Scientist (New Delhi) 7.6 (1979): 3-31.
- "The Economic Bases of Demographic Reproduction to Wage Earning". <u>Journal of Peasant</u>
 Studies 11.1 (1983): 50-61.
- Michaelson, Karen .L. "Introduction-Population Theory and the Political Economy of Population Process". And the Poor Get Children: Radical perspectives on Population Dynamics New York: Monthly Review, 1981, 11-35.
- ed. And the Poor get Children Radical Perspectives on Population Dynamics New York: Monthly Review, 1981.
- Mies, Maria. "Capitalist Development and Subsistence Reproduction: Rural Women in India ". <u>Bulletin of Concerned Asian Scholers</u> 12.1 (1980): 2-14.
- Rudra, Ashok. "Against Feudalism". Economic and Political Weekly Dec (1981): 2133-46.
- Rudra, Ashok. "Pre-Capitalist Modes of Production in Non-European Socities". <u>Journal of Peasant Studies</u> 15.3 (1988) : 373-94.
- Seecombe, Wally. "Marxism and Demography: Household Forms and Fertility Regimes in the Western European Transition" James Dickinson and Bob Russell 23-55.
- Seddon, David, ed. <u>Relations of Production: Marxist Approaches</u>
 to <u>Economic Anthropology</u> Trans. Helen Lackner. London:
 Frank Cass. 1978.
- Sen Gupta, Suddhabrata. "Sexual Politics of <u>Television</u>
 Mythology". <u>Economic and Political Weekly</u> Nov. 9(1991):
 2558-60.
- Sharma, M. "Caste, Class and Gender : Production and Reproduction in North India ". <u>Journal of Peasant Studies</u> 12.4 (1985) : 57-88.

- Sheridan, Alan. Michal Foucault: The Will to Truth London: Routledge, 1980.
- Stolcke.V. 1978, Cited in Olivia Harris and Kate Young, 1970.
- Yalman, Nur. "On the Parity of Women in The Castes of Caylon and Malabar". <u>Journal of the Royal Anthropological Institute of Great Britain and Ireland</u> 93:25-28

:-: 114 :-:

BIBLIOGRAPHY

- Ansari, R.A. "Family Size and Society in India : A Critical Review " Diss., New Delhi : JNU, 1982.
- Baker, P.T., and W.T. Sanders. "Demographic Studies in Anthropology." Annual Review of Anthropology 1(1972): 151-78.
- Bennholdt- Thomson, Veronika. "Subsistence Production and Extended Reproduction: A Contribution to the Discussion about Modes of Production." <u>Journal of Peasant Studies</u> 9.4 July (1982): 241-54.
- Bharadwaj, Krishna. On Some Issues of Method in the Analysis of Social Change Mysore: U of Mysore, 1980.
- Birdsell, J.B. "On Population Structure in Generalized Hunting and Collecting Populations". Evolution 12 (1968): 189-205
- Birdsell, J.B. " A Basic Demographic Unit ". Current Anthropology 14 (1973): 337-56.
- Bloch, Maurice. Marxism and Anthropology Oxford: Oxford Univ, 1985.
- Bondestam, L., and Bergstorm, S. ed. <u>Poverty and Population</u> <u>Control</u> London: Academic Press, 1980.
- Bongaarts, J. "A Framework for Analysing the Proximate Determinats of Fertility." <u>Population and Development Review 4 (1978): 105-32.</u>
- Boserup, Ester. The Conditions of Agricultural Growth: The Economics of Agricultural Change Under Population Pressure London: George Allen and Unwin, 1965.
- Population and Technological Change: A Study of Long-Term Trends Chicago: U of Chicago, 1981.
- Cain, Mead.T. "The Economic Activities of Children in a Village in Bangladesh." Population and Development Review 3(1977): 201-27
- "The Household Life Cycle and Economic Mobility in Rural Bangladesh." <u>Population and Development Review</u> 4 (1978): 421-38.
- "Perspectives of Family and Fertility in Developing Countries." Population Studies 36 (1982) 159-75.

