

Beyond and for the family:
Importance and implications of a gender-generational approach
with special reference to the Asia Pacific Region*

(A preliminary investigation)

By

António Francisco

The Australian National University

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Please address any correspondence to:

Antonio Francisco
Department of Demography
Research School of Social Sciences - ANU
GPO Box 4, Canberra, ACT 2601 - Australia
Fax: 61 62 49 30 31
E-mail: aaf300@coombs.anu.edu.au

TABLE OF CONTENT

ABSTRACT.....	3
1. INTRODUCTION: BETWEEN UNIFORMITY AND DIVERSITY	4
2. THE LOCUS OF FAMILY: SEX-AGE VERSUS GENDER-GENERATION.....	10
2.1. WHY FAMILY DEMOGRAPHY HAS DIFFICULTY IN COMING TO TERMS WITH OTHER DISCIPLINES	12
2.2. GENDER AND GENERATION: THE CONTEXT OF REPRODUCTION AND SURVIVAL	16
2.2.1. <i>Sex, gender and time</i>	20
2.2.2. <i>Age, generation and time</i>	23
2.2.3. <i>Family life course: gender-generation in the context of the wider society</i>	26
3. EMPIRICAL RELEVANCE OF A GENDER-GENERATIONAL APPROACH: CONSIDERATIONS ON THE ASIA PACIFIC REGION.....	30
3.1. UNDIFFERENTIATED FAMILIES AND HOUSEHOLDS.....	32
3.1.1. <i>Selected statistics on neuter socio-demographic indicators</i>	35
3.1.2. <i>The empirical relevance of the standard neuter framework</i>	36
3.2. BETWEEN THE ECONOMIC MAN AND THE DEMOGRAPHIC WOMAN: THE ONE-SEX APPROACHES TO FAMILY 41	
3.2.1. <i>The statistics on the one-sex theory</i>	44
3.2.2. <i>The one-sex views of family and households</i>	46
3.3. THE TWO-SEX THEORY.....	47
3.3.1. <i>Selected statistics on the two-sex theory</i>	49
REFERENCES.....	54

ABSTRACT

Perhaps the most striking feature of demography, if not of most mainstream social sciences, is their failure to address, in a systematic and comprehensive way, the complementarity and patterned relationships between the sexes, and between parents and children. This has certainly affected the way the institution of family has been dealt with, both in theoretical and practical terms. Past views on family matters, including those on fertility change, migration and labour force participation, have generally been dominated by two major approaches, which relate to how we use the basic principles underlying the demographic relations, namely sexuality and age irreversibility. These two approaches are called here the neuter theory and the one-sex theory. While the former has provided the standard population framework in demography, in social sciences in general there has been a strong tendency to approach family as an undifferentiated and abstract entity, where individuals are regarded as identical, rather than women or men always bonded by specific gender and generational relations. Among contemporary models associated with this view, some of the most extreme were recently outlined by prominent social scientists under the assumption that children may have the same utility function as their parents and are produced without mating, or asexually.

On the other hand, there are the approaches devised on behalf of the experience and activities of one sex only, whether male or female. Over the twentieth century the one-sex theory has in fact become the lobbying operational theory in demography. This theory emerged in social sciences in general, at least in part, from the belief that the key feature in the relations between the sexes is their separation, or even their exclusion and opposition. Undoubtedly, the most dominating view in this case has been characterized by the overwhelming slant towards men's experience, as workers, breadwinners, performers, and protectors of their families. But dramatic social changes in the twentieth century, and in particular the insights provided by women's movements and feminist ideology, have challenged the foundations of neglect and disposability of women. Yet, explicable as are the contemporary alternatives aiming to compensate for the relative paucity of studies on women's life experience, they still show little commitment to transcending the artificial gender polarization that men are said to have invented. Disturbingly, most scientific and political theories show very little support for the commonsense view that family should not be treated as an either/or entity, in which one sex is assumed absolutely independent of the other.

The forces that can contribute to stabilizing the institution of family in a given society may be manifold, and certainly vary by time and space. But, in any case, instead of simply relying on the separation and elusive independence of the sexes, in the end they all have to come to terms with their complementarity and interaction. In order to better understand contemporary families and foresee their future we will have to stop adhering to the unrealistic framework of analysis by simply attempting to adapt to reality through means of artificial additional assumptions. This is a crucial issue with major implications, both for the construction of adequate theories and the formulation of feasible political and social strategies on family issues. For a long time a third alternative, addressing the complementarity and interdependency between the sexes, has germinated under the mainstream social sciences, including demography. But it was only in the middle of the twentieth century that a new postulate has blossomed as a scientific possibility. From different fields the new postulate has started pointing in the same direction: the possibility of what is called in this paper a two-sex theory or, to be more accurate, a gender-generational theory. In this context, probably the most perverse stereotype we will have to face is the belief that uncertainty and indeterminacy emerges whenever both sexes are considered simultaneously. And there is still much to be learnt from a very simple idea not strange to many commonsense views on family: rather than treating the interaction of the sexes as a *problem* or a *puzzle*, we should approach it as the fundamental source of realistic alternatives to solve the problems derived from the slant towards gender polarization, or the consideration of the experience and concerns of one sex separate from the other. Families may benefit more in the future if we try to devise models, views and strategies not on behalf of one sex only, but on behalf of both male and female.

1. Introduction: between uniformity and diversity

The time span, ten or twenty years, during which the sociologist William Goode (1963: 366-380) predicted that the Western pattern of the conjugal family would become the worldwide family behaviour has elapsed about a decade ago. Goode's prediction of a global inevitable convergence towards the Western conjugal family type was drawn from his belief that 'a somewhat similar set of influences is affecting all world culture' (p. 368); specially, he argued, because of the worldwide rapid move towards industrialization, urbanization, and the assimilation of the Western conjugal family type. 'Even though a majority does not accept it', wrote Goode, 'everywhere the ideology of the conjugal family is spreading', and there is an 'apparent theoretical harmony between the conjugal family system and the modern world and the modern industrial pattern' (p. 369). Thus, for Goode the trend towards 'some variant of the conjugal system' seemed not only inevitable, but around the corner: 'behavioural patterns that *will* become more pronounced, attitudes that are emerging but *will* become dominant in the future ... the next ten or twenty years' (p. 379).

Daring and strange as Goode's prediction may sound now, both in terms of the time frame and the simplistic direction of the path of changes in family systems, in normal circumstances it would not deserve this attention. But the intellectual circumstances in the 1950s and 1960s were far from normal, and in part Goode's vision into the future is but a caricature of it. Besides that his prediction had the quality to state, explicitly and very clearly, the dominant contemporary view in the West on family change: the so-called convergence theory.

While the convergence theory is probably less widely accepted now, one can also say that it is far from being forgotten. Its influence has appeared now and then, throughout the last two decades. To mention just two examples: Caldwell's (1982) core view on the increasing 'emotional nucleation' between what he defines as 'the only two modes of production' (Caldwell, 1992: 46), that is familial production and labour-market production, resembles in its fundamental way Goode's conjugal Westernized familism. As Caldwell wrote, in 1976:

Throughout William Goode's important study, *World Revolution and Family Patterns*, with its investigation of recent family changes in the Arab, Sub-Saharan African, Indian and Chinese worlds, "revolution", except in the discussion of slower growth over a longer period in the West, is a synonym for "Westernization" (Caldwell, 1976: 353; see also 1992).

