A COHERENT METHOD TO FIT CULTURAL ANTHROPOLOGY INTO THE FERTILITY STUDY

Pushp Kamal Subedi*

ABSTRACT

This paper argues for a new analytical framework that draws the most attention to the relationship between demography and sociocultural anthropology, involving micro-level research. It is called 'a case study approach to studying fertility', which involves 'process and product'. The analysis process constitutes a specific way of gathering comprehensive, systematic, and in-depth information about fertility, which leads eventually to a product: a case study fertility data. The incorporation of theories of culture as 'the evaluative behaviour of social actors' and 'social constructionism' appears to provide an attractive alternative theory of culture for fertility analysis. Special emphasis is placed on the political, economic, feminism, and social constructionism or, more generally, practice approaches to social facts.

The present paper begins with good reason to think why we use a case study approach to studying fertility and its theoretical base. We then reconnoitre 'a theory of culture for demography' in order to flesh out 'a coherent method to fit cultural anthropology into the demographic enterprise: a third generation fertility study'. Such interrogation helps clarify problems and advantages in terms of theory, methodology, practicality, useful outcomes and differences.

WHY WE USE A CASE STUDY APPROACH TO STUDYING FERTILITY

Fertility is not only biological as opposed to social; it is also historically and culturally specific, structured by a particular set of social assumptions. Issues surrounding childbearing and childrearing retain core family-related behaviours, both in social science theory and in widely shared perceptions of family life. They also remain vitally important for a range of economic, cultural and political issues: social security, education, poverty, to mention a few. Significant changes have been identified in how fertility transition occurs in societies because couples have been having fewer children throughout the world since the late-eighteenth century. There has been considerable debate about what causes it to happen and how it actually operates. Various demographic explanations fail to provide common consensus regarding the level at which fertility will eventually settle, or around what level it may fluctuate in the long run. The main reason is that given demography's methodological individualism, much of the innovation and debate hovers at the methodological level and involves misplaced contrasts. In order to get it straightened out, the paper develops a case study approach by treating fertility itself as a social institution embedded in social processes, which bring the proximate fertility determinants into a closer relationship with more general social theory. The discussion of weaknesses and strengths of demographic theories of fertility foresees a clear statement of the research questions to be

^{*} Dr. Subedi is Associate Professor in Population at Central Department of Population, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

asked and answered, the distinctiveness and originality of the approach adopted in this case study.

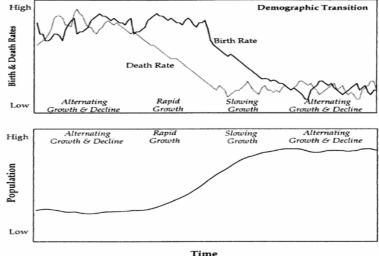
DEMOGRAPHIC TRANSITION THEORY

Demographic transition theory was foreshadowed by Thompson (1929) but created in its classical form largely by Notestein (1945) and places a broad emphasis on social and economic modernisation. In general, demographic transition theory can be characterised by four phases (see Fig.1.1): an initial phase of high mortality and high fertility; a second phase where mortality falls and fertility remains high, resulting in rapid population growth; a third phase where fertility drops, slowing growth; and a final phase of low mortality and low fertility. Transitions in fertility were explained on the basis of a version of modernisation theory (Notestein, 1945), multi-phasic response (Davis 1963) and of cultural diffusion (Coale, 1973).

The second generation is driven by dissatisfaction with the premises of first generation. The work of Greenhalgh (1990, 1995a, 1995b, 1996) critiques demographic transition theories. Greenhalgh's review of demographic theorising on fertility finds 'a remarkable persistence of a historical, Eurocentric and apolitical presumption' of modernisation theory.