- Caldwell, John.C.ed. <u>Persistence of High Fertility; Population Prospects in the Third World</u> Canberra: Australin National U, 1977
- Caldwell, John.C. et al. "Anthropology and Demography: The Mutual Reinforcement of Speculation and Research". Current Anthropology 28 1 (1987):25-43.
- Caldwell, John.C. <u>Population Growth and Family change in Africa:</u>

 <u>The New Urban Elite in Ghana Canberra: Austrlian National U, 1968.</u>
- Caldwell, John.C. Theory of Fertility Decline London: Academic Press, 1982.
- Caldwell, John.C., et al "The causes of Demographic Change in Rural South India: A Micro Approach." Population and Development Review 8.4 Dec (1982): 689-728.
- Caldwell, John.C., et al. "The Determinats of Fertility Decline in Rural South India." <u>Indai's Demography</u>: <u>Esaays on Contemporary Population</u> Ed. T. Dyson, N.Cook. New Delhi: South Asian, 1984. 187-207.
- Carneiro, R.L. "On the Relationship Between Size of Population and Complexity of Social Organization." South West Journel of Anthropology 23 (1967).
- Carr, E.H. What is History ?" Harmondsworth : Penguin, 1961.
- Carr-Saunders, A.M. World Population Oxford: Oxford U, 1936.
- Cassan, R.H. <u>India</u> : <u>Population</u>, <u>Economy</u> <u>Socity</u> 1978. London : Macmillan, 1980.
- Chakravarthy, Uma. "Conceptualising Brahmical Patriarchy in Early India: Gender, Caste, Class and State." Economic and Political weekly April (1992): 579-85.
- Copans, Jean and David Seddon. "Marxism and Anthropology: A Preliminary Survey." David Seddon. 1-47.
- Das Gupta, Monica. "Production Relation and Population: Rampur."

 Journal of Development Studies 14 (1978):177-85.
- Dharmalingam, A. "Agrarian Structure and Population in India."

 <u>Economic and Political Weekly</u> 25.26 June (1991) :

 A46-A62.
- Daimond, Stanley, ed. "Toward a marxist Anthropology: Problems and Perspective. World Anthropology Series. The Hague: Mouton, 1979.

- Dickinson, James, and Bob Russel, ed. <u>Family</u>, <u>Economy and State</u>:

 The <u>Social Reproduction Process Under Capitlism</u> London:
 Groom Helm, 1986.
- Djurfeldt, G, and S.Lindberg. "Family Planning in a Tamil Village" L. Bondestan and Bergstrom. 102-23.
- Doyal, Lesley, with Imogen Pennell. The Political Economy of Health London: Pluto, 1979.
- Driver, E.D. <u>Differential</u> <u>Fertility in Central India</u> Princeton: Princeton U, 1963.
- Dumond, D.E. "Population Growth and Political Centralization." Spooner. 286-310.
- Dunn, F.L. "Epidemiological Factors: Health and Disease in Hunters-Gatherers." Man the Hunter Ed. Lee. R.D. and I. Devore. Chicago: Aldine, 1968.
- Elwin, Verrier. The Baiga, 1936. New Delhi : Gian 1986.
- Epstein, T. Scarlett, and Darrell Jackson, ed. The Feasibility of Fertility Planning-Micro Perspectives Oxford: Pergamon, 1977.
- Espenshade, Thomas .J. "The value and Cost of Children."

 Population Bulletin 32.1 (1977): 3-47.
- Faris, James C. "Social Evolution, Populaton and Production."

 <u>Population, Ecology and Socal Evolution</u> Ed. Steven

 <u>Polgar. World Anthropology Series. The Hague: Mouton,</u>

 1975.235-71.
- Firth, Raymond. "Social Organisation and Social Change." Presidential Address to the R.A.I. <u>Journal of the Royal Anthropological Institute</u> 84 (1954): 1-20.
- Frank, A Gunder. <u>Capitalism</u> and <u>Underemployment in Latin</u> <u>America</u> Harmondsworth: Penguin, 1972.
- Frisch, R. "Demographic Implications of Biological Determinants of Female Fecundity." Soc.Biol. 22 (1975): 14-9.
- Fuchs, Stephen. The Gond and Bhumia of Eastern Mandala 2nd edn. Bombay: Asian Publishing, 1968,
- Gibaldi, Joseph, and Walter S. Actert. <u>Handbook for writers of Research Paper 2nd edn. New Delhi</u>: Willy Eastern, 1987.
- Goddard, David. "Anthropology: The Limits of Functionlism."

 Ideology in Social Science: Readings in Critical
 Social Theory Ed. Robin Blackburn. London: Fontana,
 1972. 61-75.