A more recent paper written by Mason (1992) also shares, if not the time frame, at least the overall direction of the path in family changes seen as an inevitable impact of industrialization, urbanization and migration. In her discussion of family change and support of the elderly in Asia, Mason attempted to answer the question 'What do we know?' In short, she concludes: 'the problem of care for the elderly is likely to be especially acute for women'. However, looking at the scant and not very convincing empirical evidence that Mason presented, one is led to believe that her expectation of future family patterns is but a corollary of a crude accommodation of Goode's approach to her personal fixed-slant towards women. Without entering into further discussion of the above two views on family and future, it may however be worthwhile to mention at least a different interpretation. A paper by Cain provides an alternative view to the above two authors, both in theoretical terms and in its specific emphasis on the reproductive failure in Asia and the living arrangements of the elderly:

In the heyday of modernization theory, the predominance of nuclear households in such societies as India and Bangladesh was interpreted, quite incorrectly, as evidence of erosion of the "traditional" joint family and a shift towards the "modern" nuclear form. Although modernization theory, with its image of social change proceeding from traditional to modern Western institutional forms, is no longer widely accepted, social scientists remain in anticipation of dramatic change in family structure in developing societies. We await the demise of the joint family system, reversal of intergenerational wealth flows, collapse of patriarchal authority structures, and an end to gerontocracy. At present, there is a tendency to infer such change from the fertility declines that are taking place in many developing countries. Fundamental changes in family structure may indeed be occurring; however, it is important to emphasize that we owe our anticipation and inferences largely to untested theory rather than to empirical observation (Cain, 1988: 36-7).

The convergence theory was somewhat the core subject of an IUSSP seminar in 1987 on *Changing Family Structures and Life Courses in Less Developed Countries*. Höhn (1992: 5) explains that the seminar was part of a series of seminars aiming to

overcome one major criticism of the work of the previous Committee created by the IUSSP Council in 1982 to advance research on family demography: 'the neglect of less developed countries. It is widely believed that family demography should not be restricted to formal and Western-centred studies, as was the case with the former committee'. At the same time, a specific objective of the seminar 'was to understand marriage and kinship systems, family life cycles, household development cycles, and life course in Asia, Latin America, and Africa' (Höhn, 1992: 5); or as Berquó and Xenos (1992: 9) put it in the editor's introduction ' "the anthropological basis of the family" underlying the various marriage systems world-wide. A related goal was to document the paths to change under modern conditions. Central here was the critical examination of the nuclearization/convergence idea ...'.

The significance of that seminar, from which some papers were collected in a book edited by Berquó and Xenos (1992), is to give a snapshot of the contemporary divergent rather than convergent views on an already quite old, but still controversial debate. One may infer that overall the Western intellectual whim is already rather different from the 1950s-style familism. As Höhn (1992: 6) put it, like the concept of demographic transition, the nuclearization hypothesis is much too simple and smooth to explain a complex and diverse reality. Moreover this calls our attention to, perhaps, a more interesting and surprising aspect of the changes Goode failed to predict. While family systems in the non-Western world have been far from static, during the past three decades, significant changes have occurred in the intellectual thought of the Western Culture Complex¹ itself; specially in the very understanding of the further unbundling of the so-called Western modern nuclear family.

What three decades ago was regarded by mainstream social scientists and policy-makers as, perhaps, the final family system in its process of nucleation, is now interpreted as just a product of its time:

the era of familism and Western chauvinism that pervaded the 1950s and 1960s. It was the era in which leading psychologists declared persons who divorced or did not marry as immature or

¹ The Western Culture Complex includes, according to Goode (1963: 27), the New World, Australia, New Zealand, and Europe west of the Urals.

deviant (Ehrenreich, 1983), the era in which Rostow (1962) gave us the universal path to economic growth applicable to all countries, the era in which the 'modern man' was re-invented and blatantly defined in our own image (Lerner, 1985; Inkeles and Smith, 1974) (McDonald, 1992: 25).

Berquó and Xenos asserted, as well:

the last several decades have seen much new historical research on the Western family as well as through documentation of the rather divergent recent trends in Western family systems; these have, in Oliveira's phrase 'destroyed a whole set of mistaken images' about Western families and seriously undermined the simple convergence view. At the same time the developing countries have seen, in different degrees, unmistakable change in their family systems (Berquó and Xenos, 1992: 9).

McDonald was even more impetuous in his critical assessment of the faith of convergence theory, a position that caused a subtle reprehension in Freedman's review of the book in question (see Freedman, 1993: 621-23):

Convergence theory not only failed to predict the path of changes in family systems in the non-Western context, it also failed to predict the movement away from the idealized version of the conjugal family that has occurred in the West itself in the past twenty years (McDonald, 1992: 25).

Nonetheless, authors such as Caldwell and Caldwell (1992: 46-66) and, in part Ryder (1992: 161-175) as well, remain generally in line with the convergence hypothesis. At least with the hypothesis about the worldwide shift from family systems based on family-production, most of which is for subsistence and in which the producers are given work, direction, and rewards by relatives, to labour-market production, in which work, direction, and rewards are external to the family for are provided by the society and the economy. A major issue becomes apparent in all this controversy: that the divergence of opinions is not because some are totally mistaken when they argue that family systems in a given society may change when exposed to external influences, nor because others are wrong when they maintain that the similarity of two phenomena in completely different circumstances may lead to significantly different family patterns.

Definitely the issues appear much more complex now than back in 1960s, for students of family patterns cannot even mirror where the so-called modern family in the West, to say nothing of elsewhere, is converging. The idealized process of change towards a similar final family system has crumbled in Western thought. The reason for this is the increasing acknowledgment that previous ideas about family were based on two pieces of misinformation: one about the past and present history of family in Western societies themselves, and the other about the way the recipients of Westernization elsewhere were expected to accept, adapt, and assimilate its by-product, the so-called 'nuclear family' (Laslett, 1965, cited by McDonald, 1992: 16; Laslett, 1972, cited by Burch, 1979: 177; Cain, 1988: 36). This is well illustrated by the terminology and spirit of recent family studies: that 'the "postnuclear family" is already virtually in place' (McNicoll, 1990: 18-19); that beyond the boundary of the household, 'the idealised family morality which we carry with us is that of isolated nuclear family' (McDonald, 1992: 8-9).

The move away from the 1950s familism, particularly away from the expectation of a worldwide convergence to uniformity in family patterns, has been replaced by a new type of expectation. Most observers now expect that in European countries and the like, such as Australia, there is 'a "convergence to diversity", with perhaps a rise in the present variety of acceptable family structures but with stabilized low fertility' (McNicoll, 1990).

The acceptance of diversity, whatever that means, is becoming the new Western modern, or perhaps post modern, view on family. For the time being its significance, as compared with the previous anticipation of a convergence to uniformity in family patterns, resides in being more open-minded to past, present and future developments. Though, in the past, diversity has often been portrayed as somewhat dangerous, for it inspires volatility, uncertainty and unpredictability, at least from the point of view of the development of intellectual thought the new perspective sounds promising and beneficial; especially if one can hope that the type of 'convergence to diversity' portrayed in the West now will not be converted into an inevitable new model of the final family system towards which non-Western societies should head. This danger will be less likely if the understanding of worldwide family changes, in this case in the

Asia Pacific Region, are set in the image of their own societies, and if all family patterns become increasingly recognized as different responses in a worldwide experience of family diversity.

This paper emerges in the context of its author's Ph.D. thesis currently in process. It represents the first attempt to address some of the complex scientific issues, whether theoretical or mathematical, in the wider context of their empirical relevance. Although many issues outlined here require more clarification and thought, it seems that some of the ideas can already be discussed in the broader perspective of an interdisciplinary debate of their empirical implications.