The second generation fertility theories paid attention to the nature of political/economic and cultural issues and focuses on a local level perspective. The key point here is salience of micro-level process toward understanding fertility. Topics covered in these studies included - the 'economic value of children' (Easterlin, 1978; Leibenstein, 1981), 'intergenerational wealth flow' (Caldwell 1982), 'proximate determinants of fertility' (Bongaarts & Potter, 1983), 'institutional determinants for fertility change (Cain, 1982; McNicoll, 1980), the 'ideational theory' (Cleland & Wilson, 1987), and 'gender and family system in the fertility transition' (Mason, 1987). Each theoretical approach outlined above is linked to the classical demographic transition theory.

Fig. 1: Phases of Demographic Transition Theory



McNicoll criticised the classic fertility theories as being 'without the theory of fertility', if by theory we mean a coherent body of analysis linking a characterisation of society and economy, aggregate or local, or to individual fertility decisions and outcomes, able to withstand scrutiny against the empirical record' (1980: 441). Similarly, anthropologist Susan Greenhalgh argues that demographers have often lamented their field's reputation as one of 'all method and no theory' (1996: 26). Caldwell and his colleagues (Caldwell, 1998) also criticise traditional demography as 'surprisingly deficient in theory' and note 'the reluctance of demographers to engage in research whose methods are unconventional and whose output cannot be measured in numerical terms' (Caldwell & Hill, 1988:1). To remedy this problem they called for the adoption of 'micro-level' or the 'anthropological' in order to 'encourage a more holistic view' (1988: 2). Caldwell's approach began a new era in demographic research that allowed demographers to incorporate cultural meaning into their explanations of 'demographic processes'. Fricke concludes that 'demography is in the midst of an epistemological crisis centring on its recognition of the need to incorporate localised notions of meaningfulness and culturally shaped motivations into analyses' (Fricke, 1997a: 270).

In search of novel formulations, some demographers are more concerned with individual behaviour than they are with the behaviours of aggregates, even though their data may represent aggregates while only their theory involves individuals. There are some demographers who seek to situate individual demographic behaviour in a broader context by using sample survey techniques. Similarly, some anthropologists are concerned with ecological and other structural constraints on aggregate behaviour, even though much of their field experience lies in extended conversations with individual informants (e.g. Howell 1979, 1986). There are still other anthropologists whose methods are exquisitely quantitative, whether applied to groups or to individuals (e.g. Macfarlane, 1976). There are some anthropologists who have shown the social management of fertility has profound implications for society and economy (e.g. Macfarlane, 1976). There are some anthropologists who widely agreed upon the vigour of interdisciplinary borrowing that turns to anthropological techniques as a precursor to a case study involving micro-level research. These anthropologists work rather like historians, especially in demographic history, dredging like archaeologists for the detritus of behaviour, combining individual with aggregate sources, trying always to relate their findings to broad issues of culture and institutional context (see Carter, 1995; Fricke, 1994, Greenhalgh, 1990; Hammel, 1990; Kertzer, 1995, among others). This approach is known as 'a cultural and political economy of fertility', which 'directs attention to the embeddedness of community institutions in structure and processes, especially political and economic ones, operating at regional, national, global levels, and to the historical roots of those macro-micro linkages' (Greenhalgh, 1990: 87). Following on from these studies, this thesis will focus on an attempt to understand a local situation based on a case study method (Subedi, 2006).