- Godelier, Maurice. <u>Perspectives in Marxist Anthropoloy</u> Trnas. Robert Brain. Cambridge: Cambridge U, 1977.
- Goldelier, Maurice. "Modes of Production, Kinship and Demographic Structures."1975 Marxist Analyses and Social Antrhopology Ed. Maurice Bloch, London: Tavistock, 1984. 3-27.
- Goodenough, W.H. "A Problem in Malayo-Polynesian Social Oranization." People and Cultures of the Pacific Ed. A. Vayda. New York: Natural History Press, 1968.
- Goody, Jack. <u>Production and Reproduction</u>: <u>A Comparative Study of the Domestic Domain Cambridge</u>: Cambridge U, 1976.
- Gough, E. Kathleen. "The Nayars and The Definition of Marriage."

 <u>Journal of Royal Anthropoligical Institute</u> 89 (1959) 2334.
- Gough, Kathleen. E. "Anthropology and Imperialism " Monthly Review April (1968).
- Gould, K.H. 1969. Sex and Contraception in Sherapur: Family Planning in a North Indian Village". Economic and Political Weekly 4.29 (1969)
- Graves, Robert. Greek Myths Vol. I. 1955 Harmondsworth : Penguin, 1960
- Greenhalgh, Susan. "Is Inequality Demographically Induced? The Family Cycle and the Distribution of Income in Taiwan."

 American anthropology 87 (1985): 571-94
- Anthropological contributions". Population and Development Review March (1990): 85-106, 16.1
- Greer, Germanie. Sex and Destiny: The Politics of Human Fertility London: Seeker and Warburg, 1984.
- Handwerker, W.P. <u>Culture and Reproduction</u>: <u>An Anthropological</u>

 <u>Critique of Demographic Transition Theory</u> Boulder, Colo
 : Westview, 1986.
- Harner, M.J. "Population Pressure and the Social Evolution of Agriculturalists". Soth West Journal of Anthropology. 26 (1970).
- Harris, Olivia, and Kate Young. "Engendered Structures: Some Problems in the Analysis of Repoduction". The Anthropology of Precapitalist Societies: Ed. J.S. Khan and J.R. Llobera. London: Macmillan, 1981: 109-47

- Hawthorn, Geffrey. "Introduction" <u>Journal of Development</u> <u>Studies</u> 14 (1978): 1-21
- Hodgson, Dennis. "Orthodoxy and Revisionism in American Demography". Population and Development Review 14.4 (1988): 541-69
- Howell, Nancy. "Demographic Anthropology". Annual Review of Anthropology 15 (1986): 219-46.
- Huizer, Gerrit, and Bruce Mannhaim, ed. The Politics of Anthropology: From Colonialsm and Sexism-Toward a View from Below World Anthropology Series. The Hague: Mouton, 1979.
- Hutton, J.H. The Angami Nagas 1921. London: Oxford U, 1969
- Jairath, Vinod.B. "Production Relation and Population: Ramdua".

 Journal of Development Studies 14 (1978): 165-76
- Kahn, J.S. and J.R. Llobera. ed <u>The Anthropology of Precapitalist</u> <u>Societies</u> London: Macmillan, 1981.
- Kamat, M, and R.G. Kamat. "Diet and Fecundity in India".

 Procedings of Sixth International Conference on Planned
 Parenthood London: IPPF, 1959.
- Kaplan, Bernice .A. Anthropological Studies of Human Fertility
 Detroit: Wayne State U, 1976.
- Kertzer, David I, and Dennis P.Hogan. Family, Political Economy and Demographic Change: The Transformation of Life in Casalecchio, Italy, 1861-1921 Madison: U of Wisconsin, 1989.
- Kosambi, D.D. "On the Class Structure of India" <u>Exasperating</u>

 <u>Essays</u> : <u>Exercise in the Dialectical Method</u> 1957, New Delhi : People's Publishing, 1991. 19-31.
- Krishnaji, N. "Agrarian Structure and Family Formation: A Tentaive Hypothesis." <u>Economic and Political Weekly</u> 15.13 March (1980): A38-A43
- Poverty and Fertility: A Review of Theory and Evidence". Economic and Political Weekly 18.19-21 Annual (1983): 865-76.
- Leach, Edmund.R "Polyandry, Inheritance and the Definition of Marriage". Man 54 (1955): 182-86
- Leacock, Eleanor. "Women's Status in Egatitarian Society: Implications for Social Evloltuion". Current Anthropology 19.2 (1978): 247-75.