The paper has started by taking up the old, but still not settled, issue on whether changing family behaviours are converging to uniformity or diversity. If this is not the most intellectual issue in contemporary academic family studies, it still has significant policy implications. Often the answers researchers or policy makers find to such an issue depend on whether they regard specific family forms as a barrier rather than a way out to development.

The second part of the paper follows with an outline of some theoretical issues on the locus of family. Without entering into the details on the theoretical and formal aspects of the relatively novel approach which has been worked out in the Ph.D. work currently in progress, the second part of this paper touches some issues which are more closely relevant to family studies, namely the gender-generational relations considered in the wider context of societal reproduction and survivorship.

The third section of the paper addresses the empirical relevance of what is called here a gender-generational proto-theory. This will be done while, at the same time, the scale and intensity of social change which the Asia Pacific region as a whole has experienced during the past half century are considered in terms of their relevance for changing family patterns.

2. The locus of family: sex-age versus gender-generation

Within any given society families may assume several forms. Each family form has its own expressions of vulnerability and viability, which can only be well understood and assessed when placed in the context of its specific social setting. In this enterprise all social sciences may have something to contribute. However small and simple family forms and structures may be, they always reflect a complex web of societal relationships, which a single discipline cannot aspire to embrace alone. In this context, the characterization of family systems provided by demographers should be, and is, often well received, by other social scientists: at least as a useful, if not indispensable, raw material for their deeper analyses.

The idea that until the 1970s demographers contributed very little to the understanding of family systems is generally accepted without much controversy, including by demographers themselves (Bongaarts, 1983: 399-416; Burch, 1979: 173-95; Höhn, 1992: 3-7). One reason may be associated with the relatively little attention given to family demography. By the time sociologists and economists were far advanced in outlining analytical models on family matters, to the extent that they soon became confident enough to advance predictive theories like the one mentioned in the beginning of this essay, demographers appeared to be still too busy and anxious in *counting* the world human population. In the 1950s and 1960s some countries, for instance on the African continent, were just undertaking their first comprehensive national census. In Australia, demographers had still to wait a few years more to be told by policy makers that the Aborigines should thereafter be counted as part of the Australian population.² However, none of these cases should be regarded as sufficient excuses for thinking that demographic data were lacking, and so demographers, more

² While the non-Aboriginal population has been systematically counted at least since the middle 1800s, the efforts to count the Aboriginal population only become a concern during the past two decades. The 1971 Census was the first national population census which included Aborigines as part of the Australian people. This was possible as a result of the repeal of Section 127 of the Australian Constitution, which stated that 'in reckoning the numbers of people of the Commonwealth, or of a State or part of the Commonwealth, aboriginal natives shall not be counted' (Altman and Gaminiratne, 1992:3).

than other social scientists, had great difficulty in conciliating their descriptions of demographic measures with adequate theoretical frameworks. Yet, as Burch stated in the late 1970s,

Compared to the subfields of natality or migration, household and family demography is still immature. Documentation of key generalizations is spotty, measurement conventions are not yet firmly established, and theory of determinants and consequences is sketchy and ad hoc (Burch, 1979: 183).

A few years later Bongaarts (1983: 27) added to the above conclusion a further comment from United Nations (1973): 'The study of families and households, including that of marriages and divorce, is perhaps the most underdeveloped branch of demography'. Once again, Bongaarts pointed out as well:

The family has long been a focus of study by social scientists. In contrast, relatively little attention has been given to the formal demography of the family which deals with the quantitative aspects of the size, composition and change of families and households (Bongaarts, 1983: 27)

What is most intriguing in the above overviews is their neglect of probably the most important aspect in what they all agree to be an unsatisfactory state of affairs of family demography. That is, why did it happen for so long? What were the causes? Why did demographers have difficulty in accepting the contributions on family coming from other fields? Do demographers have any theoretical contribution which other social scientists should take into account?

One would expect that at least a tentative answer to these questions could be attempted in an overview on family demography such as those mentioned above. However, while for instance Bongaarts did mention the existence of some causes, he bypassed the matter in a rather tautological and superficial manner:

The causes of this unsatisfactory state of affairs are not entirely clear, but the complexity of the subject matter and the lack of standard definitions, procedures and models for analysis of family and household data are among the principal contributing factors (Bongaarts, 1983: 27).

Of course, if it was easy to outline standard definitions, procedures and models for analysis of family and household data, the state of affairs of family demography would probably be far from complex and thus unsatisfactory. But the important issue of what were the causes awaits an explanation.

2.1. Why family demography has difficulty in coming to terms with other disciplines

Before discussing the importance and implications of the three theoretical perspectives for family studies in the Asia-Pacific region outlined below, first it is worthwhile to turn to the causes of the relatively little attention given by demographers to family studies. The reason was certainly not the shortage of empirical data. When in the middle of the twentieth century sociologists (eg. Goode, 1963; Parsons, 1955) and economists (eg. Becker, 1960; 65; Leibenstein, 1957) started to outline their theories relevant to family, demographers had already gathered an impressive empirical demographic data-base. The new sociological and economic theories on family found very little support in demographic data, though this has not affected them much as for most of them were outlined with little concern for empiricism; except, as McNicoll (1994: personal conversation) commented, when some cosmetic veneer to round off the articles for publication are required. Yet, to think that demography is within social sciences but a 'third world' discipline which can only supply valuable raw material for deeper intellectual endeavours in 'first world' fields is an unfair misinterpretation of the theoretical tradition in demography.

Demographers have little to envy in the high mathematization of, for instance, economics. They have their own. At least since the beginning of the twentieth century Lotka and others had contributed a great deal to opening the way for a sophisticated formalization of population studies. This may not be apparent at first glance, particularly if one observes demography superficially from the outside, and because of the current strong reliance of demographers on empiricism. In fact, one gets the impression that in the past four or five decades demography has followed exactly the

opposite direction to economics. While most economists have mostly found refuge in the increasing formalization of their discipline, the average demographer has become schizoid by empirical data. The task of calculating demographic indicators, such as the vital rates, the reproductive and population growth rates, family size, and marital status, turned into something that 'ought' to be done for its own sake. Hence, many still do not distinguish between demography as a science and as an accountability or a bookkeeping of the ins and outs in population numbers, as well as the statistics on the number, size and composition of households.

This may explain why many social scientists still find it hard to distinguish clearly between demographic and purely statistical work. As yet, demographers themselves have often contributed to the general perception that their discipline is intellectually deprived of its own epistemological and methodological insights. They have done so in two ways: first, by spreading the belief that they use sex and age merely as standard variables as opposed to their role as principles of theoretical construction. This is part of a wider problem, which Wunsch (1984: 1) characterized well when he wrote: 'little attention in demography is devoted to the process of acquisition of knowledge in demography, either from the point of view of the philosophy or the sociology of science, or from that of the sociology of knowledge'. The caricature provided by Wunsch deserves to be cited in full, for like any caricature it emphasizes the most characteristic features of the state of affairs in demography, which are relevant for population studies, in general, and family and household, in particular:

the average demographer starts off with a vague idea of one (or several) possible determinants of e.g. the decline of fertility in developing countries. He (or she) then picks out from the existing data one (or several) indicators of these determinants, somewhat like a conjuror drawing out a rabbit from a top hat. The demographer's conjecture is then "confirmed" by finding out a few cases where the association between the indicators is predicted; cases where the association is not confirmed are considered exceptions to the rule, or are not mentioned. Results are then dressed up with some theoretical considerations, in order to be presented in a publishable form. Where is the underlying theory? How are the concepts defined? How does one move from theoretical concepts to observational indicators? When (if ever) is the theory confirmed? (Wunsch, 1984: 1-2).