THEORETICAL BASE: CASE STUDY APPROACH TO STUDYING FERTILITY

An anthropologically informed demographic case study on the determinants of human fertility can be divided into two broad areas: macro (treating larger populations such as societies and communities: Greenhalgh, 1990, 1995b; Kertzer, 1995; McNicoll, 1980) and micro (treating individuals and families: Cain 1982, Caldwell and Hill 1988, Caldwell et al 1988, Knodel et al. 1987, Fricke 1994, Macfarlane 1976). At each level, fertility behaviour and its determinants have been studied to date. For example, Nancy Howell focused on studies of the Kung of Botswana that contributed importantly to define the meaning of 'demographic microanalysis' as 'the study of particular populations of a group of locally bounded people, defined as small enough that they can be studied by one or a few investigators over a period of a few months to a few years' (1986: 226). Other works in this development based on accurate data among non-literate populations include Macfarlane's (1976) and Fricke's (1994) community studies from Nepal. Caldwell's (1976) 'anthropological demographic study' also derives from his efforts to explain demographic transition from high to low in the Yourba community of Nigeria. Thus, scholars from various fields have crafted the basis for this type of intra-disciplinary dialogue about demographic research. They do not, however, always employ the term 'case study approach to demographic research'. The diverse synonymous meanings of this term are adopted variously as 'micro-demographic studies' or 'demographic microanalysis' or 'demographic anthropology' or 'anthropological demography'. Contemporary demographers also frequently apply the term 'social demography'.

The paper also argues for a new analytical framework that draws the most attention to the relationship between demography and socio-cultural anthropology, involving micro-level research. It is called 'a case study approach to studying fertility', which involves 'process and product'. The analysis process constitutes a specific way of gathering comprehensive, systematic, and in-depth information about fertility, which leads eventually to a product: a case study fertility data: 'placing demographic processes within a cultural matrix call for a special kind of research effort, one that combines within the same project the multiple methods suitable for gathering different kinds of data and one that places all analytical strategies within more encompassing models of cultural and social action' (Fricke, 1997c: 831).

A THEORY OF CULTURE FOR DEMOGRAPHY

For the first time in the history of demographic studies, the work of Carr-Saunders (1922) generated concepts have dominated the anthropological demographic borderland. The first was that the mankind had controlled its numbers: "There is another class of factors the primary and not the incidental function of which is either to reduce fertility or to cause elimination. These factors are prolonged abstention from intercourse, abortion and infanticide. The view put forward here is that normally in every primitive race one or more of these customs is in use" (Carr-Saunders, 1922: 214), there is "ample evidence that one or more of these practices are recorded for almost every people" (p. 216). To these controls, Carr-Saunders added postponed marriage to his interpretation of

human demography that was version of Malthus' equilibrium. The second concept was that the purpose of these controls was to prevent mankind from pressing upon resources and so to allow a life that was not dominated by misery. Carr-Saunders argued that fertility control was practised to such a "degree...that there is an approach to the optimum number" (p. 214). Moreover, these were both societal and individual decisions: "the number of children to be preserved is a matter for consideration in which the wishes of not only the parents but also of the relations and of the community in general have to be taken into account and...the practices are enforced by social pressure" (p. 216). "Few customs can be of more advantage than those which limit the number of a group to a desirable number" (p. 223). The third concept was the relaxation of these practices through the contact with Europeans, the result both of the opposition of missionaries to many of the methods employed and of an initial upswing in mortality, which meant that such controls were no longer necessary to maintain population equilibrium (p. 215). Modern fieldwork methods may have begun with Malinowski stranded on the Trobriand Islands in World War I, but concerns with collecting demographic data started earlier. A British guide entitled 'Notes and Queries on Anthropology' (Royal Anthropological Institute, 1951), which was first published in 1874, established census-taking as one of the first, key steps of fieldwork. Structural-functionalist anthropologists such as Malinowski and Radcliffe-Brown came upon population issues primarily through their focus on analysing kinship systems, as did their pupils Raymond Firth and Mayer Fortes. In Firth's classic study of the Polynesian island of Tikopia (Firth [1937] 1963), an entire chapter is devoted to "A Modern Population Problem" which is firmly with the Carr-Saunders mould (although Firth did not cite Carr-Saunders). This chapter indeed signals a shift in Firth's interests from kinship per se to issues of economic organisation. Firth focuses on problem of balancing land and population on a small island. He believed that European contact had an important on the previous cultural mechanisms supporting population-land equilibrium. Fortes (1943) discusses the defects of the demographic data that anthropologists have produced, and presents the results of his fertility analysis of the West African Tallensi, based on his surveys of men and women. His work was more influential than Firth in emphasising the central role to be played by demographic data