- Lee, R.B. "! Kung Bushman Subsistence: An Input-Output Analysis". Human Ecology: An Anthropological Reader Ed. A.P. Vayda New York: Natural History Press, 1969
- Leibenstein, Harvey. "Economic Decision Theory and Human Fertility Behavriour: A Speculative Essay". Population and Development Review 1(1981): 381-400.
- Levi-Strauss, Claude "The Family" Man Culture and Society Ed. Harry L. Shapiro. Rev ed. London: Oxford U, 1974. 33-7.
- Lindenbaum, Shirley. "Sorcery, Ghosts and Polluting Women: An Analysis of Religious Belief and Population Control". Ethnology 11 (1972): 241-53.
- Lorimer, Frank, ed. <u>Culture and Human Fertility Paris</u>: UNESCO, 1954.
- Lovejoy, C.O. "The Origin of Man" Science 211 (1981): 341-50.
- Macfarlane, Alen. "Modes of Reproduction". <u>Journal of Development</u>
 <u>Studies</u> 14(1978): 100-20.
- Mamdani, Mahmood. The Myth of Population Control: Family, Cast and Class in an Indian Village New York; Monthly Review, 1972.
- "The Ideology of Population Control". Economic and Political Weekly Spl. No., Aug (1976) 1141-49.
- Majumdar, D.N. and T.N. Madan. An Introduction to Social Anthropology 4th edn. New Delhi: National Publishing, 1989.
- Malinowski, B. <u>Sex and Repression in Savage Society</u> London: Routledge and Kegan Paul, 1960.
- Mason, Andrew. "Saving, Economic Growth and Demographic Change". Population and Development Review 14.1 (1988) 113-44.
- Meillassoux, Claude. "From Reproduction to Production: a Marxist Approach to Economic Anthropology". Economy and Society 1.1 (1972): 93-105.
- Over Exploitation and Over-Population: The Proletarianization of Rural Workers". Social Scientist (New Delhi) 7.6 (1979): 3-31.
- "The Economic Bases of Demographic Reproduction to Wage Earning". <u>Journal of Peasant Studies</u> 11.1 (1983): 50-61.

.

- Michaelson, Karen .L. "Introduction-Population Theory and the Political Economy of Population Process". And the Poor Get Children: Radical perspectives on Population Dynamics New York: Monthly Review, 1981, 11-35.
- Michaelson, Keren .L. ed. And the Poor get Children Radical Perspectives on Population Dynamics New York: Monthly Review, 1981.
- Mies, Maria. "Capitalist Development and Subsistence Reproduction: Rural Women in India ". <u>Bulletin of Concerned Asian Scholers</u> 12.1 (1980): 2-14.
- Mueller, Eva. "Economics Motives for Family Limitation; A Study Conducted in Taiwan: Population Studies 27.3 (1972): 383-403.
- "The Economic Value of Children in Peasant Agriculture". <u>Population and Development</u>: <u>The Search for Selective Intervention</u> Ed. R. Ridker. Baltimore: Johns Hopkins U, 1976, 98-153.
- Nadkarni, M.V. "Overpopulation and the Rural Poor". Economic and Political Weekly Spl no. Aug (1976): 1163-72.
- Nag, Moni. "Sex Culture and Human Fertility: Indian and the United States". Current Anthropology 13.2 (1972):231-7.
- "Anthropology and Population: Problems and Perspectives". Population Studies 27(1973): 59-68.
- Nag, Moni et al. "An Anthropological Approach to the Study of the Economic Value of Children in Java and Nepal." <u>Current Anthropology</u> 19 (1978): 293-306.
- Nag, Moni, and Neeraj Kak. "Demogrpahic Change in a Punjab Village". <u>Population and Development Review</u> 10 (1984) :661-76.
- Nardi, B.A. "Models of Explanation in Anthropological Population Theory: Biological Determinism vs Self Regulation in Studies of Population in Third World Countries".

 <u>American Anthropology</u> 83 (1981): 28-56.
- Nell, Edward .J. "Population Pressure and Methods of Cultivation : A Critique of Classless Theory ." Stanley Diamond.
- O' Laughtun, Bridget. "Marxist Approaches in Anthropology" Annual Review of Anthropology 4 (1975): 341-70.
- Patricia, Maria, and Fernandzkelly. "The sexual Division of Labour Development and Women's Status." <u>Current Anthropology</u> 22.4 (1981): 414-19.