As a corollary of the above posture there is another very common attitude among demographers: when they have to come to terms with the necessary explanations for their measures, demographers are too prone to seek refuge in the concepts and analytical frameworks outlined in other disciplines. These disciplines, such as for instance sociology and economics, do have theories which might be relevant when the demographic relations need to be put in the context of the wider society. But it is one thing to seek the links and interdependence between demographic and non-demographic relations, and another to reduce the former to a crude caricature of the latter. The works of Bongaarts and Caldwell provide two useful illustrations to clarify this complaint against the theoretical deprivation of demography.

Following Davis and Blake's (1956) sketch of the 'intermediate variables' framework, Bongaarts (1978, 1982, 1983, 1986) later refined it and created the elegant model of the so-called 'proximate determinants'. In its recent form this model comprises six main biological and behavioural factors, which are supposed to directly influence fertility: age at marriage, duration of postpartum infecundability (due to breastfeeding and abstinence), frequency of intercourse, age at onset of sterility, intra-uterine mortality, and biological risk of conception failure (Bongaarts, 1993a: 11).

From the viewpoint of this paper, Bongaarts's model is an example of a purely one-sex (female) model. Because the model is set on the assumption that the determinants of fertility are a function of the female sex only, from the onset its variables were stripped of its demographic context: that is, the relational aspects associated with the gender and generational interactions between males and females, and between parents and children. Though this assumption was never explicitly spelt out by its author, it is an assumption that gives little margin to attempt a systematic theorization of the interdependence between the demographic and non-demographic variables. However, in an attempt to minimize the lack of contextualization of his model, Bongaarts has recently turned to the supply-demand theory developed by Easterlin (Bongaarts, 1993b). He did it on the grounds that 'it is the most widely used theoretical framework, in part because it is conceptually simple yet powerful, and it synthesizes economic and sociological approaches to the analysis of fertility'

(Bongaarts, 1993b: 437-8). Yet, missing from such a synthesis is a specific demographic approach to the analysis of fertility.

Another example of an implied conceptual and methodological deprivation in demography is provided by Caldwell. Although Caldwell has raised some of the most interesting hypotheses and tentative explanations in contemporary generational theorizing, a point to which this paper will turn below, he has done it while borrowing the core concepts in his theory from sociology and economics. Sometimes, as for example in the following passage, Caldwell himself has manifested some regret for doing so, though his extensive writings provide no clue for a better option:

One feels a certain unease in employing such concepts as the 'traditional family' and the impact upon it of 'modernization'. Yet, from Weber to Durkheim and on to Parsons, these concepts have been the mainstream of sociology ... We draw upon Marx to employ the valuable concepts of modes of production, the accompanying relations of production, and the (cultural) superstructure that they generate (Caldwell and Caldwell, 1992: 46).

Caldwell's feeling of uneasiness mirrors a tacit recognition that although the concepts have been the mainstream of sociology, they are far from adequate for a proper demographic analysis. This is an anomalous situation, the more so in that most of the ABC of demography highlights the fact that concepts like 'relations of production', 'family production' and 'market production', are beyond the scope of the so-called demographic relations. On the other hand, it is ironic that when demographers find themselves in the position of having to explain their own measurements they show little hesitation in treating them as mere instruments of some economic, social, political and other non-demographic factors. Because of the lack of a better alternative, demographers find it convenient and easier to back themselves up by well-known philosophical and ideological concepts and analytical models, such as the modernization theory, Marxism, Popperian logic of scientific discovery, Kuhnian paradigms, neo-classical economics, or feminism.

While philosophical, ecological, economic, and ideological views constitute valuable reference points, they are often shown to be not enough to make the history of gender and intergenerational relations entirely clear, particularly because they say

nothing about age and sex as relevant principles to demographic analyses, whether formal, empirical or purely theoretical. This explains the difficulty demographers have in identifying the relevance of theoretical frameworks on family and household drawn from mainstream economics and sociological theories. These theories are generally outlined within what this paper calls the neuter theory. Demographers know very well that the neglect of population structure, though useful for some purposes, for many others leads to crude and, very often, misleading results. Therefore, the approaches offered by several disciplines can hardly captivate the interest of demographers who have, at least during the twentieth century, made all their best efforts to overcome the limitations of the neuter approach. To treat population and families as undifferentiated and abstract entities, where individuals are regarded as identical rather than sex and age differentiated, may be of some theoretical interest but for demographers is for long not good enough.

In short, the departure of this paper from the above orthodoxy is twofold: on the one hand, it challenges the current stereotypes about the significance of sex and age. On the other hand, it challenges the usefulness of the customary correlations between the demographic and non-demographic variables, unless the proper demographic relations become visible enough to avoid reducing them to a pile of isolated variables.

2.2. Gender and generation: the context of reproduction and survival

It is extraordinary that neither demographers nor other social scientists who have also to deal, implicitly or explicitly, with sex and age have fully acknowledged their theoretical significance in theory construction. As will be argued throughout this paper it is important to bear in mind that depending specifically on how we use the basic organizing principles associated with sex and age, namely sexuality and age irreversibility, the theories of family and population dynamics may be classified in three main groups: neuter, one-sex, and two-sex theories. In other words, we can evaluate the theoretical consistency and value of existing family theories from the point of view of their premises based on the sex-age reference frame. Even though

such premises are hidden, implicitly or explicitly they have always determined the way to the setting up of demographic theories in general, and family theories in particular.

In spite of the apparent obsession of demographers with sex and age, in general the way they use them is but as standard variables. This is not been substantially different from the way other scientists use them as well. The latter, whether economists, anthropologists, historians, or sociologists, have probably not used those two concepts as much as the former. But when they have used them, they have done it with some mastery. In their respective fields they have contributed a great deal to demonstrating how sex and age are in real life more than just the x and y in a system of Cartesian coordinates. The evidence they have gathered so far is generally consistent with the one provided by demographers. That is, they all convincingly support the idea that sex and age are universal societal principles of population and family organization. Such principles may be expressed in several forms and contexts as, for instance, sexual and generational hierarchization and stratification, division of labour, and complementarity between both sexes.

It may be enough to recall only a few authors who have explored these aspects in population and family studies specifically relevant to the Asia Pacific Region. The diversity of findings and the range of their interpretation is wide: in different papers Cain (1979; 1982, 1988, 1993) highlighted the two aspects of the family that are of potential theoretical importance for fertility in developing countries, but have been neglected in the literature and subjected to some misinterpretation: sex stratification within the family and extended family networks; In many of his papers Caldwell (1982, 1992) illustrates the segmentation by age and sex convincingly; Dyson and Moore (1983) developed a sociological analysis on female autonomy in the context of different kinship structures and demographic behaviour in the North and South of India; Folbre (1984) challenged the neoclassical economic approach of an undifferentiated utility function when she considered the specific case study of household and family production in the Philippines; Friedl (1975) explores the patterns of variation in sex roles in the context of different technological levels; Greenhalgh (1985, 1988) discussed the family context of sexual and intergenerational stratification in Taiwan and its expression in East Asian societies, such as Hong Kong, (South)

Korea, Japan, and China; Mead's classical book (1967) focused on males and females, as children and as adults, and drew chiefly on seven peoples in the Pacific Islands: the Samoans, the Manus people of the Admiralty Islands, the Mountain Arapesh, the Mundugumor of the Yuat River in New Guinea, the Lake-dwelling Tchambuli, the Iatmul Head-hunters of the Great Sepik River (New Guinea), and the Balinese; Malhotra (1991) focused on patterns of spouse choice for both men and women in central Java; Sandom (1978) discussed the importance of sex and age as principles of social differentiation for the people of Darwin and the city's hinterland in North Australia.