The International Union for the Scientific Study of Population (IUSSP) established in 1951 consisted of the grandly titled Committee on 'Population Problems of Countries in Process of Industrialisation'. This committee recognised that social and cultural conditions affected fertility in non-industrial societies. The highly influential result of this project was the work 'Culture and Human Fertility', published in 1954. Lorimer proposes 'an examination of cultural conditions affecting fertility in different non-industrial societies in the context of their social organisation and cultural values— especially with respect to organisation of the family and kinship relations' (1954: 98); and concludes these relations make for the survival and dominance of groups with both high fertility and corporate kinship systems in areas where control of resources depends on internal competition. Lorimer (1954: 15) pointed to Carr-Saunders's (1922) earlier claim that cultural evolution had resulted in a "universal tendency toward the maintenance of an 'optimum population' appropriate to the resources of each

area and the economic technology of its occupants." Cultural measures to sustain such equilibrium ranged from the indirect - prolonged lactation and child neglect among them— to the direct: prolonged abstention from intercourse, abortion, and infanticide. Lorimer shows imagination and skill in his analysis but, reflecting the weakness of most functionalist approaches, the meaning of such measures as understood through the local culture does not form part of the explanation.

In 1963, the Princenton University-based European Fertility Project was designed to test transition theory with historical data from roughly 700 provincial-level units throughout Europe. This project found that factors of language, ethnicity, and religion played a greater role in fertility decline than other socioeconomic factors, and subsumed these factors under the category of culture. Following this project, Australian demographer Caldwell (1982) developed a 'Theory of Intergenerational Wealth Flow'. He sought to explain changes in fertility between pretransitional and transitional regimes in terms of a change in the direction of flows of wealth between children to parents. Modern education and labour market systems meant that there was greater downward flow of wealth in families than in earlier forms based on domestic production where children contributed to their parents' wealth. Caldwell's 'wealth flow theory' has placed family, culture and social organisational issues at the centre of demographic transitions studies. Its research program has legitimised small-scale anthropological-style demographic studies, which is known as 'quasianthropological techniques'. Greenhalgh (1995b) offers a trenchant critique of Caldwell's quasi-anthropological methods in demography.

In response to the old structural-functionalist model of cultural meaning adopted by demographers, Hammel (1990) reviews the history of anthropological notions of culture and shows how demographic research has invariably drawn on older definitions and has neglected newer meanings that may have special relevance to demographic behaviour. As he puts it

the use of 'culture' in demography seems mired in structural-functional concepts that are about 40 years old, hardening rapidly, and showing every sign of fossilization [....]

Over the last 40 years, anthropological theory has moved away from the institutional, structural-functionalist approach it has long presented to its sister social sciences, towards the elucidation of local, cultural-specific rationalities, in the building of which actors are important perceiving, interpreting, constructing agents (1990:456).

Hammel rejects the traditional notion of culture as existing independently of any individuals (i.e. what Durkheim described as its 'superindividual' property), which can lead to a view of individuals as automatons or 'cultural morons'. However, he implicitly recognises that the contrary view of culture as a matter of individual creativity leads ultimately to the dissolution of the culture concept (as a measurable variable) altogether. Hammel argues that 'culture does not exist in some autonomous sense, but rather it is constituted.' He thus defines culture in terms of 'the commonality of perception that emerges between actors as they establish and conduct their social relations' (1990: 465-466).

Kertzer (1995) argues that demographers' assumption, that religious beliefs are primary and can simply be read into fertility behaviour, gives the 'narrow' meaning of culture. The main problem he identifies is that demographers used a rigid concept of culture which is a very different view from contemporary theories which treat culture as an environment or context that influences and is influenced by human action. Kertzer also criticises Hammel's 'commonality of perception' or 'culture as a negotiated symbolic understanding or evaluative discourse' terms as problematic.