ATERIAL OF STREET

:-: 121 :-:

- Polgar, Steven. ed. <u>Culture and Populations</u>: <u>A Collection of Current Studies</u> Cambridge; Schenkman, 1971.
- Polgar, Steven. "Population History and Population Policies from an Anthropological Perespective." Current Anthropology 13(1972): 203-11.
- Polgar, Steven. ed. <u>Population</u>, <u>Ecology and Social Evolution</u> Chicago: Aldine, 1975.
- Radhakrishnan, S. "Inagural Address" <u>Proceedings of the Third</u>
 <u>International Conference on Planned Parenthood Bombay :</u>
 <u>Family Planning Association of India, 1952. 10-13.</u>
- Rao, S.K. "Population Growth and Economic Development: A Counter Argument." Economic and Political Weekly Spl. No. Aug (1976): 1146-58.
- Rappaport, R.A. <u>Pigs for the Ancestors : A Ritual in the Ecology of the New Guinea People</u> New Haven : Yale U, 1967.
- Rudra, Ashok. "Against Feudalism". Economic and Political Weekly Dec (1981): 2133-46.
- Rudra, Ashok. "Pre-Capitalist Modes of Production in Non-European Socities". <u>Journal of Peasant Studies</u> 15.3 (1988) : 373-94.
- Said, Edward .W. <u>Orientalism</u> London: Routledge and Kegan Paul 1978.
- Scrimshaw, S.N. "Infant Mortality and Behaviour in the Regulation of Family size." Fertility Decline in the Less Developed Countries Ed. N. Eberstadt. New York: Praeger, 1981.
- Seecombe, Wally. "Marxism and Demography: Household Forms and Fertility Regimes in the Western European Transition" James Dickinson and Bob Russell 23-55.
- Seddon, David, ed. <u>Relations of Production</u>: <u>Marxist Approaches</u>
 to <u>Economic Anthropology</u> Trans. Helen Lackner. London:
 Frank Cass, 1978.
- Sen Gupta, Suddhabrata. "Sexual Politics of <u>Television</u> Mythology". <u>Economic and Political Weekly</u> Nov. 9(1991): 2558-60.
- Sharma, M. "Caste, Class and Gender: Production and Reproduction in North India". <u>Journal of Peasant Studies</u> 12.4 (1985) : 57-88.
- Sheridan, Alan. <u>Michal Foucault: The Will to Truth</u> London: Routledge, 1980.

TH-6794

- Shostak, Marjorie. NISA : The Life and Words of a !Kung Women Harmondsworth : Penguin, 1981.
- Smapera, I. "An Anthropologist's Approach to Population Growth".

 The Number of Men and Animals Ed. J.B. Cragg and N.W.

 Pine. Edinbergh: Oliver and Boyd, 1955.
- Spooner, B. ed. <u>Population</u> <u>Growth</u> : <u>Anthropological</u> <u>Implications</u>. Cambridge : MIT, 1972.
- Stevenson, R.F. <u>Population and Political System in Tropical Africa</u> New York: Colombia U, 1968.
- Sussman, Robert .W. "Child Transport, Family Size and Increase in Human Popuation During the Neolithic." <u>Current Anthropology</u> 13.2 (1972):258-67.
- Swedlund, A, and G.J. Armelagos. <u>DEmographic</u> <u>Anthropology</u> Dubuque : Brown, 1975.
- Thomas, Neil. "Land, Fertility, and the Population Establishment". <u>Population Studies</u>, 45(1991): 379-97.
- Tilakaratne, W.M. "Economic Change, Social Differentiation and Fertility: Althugma." <u>Journal of Development Studies</u> 14 (1978): 186-97.
- United Nations. The Mysore Population Studies No. 34, New York: Deprt. of Economic and Social Affairs. 1961.
- Vogt, Willan. Road to Survival New York: Willan Sloane Association, 1948.
- Weiss, K.M. "Demographic Theory and Anthropological Inference".

 <u>Annual Review of Anthropology</u> 3(1976) 351-81.
- Wyon, J.B. and J.E. Goron. The Khanna Study Cambridge: Harward U, 1971.
- Yalman, Nur. "On the Parity of Women in The Castes of Caylon and Malabar". <u>Journal of the Royal Anthropological Institute of Great Britain and Ireland</u> 93:25-28
- Yengoyan, A.P. "Demographic and Ecological Influences on Aborginal Australian Marriage Sections". Man the Hunter Ed. Lee. R and I. Devore. Chicago: Aldine, 1968.
- Zubrow, E.B.W. ed. <u>Demographic Anthropology</u> : <u>Quantitative</u> Approach Albuquerque : <u>U of New Mexico</u>, 1976.