Despite the wide recognition of the demographic and social role of sex and age as societal organizing principles, as pointed out above neither demographers nor other social scientists have systematically considered these two concepts in a coherent and intelligible setting. Though in the last two or three decades authors in different fields have increasingly recognized that sex and age have their proper setting, that is the gender and intergenerational relations, we still lack a comprehensive theory specifying the relations within these two subsystems and between them and other domains.

In this respect, this paper challenges the orthodox claim, specially raised by feminist authors in the last two decades, that research on families has generally failed to identify and address sources of conflict within family life (Folbre, 1982, 1983, 1984, 1986a, 1986b; Hartmann, 1981; McCrate, 1987; Sanchez, 1988). It is true that the feminist critic of mainstream social sciences has contributed a great deal to unveiling some of the misinterpretations associated with what is called in this paper the neuter theory: particularly the types of misinterpretation pointed out by Hartmann (1981) and Sanchez (1988), among others, on the tendency to overlook the potential sources of conflict between women and men. However, this type of criticism turns itself into a misleading perspective when it just stresses the relevance of conflict, dispute and inequality as opposed to unity, harmony and complementarity between the sexes. By reading for instance Hartmann's paper (1981: 365-7) one gets the impression that she believes that past research on families has contributed enormously to the understanding of 'family as a unified interest group and as an agent of change in its own right'. Therefore, this type of research only becomes controversial and critical

when it fails 'to identify and address sources of conflict within family life' (Hartmann, 1981: 366). A similar view is expressed by Sanchez (1988: 1) when commented about fertility theories dealing with childbearing desires and behaviour, namely those of Davis and Blake, 1956; Becker, 1960; 1965; Easterlin, 1969, 1975, 1978; Freedman, 1970; Ryder, 1974, 1980; Caldwell, 1982: 'no theory considers gender roles - or changes in gender roles - as potential sources of conflict between women and men about having children'.

While Hartmann and Sanchez, among many others, assert that families and households are the locus of gender, class, and political struggle, they remain victims of the neuter theory that they correctly aim to challenge. Even if their criticism of the household as an egalitarian collectivity is generally correct, it is certainly controversial and misleading to imply that such an outdated view should be replaced by a perception of household as a belligerent collectivity in a permanent stage of emergency. If the household is treated by many mainstream economists, as 'an individual by another name' (Folbre, 1986a: 5), how can it be possible to downplay conflict and differences of interests without downplaying complementarity, harmony and the sharing of common interests among family members as well? How can one be sure that because a family theory is vested in the metaphors of altruism, only 'the importance of conflict and inequality between household members' (Folbre, 1986: 5) is overlooked?

One should expect that when family is approached from a neuter perspective, that is as an undifferentiated unit by definition, its inner dynamics as a whole will be overlooked. And this is true either about conflict or concordance of interests, about dispute or harmony in decision making, and about altruism or selfinterest. The fact that neoclassical economists, specially led by Becker, have defended the explicit aggregation of individual utilities in a joint utility function approach (Folbre, 1986: 18) has more to do with the legitimation of the neuter theory than with the reality of families and households themselves. Likewise, the range of interpretation about families and households has much to do with the way their authors understand the concept of gender and generation.

2.2.1. Sex, gender and time

Though sexuality has gradually become separated from biological reproduction it is questionable that the opposite has happened as well. That is, human reproduction is sexually determined, or in other words requires the complementarity and union of two sexes. From a mathematical point of view while the outcome of sexual reproduction involves two sexes only, the analyses can be more or less complicated depending on the assumptions made and the methods applied: linear or non-linear, deterministic or stochastic, continuous or discrete-time. In turn, from a conceptual and methodological viewpoint the approaches and specially the results produced may vary a great deal as well. This depends, among other aspects, on how sex is taken into account or is ignored when outlining the setting of our models.

In a neuter perspective the basic assumption is that the individuals comprising a population or a family are identical and undifferentiated, or in other words that they are asexually reproduced. Within the one-sex theory, whether male or female oriented, the basic premise is that sex is but an individual trait, and thus male and female can be assumed as absolutely independent from one another. In a third perspective, the one which accounts for the role of both sexes, sexual complementarity is treated as the core organizing demographic principle of any modelling endeavour; this means that sex becomes theoretically important not as an individual trait, but for its function in defining the structure and the organization inherent in the dynamics of population and families. This way of approaching family and population matters presupposes a perspective of gender according to the following definition of Wilson (1989: 2; see also Scott below):

a basis for defining the different contributions that men and women make to culture and collective life by dint of who they are as men and women. It is gender that absorbs sex rather than the reverse, because gender is the basis for the only sensible allocation of functions throughout a culture, rather than simply in its work and labour (civil) system. Who people are is much more than what roles have been imposed on or assigned to them as physiological entities, because this presumes that sex as the operative civil designation is genderless when, of course, it is not (Wilson, 1989: 2).

While this type of argument has been repeated in many situations by several authors, the range of interpretations and purposes is still enormous. For instance, a recent move by some feminist intellectuals has been characterized by an increasing use of the concept 'gender'. Though in many cases the use of the term may be justifiable, in many others, specially if the purpose is but to replace the term 'sex', it reveals a great deal of confusion. This is clearly illustrated in the strong tendency among some feminist intellectuals to rename all that used to be called 'women's studies' with the expression 'gender studies'.

The use of the term 'gender' from the point of view of a one-sex theory often leads to two main types of exaggerations. Depending on the ideology and political strategy embraced, the one-sex perspective can be used to over-and under-estimate both the experience of power and the experience of powerlessness of the sex being studied at the expense of the sex abstracted. Some economic theories, including particularly those labelled as neoclassical and Marxist, often have focused on areas dominated by male experience and notoriously neglected the role of women, for instance, in societal labour and migration experience. In demography, the physiological role of women in reproduction has generally been isolated from both their own social role and the role of men. On the other hand, feminist theories either tend to exaggerate women's experience of powerlessness, what Boulding (1992: 5) called 'woman as victim', or to celebrate their uniqueness and power. Wolf (1993), in her recent book, *Fire with Fire*, exhorts women to abandon 'victim feminism' and embrace 'power feminism'.

In recent years a few feminists have attempted to distance themselves from the orthodox feminist approach to gender relations. For instance Scott (1988) maintain that

In its most recent usage, 'gender' seems to have first appeared among American feminists who wanted to insist on the fundamentally social quality of distinction based on sex. The word denoted rejection of the biological determinism implicit in the use of such terms as 'sex' or 'sexual difference'. 'Gender' also stressed the relational aspect of normative definitions as femininity ... according to this view women and men were defined in terms of one another, and no understanding of either

could be achieved by entirely separate study (Scott, 1988: 29, cited by Watkins, 1993:570).

Even if the assertion that the most recent use of the term 'gender' has first appeared among feminists is true, it is still controversial to take for granted that a definition of gender such as the one proposed by Scott is really a feminist definition. For instance, Nelson (1993: 123) argued that while the term "gender" is often interpreted as meaning "pertaining to women", the use of the term in feminist theory is quite different, in two important ways:

First, a central insight of feminism is that the recognition that many traditional social divisions between men and women are socially created and malleable ... Second, the term 'gender' is seen as systematically referring to both masculinity and femininity; the popular association of gender with only the feminine side of the dualism implicitly assumes that masculinity is unmarked or universal, and only femininity is 'tainted' with gender (Nelson, 1993: 25)

Both ways explained by Nelson give a rather putative view of what feminist theory stands for.