The work of Fricke (1997a, 1997b, 1997c) has also argued for the concept of culture in demography. He bears some of the characteristics that Hammel and Kertzer criticise. Fricke draws on Geertz's (1973) 'culture as models of and for reality'. These ideas of culture as negotiated meanings rather than external constraints depend on the idea of agency. Partly Fricke's approach is similar to Caldwell's quasi-anthropological methods in which the 'cultural' were chosen not on the basis of contemporary culture. He writes 'if anthropological conceptions of culture have moved beyond the earlier notion of behavioural prescription and institutions, their measurement becomes much more problematic and their uses to demography less evident' (1997a: 252).

Carter (1995) argues that the problem of demography is absence of theory than of a particular sort of theory. Drawing on the work of Giddens's (1979) 'theory of structuration' and Jean Lave's (1988) 'work on cognition in practice', Carter's (1995) 'Agency and fertility: For an ethnography of practice' argues that human agency is correctly understood not as a sequence of discrete acts of choice and planning, but rather as a reflexive monitoring and rationalisation of a continuous flow of conduct, in which practice is constituted in dialectical relations between persons acting and the setting of their activities.

This paper has a fundamental theme- that fertility is humanly constructed issue which is influenced by the notion of Berger and Luckmann (1966: 79): 'Society is a human product. Society is an objective reality. Man is social product'. This social 'reality' is the emergent property of action in which action presupposes structure as a necessary condition for its production in the activity-setting. In this context, a clear understanding of what constitutes culture is vital. I want to define my own meaning of culture.

From the era of Franz Boas onward, culture was a guiding theoretical concept for anthropology. The focus was on the pluralities of cultures in terms of global differences and similarities through time and space. This tradition was concerned with cultural relativism and questioned the interpretations that imposed alien meanings from one culture onto another. Some anthropological approaches seek to explain culture in terms of a material base as, for example, in the evolutionary theories of Leslie White. Marxist interpretations, be they structural Marxism (Wolf, 1982), or other versions such as Emmanuel Wallerstein's (1987), seek to provide economic and materialistic interpretations of cultural phenomena. Some contemporary interpretations based in the Marxist tradition of anthropology, go so far as to state that wherever domination and hegemony exist, the cultural system is based on an ideological foundation. Culture thus becomes the trappings and mystifications that conceal and invert a basic inequality running

throughout the society. Ortner (1984), however, suggests culture has its own ontological uniqueness above and apart from materialist explanations. The question is: should we treat culture as primarily an ideological phenomenon or culture as an independent phenomenon only explicable in its own terms? My own opinion is that both concepts of culture are essential. We need to understand the internal dynamics and dialectics between culture and ideology— as located-meaning practices using locally appropriate tools. If we draw on more recent sociological traditions and contemporary developments in post-modern anthropology (which caution against a reified view of culture), and emphasise the local and situated nature of the *production* of culture, such *a priori* distinctions are unnecessary.

STEPS TOWARD A NEW SYNTHESIS

The greatest methodological weight in this study is applied to contextualisation which connects individual behaviour and the cultural and social contexts of its occurrence. We need a more general social theory, one which includes culture and agency that can then be accorded the same weight in demography as positive facts. This requires naturalistic inquiry - one in which the actors, who know the ground, are permitted to lead the way. At the level of naturalistic inquiry, the aim of the anthropological analysis of cultural materials or symbolic expression is 'to determine the native system(s) of classification of social groups, demographic event, and kinds of behaviour' (Hammel, 1990: 472). This approach is best suited to a presumably deeper analysis of subjective meanings that actor sets to his/her behaviour because demography can benefit from anthropological theorisation of the meaningful context in which behaviour occurs. But how can a 'research as practice' approach inform the collection of raw material toward generating highly complex structural models of marriagefertility relationships? In this context, naturalistic inquiry must be central. Ortner describes it as 'theoretical bricoleur kits' (1984: 128). According to Levi-Strauss, when confronted with the task of constructing some tangible objects, the bricoleur (a French handyman) surveys the bricolage 'to consider or reconsider what it contains and, finally and above all, to engage in a sort of dialogue with it, and before choosing between them, to index the possible answers which the whole set can offer to this problem' (1966: 18). Because the bricoleur works with 'a collection of oddments left over from human endeavours' (1966: 19)he salvaged scraps and miscellaneous items from a variety of completed and unrelated projects- the bricoleur is constrained in his efforts by the materials available and by his abilities to conceptualise alternative ways of constructing a new phenomenon out of them. The researcher-as-bricoleur-theorist works between and within competing and overlapping perspectives and paradigms. In this sense, the 'bricoleur kits' are qualitative methods such as participant observation, interpretative or narrative practice, developed by the research based on local and anthropological meaning-making practices. The choice of research methodologies depends upon whatever strategies, methods or empirical materials are at hand, but all require thorough immersion through fieldwork in the local culture.

Davis and Blake (1956) developed a framework for looking at the causes of a particular fertility determinant. They recognise that the proximate determinants of natural fertility are a set of biological and behavioural factors that affect fertility directly through socio-economic and other background variables. Davis and Blake list three major variables determining fertility: intercourse, conception, and gestation. These were further broken down into 11 distinct subvariables, which were known as the proximate fertility determinants, but all these variables have not been accepted widely in quantitative fertility studies because some are not easily incorporated into fertility models. Later Bongaarts and Potter (1983) produced a modified version of the work of Davis and Blake (1956). Potentially this Bongaarts model can provide a starting point for the integration of demographic and anthropological traditions by focusing on a framework of biological universals with which all local cultures must deal and ascribe meaning to in some way. Theoretically Bongaarts's model emphasises the four principal proximate determinants, which are considered inhibitors of fertility, because they lower fertility from its maximum value. Fertility does not reach its maximum value due to: absence of intercourse (which is interpreted to mean delayed marriage and marital disruption); failure to conceive (which is interpreted as the use of contraception); induced abortion; and postpartum infecundability (introduced by breastfeeding and sexual abstinence). He further notes that the remaining proximate determinants (natural fecundability, spontaneous intrauterine mortality and permanent sterility) are much less important causes of variations in fertility and for the purposes of this thesis we will treat them as secondary factors. Thus the proximate determinants identified by Bongaarts are found to be of greatest importance in the context of developing societies.

CONCLUSION

In this paper I have argued that the contemporary meaning of culture is influenced by ideas of human agency, which is a very different view from the old structural-functionalist models of culture. Furthermore, anthropologists are involved in the central issues of social theory that link political economy, history and culture to the major issues of population. The classical demographic theories of fertility, on the other hand, is one of methodological individualism - attention has been given to the micro-level fertility processes and no clear mechanism of how socio-economic and cultural factors influence fertility behaviour is indicated. I have also shown that demographic theory has problems with the newer meanings of culture and agency.

Through this review I have developed a specific methodology for anthropologically informed demographic studies— what I have called 'a case study approach' to fertility analysis. This I believe can provide a coherent method to fit cultural anthropology into the demographic enterprise. It is possible to combine the elegance and simplicity of Bongaarts's model with a 'research as practice' approach designed to contextualise the meaning of Bongaarts's indices as local practices by using anthropological tools. In particular, this can be done by providing a method toward understanding locals' motivation for fertility behaviour; and by using the power of naturalistic inquiry to provide a meaningful context in which the behaviour occurs. This study can be seen as a third

generation fertility study. One which combines both objectivity and subjectivity on the basis of structure and action (practice theory), but is itself 'a case study approach'. If we can demonstrate the effectiveness of the method for the noncontracepting societies then we can recommend it as a research strategy for a broader range of demographic concerns.