If feminism, whether as ideology and political points of view or as a more theoretical perspective, has ever been relevant it was by speaking out on behalf and for the experience of women. However, one can probably already infer that the most recent usage of 'gender' appears to entail the defeat, in the positive sense, of feminist theory. First, explicable as the past woman-centred demographic researches may be, they are definitely misplaced as far as the construction of a gender theory is concerned. Second, any research carried out on behalf of women or men only, rather than on behalf of both sexes, is certainly not committed to transcending the artificial gender polarization that men are said to have invented. This is a paraphrase of the following words of Bem:

With respect to gender polarization, the case is clear. For all of its emphasis on a woman's unique ability to transcend the artificial polarities that men are said to invent, the woman-centered perspective has so completely polarized women and men, along with what it defines as the male and female modes of relating to reality, that for all practical purposes, both men

and women are as limited by homogenized visions of themselves as ever before (Bem, 1993:130-131).

And third, it would make little sense if the important outcome of the radical reconceptualization of social relations provided by feminist intellectuals were to become a gynae-centric instead of the outdated androcentric perspective. As Bem (1993: 131) puts it,

Granted that it is now men rather than women who are being denigrated, and granted also that the words *masculinity* and *femininity* are not being used explicitly, still, these are not real women being celebrated and real men being pilloried. These homogenized visions are but the flip side of the polarized, gender caricatures of androcentrism (Bem, 1993: 131).

2.2.2. Age, generation and time

As Robertson (1993: 95) wrote, generation, seen as an aspect of reproductive organization, 'has been somewhat neglected recently in favour of the exploration of gender'. However, just like the term 'sex', considered above, both in real life and in theory age plays a function not paralleled by other individual traits, such as weight, size, and colour. From a mathematical point of view, while the range of ages over the life span of individuals is wide, as far as mensuration is concerned it has a privileged position for allowing precision in quantitative analyses. An individual's age at birth always has the fixed value zero and it increases linearly with time: $da/dt = 1$. Curiously, even with regard to the term generation and conversely to the currently more fashionable term 'gender', the mathematical definition of the length of a generation has been well worked out in demography. Quantitatively speaking the length of a generation is generally interpreted as being approximately equal to the mean interval between the birth of a female or a male and the birth of their children. The consideration of age and generation can also be possible through several methods using continuous or discrete-time, linear or non-linear approaches, and deterministic or stochastic models.

Even though, grammatically speaking, the term 'neuter' denotes a sexless, apparently sexless, or indeterminate sex between masculine and feminine, what is here called the neuter theory includes the ageless perspectives. From a conceptual and methodological viewpoint the findings based on approaches and models which assume individuals either as ageless or with age may vary substantially. To be more accurate what is here called the neuter theory, when appropriate should be called the neuter ageless theory. Therefore, unless otherwise noted in this paper the term 'neuter', used mainly to refer to views which neglect the nature of sexual reproduction, will denote ageless as well.

In the neuter theory the disregard of age corresponds to what Keyfitz called 'population without age':

Abstraction is necessary in demographic as in other theory; is it possible to abstract even from age and still obtain results of value? To represent a population as a number varying in time, and in disregard even of its age composition, is like treating the earth as a point in space - though too abstract for most purposes, it is useful for some (Keyfitz, 1977:1).

This view is consistent with the core assumption of a general neuter theory, for it assumes that the individuals can be regarded as identical and undifferentiated with regard to age. But when using the one-sex theory, whether male or female oriented, the consideration of age distribution becomes a function only of the sex taken into consideration.

The exclusion of the age distribution concerning the sex left aside is based on assumptions with regard to the sexual nature of reproduction. For instance, the premise behind the consideration of reproductivity and fertility in relation to females only is drawn from the belief that they are concerned with the production of children, and this is a function of the female sex. Likewise, the idea that the birth rate is a function of the number of females and to a much lesser extent of the number of males tacitly suggests that human population is sexually promiscuous. While this argument may be very well applied for many, though perhaps not all, animal populations, as Karmel put it:

in human populations in which monogamy is practised this argument breaks down - a relative shortage of males will reduce the birth rate by reducing the proportion of females who can

marry in the same way as a similar shortage of females, so that the birth rate must be regarded as a function of the numbers of both males and females ... Thus the argument might run that a shortage of females aged, say, 20-40 years in a population will reduce its birth rate whereas a similar shortage of males will not do so, and so on ... But again it is clear that such reasoning will not hold in monogamous populations (Karmel, 1948: 52-54)

As gender absorbs sex rather than the reverse, in social life it is also generation that absorbs age. This may have been somehow obfuscated by the conventional reproductive rates based on annual data fluctuating with rather temporary shifts. On the other hand, the concept of generation is generally recognized by commonsense as a way to find out the interactions between descendants and progenitors, parents and children, or among individuals of different age and experience groups.

While the term generation has been used throughout the twentieth century, specially in considerations of reproductive rates in formal demography, until the 1970s its appeal for broader population and family studies was minor. But a major shift of focus, which started to take shape in the 1960s, developed in the decades of the 1970s and 1980s: that is, a significant shift from a macrodemography focused on the relationships between broad demographic aggregates such as vital rates, population growth, and reproduction rates, to a microdemography dealing with family and household units such as their size and composition, as well as the timing and duration of stages in the family life cycle. A product of the major shift of emphasis in demography from a macro to a micro-level approach was the emergence of large social surveys such as the World Fertility Survey (WFS). In the words of Hobcraft (1985: 84), 'it is no accident that the major shift of emphasis in demography from a macro-level approach coincided with the WFS.'

In this context there are at least two important new theoretical developments which deserve to be mentioned: the family life cycle approach (Ryder, 1964, 1992; Young, 1977, 1994), and the intergenerational wealth flows theory of fertility (Caldwell, 1982; Handwerker, 1986). These two developments have opened the way to new research on family systems, and specifically to a return and reassessment of the theoretical and empirical relevance of the concept of generation. While the family life

cycle approach is now recognized as an important field in demography, the intergenerational flows theory has provided one of the most exciting scientific hypotheses. According to Young, who has probably not expressed her view in writing yet, the intergenerational flows theory may be regarded as a subset of the broader family life-cycle approach. This idea may even be more valid when one considers that the use of the intergenerational wealth flows theory lacks much theoretical elaboration. If by theory one understands a systematic explanation of a given phenomenon Caldwell's theory is, as yet, embryonic and needs to be elaborated as part of a more comprehensive framework of concepts, categories, testable hypotheses and consistent explanations of demographic change. But this is not a sufficient reason to dismiss the major strength of the intergenerational wealth flows approach as compared with the life cycle framework. That is, without necessarily being already a good and systematic theory Caldwell's approach has shown to be, from its onset, a good guide for research. It has challenged the students of population to seek the explanations of macro-demographic changes through their micro-level manifestation occurring in the context of families and households.

2.2.3. Family life course: gender-generation in the context of the wider society

The above emphasis on sex-gender and age-generational subsystems is far from intending to suggest that social organization can be reduced to gender and generational relations. There are obviously other important expressions of social organization, such as those concerned with class, ethnicity, and race. But though the latter are important for broader considerations of family and household, at least as far as the demographic forms of social organization are concerned they do not comprise the core and most immediate content of the reproductive relations. Besides that, the identification of their specific content and relative autonomy as well as interactions with other social relations is a pre-condition for an adequate consideration of family in the context of the wider society.