WORKS CITED

- Berger, P.L. & Luckmann, T. 1966. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. London: Penguin Books.
- Bongaarts, J. & Potter, R.J. 1983. Fertility, Biology and Behaviour: An Analysis of the Proximate Determinants. New York: Academic Press.
- Bourdieu, P. 1977. Outline of Theory of Practice. Cambridge: Cambridge University Press.
- Cain, M. 1982. 'Perspective on Family and Fertility in Developing Countries'. Population Studies 36(2): 159-75
- Caldwell, J.C. 1982. Theory of Fertility Decline. New York: Academic Press.
- Caldwell, J.C., Caldwell, P. & Caldwell, B. 1987. 'Anthropology and Demography: The Mutual Reinforcement of Speculation and Research'. Current Anthropology 28(1): 25-43.
- Caldwell, J.C., Reddy, P.H. & Caldwell, P. 1988. The Causes of Demographic Change: Experimental Research in South India. Madison: University of Wisconsin Press.
- Caldwell, J.C. & Hill, A. 1988. 'Recent Development Using Micro-Approaches to Demographic Research'. In J. Caldwell, A. Hill, and V. Hull eds. Micro-Approach to Demographic Research. London: Kegan Paul, pp. 1-9.
- Carr-Saunders, A.M. 1922. *The Population Problem*. Oxford: Clarendon Press.
- Carter, A.T. 1995. 'Agency and Fertility: For an Ethnography of Practice'. In S. Greenhalgh ed. Situating Fertility: Anthropology and Demographic Inquiry. Cambridge: Cambridge University Press.
- Carter, A.T. 1999. 'What Is Meant, and Measured, by "Education"?'. In Caroline H. Bledsoe, J. B.
- Cleland, J. & Wilson, C. 1987. 'Demand Theory of Fertility Transition: An **Iconoclastic View'.** *Population Studies* 41(1): 5-30.
- Coale, A.J. 1973. 'The Demographic transition'. In International Population Conference. Liège: International Union for the Scientific Study of Population, pp. 53-72.
- Davis, K. 1963. 'The Theory of Change and Response in Modern Demographic History.' Population Index 29: 345-366.
- Davis, K. & Blake, J. 1956. 'Social Structure and Fertility: An Analytical Framework'. Economic Development and Cultural Change 4(3): 211-35.
- Durkheim, E. 1964. The Division of Labour in Society. Translated by George Simpson. London: Collier-Macmillion.