Very often the gender and generational relations in which families and households need to be considered are presented as part of a cloudy bundle broadly named socio-cultural setting. However, the identification of the content and importance of gender and generational relations appears to be of crucial importance for further development of demographic theory. For instance, it can be presumed that there is a radical difference between the current approach which assumes the existence of a direct relationship between say income or education and fertility, and an alternative view sustaining that the determinants of fertility can only be well understood when studied as being percolated through the complex web of gender and intergenerational relationships among men, women, and children. The former approach abstracts the socio-economic and cultural factors from the organizative setting of the demographic system, that is the gender-generational setting. Such a methodological stance is analogous to the determination of crude vital rates in disregard of population structure by age and sex.

In turn, the alternative approach should not only establish that family structure, marital status, or fertility levels vary in opposite direction from, for example, the educational attainment of women. Though this may be a correct description of facts, in itself it does not help to understand why and how it is so. Or, in the words of Wunsch (1984: 3) purely 'description is not knowledge', for what is mostly needed to claim some knowledge upon a given phenomenon is a sufficient understanding of the reasons or causes of the process under consideration.

Whether dealing with population dynamics in general, or families and households in particular, demography and several other disciplines are mainly concerned with two phenomena: survivorship and reproduction over time:

For an individual, the significance of the passage of time - the phenomenon of individual ageing - is in part the survival problem posed by the fact that the individual life begins with a lengthy period of immaturity. For a population, the significance of the passage of time is the problem of replacement. If the population is to persist, despite the mortality of its individual members, new personnel must be continually created and prepared to fill roles of those who die. The family is above all the institution to which is assigned the responsibility for attempting to solve the problems of the passage of time both for the individual and for the population (Ryder, 1992: 161).

This passage highlights what the Ph.D. thesis from which this paper has emerged sees as one of the two most important universal demographic determinants in human population: the irreversibility of time as manifested in the ageing process between birth and death. The other not less important factor is the sexual nature of reproduction.

These two factors are directly associated with the role of age and sex in reproduction and social organization and thus, as pointed out above, in demographic theorizing. They can even be considered the two most important factors influencing the construction of all the existing partial demographic and, perhaps, most social theories. On the one hand, they set the basis for evaluating the theoretical consistency and value of existing demographic theories, first of all, from the point of view of its premises based on the sex-age reference frame. Even though such premises are hidden, implicitly or explicitly they have always determined the way to the setting up of demographic theory. On the other hand, in a view of population and family dynamics as complex, self-organizing and cooperative phenomena they coexist as two arrows in a coordinate system: first, the arrow of the direction of irreversible transformation or negative feedback as manifested in the individual and population ageing processes; second, the arrow of the positive feedbacks, or the increase output as manifested in the gender-generational subsystems rooted in the sexual nature of human reproduction.

In order to be able to account for and acknowledge the significant theoretical role of sex and age in demographic theorizing relevant for family studies, it may be useful to consider in more detail the three theoretical approaches already mentioned, namely the neuter theory, the one-sex theory, and the gender-generational theory. Each of these three approaches will be discussed below with special reference to the Asia Pacific Region.

The intent of the following description is to sketch the general theoretical, formal and empirical aspects which need to be taken into consideration in any effort to outline a relatively new theory of gender-generational relations. It is neither a comprehensive overview of literature nor a critique at length of the three demographic approaches. The contention behind this paper is that such a theory may not yet be

comprehensive and systematic enough to be called anything but a proto-theory. But, for the time being, two features can already be pointed out as evidence that a new view is in process of gestation. First, is the fact related to the broad assessment presented above. It represents already a departure from the orthodoxy, for it seeks to come to terms with the shortcomings as well as the merits of the two most dominant approaches, the neuter and one-sex theories. To be more specific, the gender-generational demographic theory is intended to overcome the currently dominant approaches of population and family dynamics, which either consider individuals as undifferentiated and abstract entities or see them as being represented or dominated by one of the sexes, whether male or female. As yet, two things need to be noted: on the one hand, that the line dividing the three demographic approaches discussed here may only be sketchily drawn; sometimes such a line should not even be identified as clear cut. On the other hand, rather than competing with the two dominant theories a gender-generational theory will have to complement and provide a more fundamental and holistic theory relevant to the study of population and family dynamics.

The second evidence of the originality of what can be already called a gender-generational demography proto-theory is the fact that it has already moved beyond the past discussion on the two-sex models addressed in two very separate bodies of theory. On the one hand, with regard to formal demography this is no longer a contribution to the solution of what its literature conventionally calls the 'two-sex problem'. The reason is that while one should not underestimate the mathematical difficulties inherent in the modelling of a two-sex population, such difficulties cannot be mystified and exaggerated as compared with the existing problems of the modelling of two-sex in theoretical and empirical terms. Moreover, it may be said of a gender-generational theory that rather than seeking a solution for the 'two-sex problem', whether mathematical, theoretical or empirical, it is instead interested in overcoming the 'neuter' and the 'one-sex' problems. This is more than a semantic issue, for if one distinguishes difficulties from scientific problems the idea defended here is that only a two-sex approach may contain the solution for what, in fact, are the problems inherent to the 'neuter' and the 'one-sex' approaches.

On the other hand, a gender-generational theory has the potential to show why and how much of what appears as a feminist theory is blinkered, and why correcting this situation can be an important endeavour with major theoretical and policy implications. A gender-generational theory should demonstrate how, for instance, calling a gender theory a new feminist theory (see Ferree, 1990; Thompson, 1993) is as contradictory as if we called it a new masculinist theory. It can show as well why and how the demographic two-sex models outlined throughout almost half a century, whatever their shortcomings may be, are probably the best attempts to formally model gender relations that feminism has never made, nor is even aware of.

3. Empirical relevance of a gender-generational approach: considerations on the Asia Pacific Region

It would not serve the purpose of this paper to expand further into the complexities associated with the theoretical and formal or mathematical dimensions of any of the three approaches considered above. An alternative option, though risky since it implies leaving important aspects without enough clarification, is to consider immediately the empirical relevance of what is called here a gender-generational proto-theory. This will be attempted while, at the same time, the scale and intensity of social change which the Asia Pacific region as a whole has experienced during the past half century is considered in terms of its relevance for changing family patterns. In fact, the ultimate objective of the Ph.D research activities from which the present paper is emerging is to deepen the theoretical capacity to handle and assess the empirical information related to specific cultural and historical contexts.

The terms of reference of this Conference are in themselves rather broad. While this may be good for it allows a healthy diversity of contributions, at the same time the wide range of issues under the six proposed panels may make the aim of avoiding undue simplifications extremely difficult. The task may not even be easy for the experts on issues relating to the Family in the Asia Pacific region, to say nothing of those outsiders, like the author of this paper, who have joined this meeting more for academic curiosity than for sharing a specific expertise on this Region. The discussion

that follows is the result of a scanty, scattered and preliminary reading of relevant literature on family in the region which is the focus of this conference. In this respect, what any outsider researcher can only hope is that the references he or she found relevant are not too far from grasping the real issues. In this particular case, the underlying questions raised for debate at this Conference are the following: how has the institution of family in this region responded to the challenges and processes of development? What has the changing structure of families meant to the policy makers and the states within the region? Is the concept of the family in the region stable?

The discussion in the first part of this paper suggests that the answers we may get to such questions as these depend not only on the empirical information available. On the contrary, this very information and particularly what we can learn from it depends very much on the specific frameworks, concepts, theories, models, hypotheses, and even operational definitions used. While reviewing the literature on family in the Asia Pacific Region this concern has become even more pertinent, specially after being confronted with assertions such as the following: 'The inadequacy of the old rubric of family studies has become an embarrassment to anthropology and sociology' (Robertson, 1991: 3). Or yet, in the more incisive words of Hannan:

Anthropologists have not ignored the family - clan and kinship structures are among the most inclusive institutions in many of the simpler societies that they have studied. But anthropologists have been unable to develop general schemes for explaining variations in family structure in modern societies. Sociologists have supposed that the family has waned in importance as its functions have been assumed by the state and other bureaucratic institutions. The view that the family in modern society fulfils mainly 'expressive' or emotional functions seems widely accepted. Sociological theorists have turned their attention away from the family toward large-scale social structures. In recent years the study of marriage and the family has become an intellectual backwater in sociology. Until recently, the situation was even worse in economics. Economists have tended to view their subject matter narrowly as involving the production and distribution of valued material goods. The family plays no important role in these theories other than as a unitary consumer and supplier of labor (Hannan, 1982: 65).