- Easterlin, R.A. 1978. 'The Economics and Sociology of Fertility: A Synthesis'. In C. Tilly ed. *Historical Studies of Changing Fertility*. Princeton: Princeton University Press, pp. 57-133.
- Firth, R. 1936. *We, the Tikopia: Kinship in Primitive Polynesia.* 3rd ed. Boston: Beacon Press
- Fortes, M. 1943. 'A Note on Fertility among the Tallensi of the Gold Coast'. *Sociological Review* 35(4,5): 99-113.
- Foucault, M. 1972. *The Archaeology of Knowledge*. New York: Pantheon.
- Fricke, T.E. 1995. 'History, Marriage, Politics, and Demographic Event in the Central Himalaya'. In S. Greenhalgh ed. *Situating Fertility: Anthropology and Demographic Inquiry*. Cambridge: University Press, pp. 202-224.
- Fricke, T.E. 1997a. 'Culture Theory and Demographic Processes: Toward a Thicker Demography'. In D. I. Kertzer and T. Fricke eds. *Anthropological Demography: Toward a New Synthesis*. Chicago: The University Chicago Press, pp. 248-278.
- Fricke T.E. 1997b. 'Marriage Change as Moral Change: Culture, Virtue, and demographic Transition'. In G. W. Jones, R. M. Douglas, J. C. Caldwell and R. M. D'Souza eds. *The Continuing Demographic Transition*. Oxford: University Press, pp.183-212.
- Fricke, T.E. 1997c. 'Use of Culture in Demographic Research'. *Population and Development Review* 23 (4): 825-832.
- Geertz, C. 1973. *The Interpretation of Cultures*. New York: Basic Books.
- Greenhalgh, S. 1990. 'Toward a Political Economy of Fertility: Anthropological Contributions'. *Population and Development Review* 16(1): 85-106.
- Greenhalgh, S. 1995a (ed.). *Situating Fertility: Anthropological and Demographic Inquiry*. Cambridge: Cambridge University Press.
- Greenhalgh, S. 1995b. 'Anthropology Theorizes Reproduction: Integrating Practice, Political Economic, and Feminist Perspectives'. In S. Greenhalgh ed. *Situating Fertility: Anthropology and Demographic Inquiry*. Cambridge: Cambridge University Press, pp. 3-25.
- Greenhalgh, S. 1996. 'The Social Construction of Population Science: An Intellectual, Institutional, Political History of Twentieth -Century Demography'. Comparative Studies in Society and History 38(1) 26-66.
- Hammel, E.A. 1990. 'A Theory of Culture for Demography'. *Population and Development Review* 6(3): 455-85.
- Howell, N. 1979. Demography of the Dobe! Kung. New York: Academic Press.
- Howell, N. 1986. 'Demographic Anthropology'. Annual Review of Anthropology 15: 219-46.
- Kertzer, D.I. 1995. 'Political-economic and Cultural Explanation of Demographic Behaviour'. In S. Greenhalgh ed. Situating Fertility: Anthropological and Demographic Inquiry. Cambridge: Cambridge University Press, pp. 29-52.

- 80
- Kertzer, D.I. & Fricke, T. 1997. 'Toward an Anthropological Demography'. In D.
 I. Kertzer and T. Fricke eds. *Anthropological Demography: Toward a New Synthesis*. Chicago: The University of Chicago Press.
- Knodel, J., A. Chamratrithirong & Debavaya, N. 1987. Thailand's Reproductive Revolution: Rapid Fertility Decline in a Third–World Setting. England: The University of Wisconsin Press.
- Kuhn, T.S. 1970. The Structure of Scientific Revolution. Chicago: University of Chicago Press.
- Leibenstein, H. 1981. 'Economic Decision Theory and Human Fertility Behaviour'. *Population and Development Review* 7(3): 381-401.
- Levi-Strauss, C. 1966. *The Savage Mind*. Chicago: University of Chicago Press.
- Lorimer, F. 1954. 'General Theory'. In F. Lorimer ed. *Culture and Human Fertility*. UNESCO, Paris, pp. 13-251.
- McNicoll, G. 1980. 'Institutional Determinants of Fertility Change'. *Population and Development Review* 6: 441-462.
- Mason, K.O. 1987. 'The Impact of Women's Position on Fertility in Developing Countries'. *Demography as an Interdisciplinary*. pp. 100-127.
- Notestein, F. 1953. 'Economic Problems of Population Change'. In *Proceedings* of the 18th International Conference of Agricultural Economists. London: Oxford University Press, pp. 13-31.
- Ortner, S.B. 1984. 'Theory in Anthropology since the Sixties'. *Comparative Studies in Society and History* 26(1): 126-66.
- Popper, K.R. 1969. *Conjectures and Refutations: The Growth of Scientific Knowledge'*. London: Routledge and Kagan Paul.
- Subedi, P.K. 2006. 'Fertility Behaviour among Duras: Multidisciplinary Approaches'. *Unpublished Ph.D. Thesis*. Exeter: University of Exeter, UK.
- Thomson, W. S. 1929. 'Population'. American Journal of Sociology 34: 959-75.
- Wallerstein, I. 1987. The Modern World-System III: The Second Era of Great Expansion of the Capitalist World-Economy, 1730-1840s. New York: Academic Press.
- Wolf, E. 1982. Europe and the People without History. California: University of California Press.