Before this sort of criticism, as with regard to what has been said above about the state of affairs of family demography, one is led to believe that the embarrassment concerning the inadequacies in family studies is rather more widespread than initially expected. This is not a cause for relief. On the contrary, there are even more reasons to wonder how we can be fairly confident that even a descriptive paper of plain empirical findings is addressing the real family issues rather than personal or traditional stereotypes and preconceptions. Speaking more specifically, about the basics on family as an agency of socialization, does the term family coincide with household in all parts of rural Asia? If not how are they interrelated and how do they respond to the challenges and processes of development? Or, if so, is that coincidence of the same type once found in European peasant societies to render the interchangeable reference between the terms 'peasant family' and 'peasant household' acceptable as in classical European literature? (Mafeje, 1991: 9).

To some extent the very methods and operational definitions needed for collecting statistical information on households and families, through censuses and surveys, are among the main culprits for much of the possible confusion.

3.1. Undifferentiated families and households

The neuter approach has generally provided in several social disciplines, and in particular in demography, the earliest and most immediate standard models and concepts. Nowadays it still prevails in social sciences as the most accessible and easy-to-use framework in population and family studies. Though the increasing influence of the one-sex approach since the beginning of the twentieth century has somehow undermined its usefulness, the neuter perspective has preserved its place safe, at best as the easiest way to get a first glimpse of changing population and family institutions.

Curiously, the weaknesses of the neuter approach are, perhaps, the source of its strength. That is, its main characteristic, whether used in formal, theoretical, or empirical terms, is to overlook population structure, including its inner composition by sex, age, and marital relations. It also disregards population organization, specially the

societal networking of gender, generational, ethnic, and class relations manifested at the individual, family, community, national and regional levels. These two dimensions of population, the structure and the organization, make up the ultimate guarantee for the continued social, economic and demographic population system to persist and reproduce. Yet the neuter approach overlooks both, for it considers the individuals of both population, at the macro level, and families at the micro level, as undifferentiated and abstract entities. The individuals are seen as identical, rather than women or men and parents or children always bonded by specific gender and generational relations. At the macro level the neuter aggregate measures often used are the crude vital rates, population growth, GDP per capita, and population density, among many others. With regard to family and household, measures such as the ratio of adults per household, and the average household size are analogous to crude rates (see Table 2 below). As Burch wrote, some of the variations of the latter

reflect differing or changing age, sex, or marital status distributions within the adult population rather than differences or changes in category-specific rates of headship (Burch, 1979: 176)

The diversity of definitions of households and families in national population surveys is clearly illustrated by the United Nations (UN) (1989) *Demographic Yearbook 1987*, which features, for the first time in 39 issues, an extensive treatment of household and family statistics (UN, 1989: 3). This issue includes a review article on the number, size, and composition of households and population living in households and institutions.

The UN issue acknowledges that an important limiting factor in analysing statistics on households and families is related to the very definition of households, families, household head or reference person and institutional population. While often this limitation may make the comparability between countries and even within countries over time a meaningless exercise, probably more important is the misinterpretations one may formulate about the reality of specific societies. The UN's attempt to standardize and make uniform the definitions among the countries illustrates the immediate and potential problems. According to its recommended

household definition countries should try to distinguish two separate concepts: 'housekeeping', sharing resources to provide household members with food and other essentials for living, and 'dwelling unit' or 'housing unit' occupying all or part of a dwelling unit. Based on this the definitions of households used in national censuses taken between 1975 and 1986, 126 countries and areas, for which a definition for household was available and that have the same or similar definitions, were grouped together (Table 1).

Table 1: Definitions of households in national censuses of Asia Pacific Region in 1975-86		
Countries or areas that use a definition similar to the UN recommendation	Countries or areas that use only the housekeeping concept	Countries or areas that use only the dwelling unit concept
<p>ASIA: Afghanistan, Brunei Darussalam, Burma, Hong Kong, India, Indonesia, Iran, Israel, Japan, Jordan, Kuwait, Malaysia, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Turkey.</p> <p>OCEANIA: Australia, Christmas Island, Cocos (Keeling) Islands, Kiribati, New Zealand, Norfolk Island, Samoa, Vanuatu.</p>	<p>ASIA: Bahrain, Bangladesh, Republic of Korea, Fiji.</p> <p>OCEANIA: Niue, Tonga.</p>	<p>OCEANIA: American Samoa, French Polynesia, Guam, New Caledonia, Pacific Islands, Papua New Guinea (urban areas).</p>
Source: United Nations, 1989: 5-6.		

Among the 83 countries or areas in all continents with a definition that incorporates both the housekeeping and the dwelling unit criteria 18 are in Asia and eight in the Pacific. Among eight countries or areas where a household is defined only in terms of the housekeeping arrangements among the individuals concerned, but without mentioning living within a single dwelling, four are in Asia and two in Oceania. None of the Asian countries rely on a household definition restricted to a dwelling unit concept, while six countries in Oceania use this third definition. In

addition to this, while there were ten countries or areas that rely on the family as the unit of census enumeration, only one - Papua New Guinea (urban area) - was in Oceania and none in Asia. Moreover, it is important to bear in mind that although countries or areas were grouped together as having a similar definition to the one recommended by the United Nations, marked differences among them were found in the phrases used, and in some cases in the way one or both of the criteria (housekeeping and dwelling unit) are emphasized.

Though one cannot infer much on the basis of this information only, at least it is possible that somehow the household definitions in each country or area may reflect a social perception of the interdependence between family types and household arrangement according to the prevailing rules of residence, inheritance, and consanguinity.

3.1.1. Selected statistics on neuter socio-demographic indicators

Table 2 below provides some socio-demographic indicators which exemplify the type of data considered in a standard quantitative analysis consistent with the neuter approach. The table includes data on indicators which may not be immediately characterizing family and household in themselves. However, the fact that such indicators illustrate some features of the scale and intensity of social and demographic change in the Asia Pacific region is at least indirectly relevant to any family study. Moreover, changes which may be depicted by indicators such as population size, population growth rates, life expectancy at birth, infant mortality, population density, real GDP per capita, and average size of household are intrinsically also about changing family institutions.

The common feature in socio-demographic indicators is that they are but putative expressions of aggregates about the conditions of people. This happens with indicators such as infant mortality rates and life expectancy at birth, when taken as undifferentiated aggregates, as with the so-called real GDP per capita which does not account for the household production outside the conventional market economy, and

thus is not a good indicator of economic growth when seen in the wider context of economic development. The neglect of the household product as a crucial part in the gross domestic product is showing to be a major flaw in orthodox development theory which is increasingly regarded untenable or even offensive.

Table 2
(File: Asiat2.doc)

3.1.2. The empirical relevance of the standard neuter framework

In spite of its gross simplification, specially when quick approximate measurements are required, the neuter approach has been shown to be useful both in demography and in other social disciplines as, for instance, economics. These two fields have found it useful in addressing issues such as the relationship between population and natural resources, or the relationship between national economic development and population growth. Over the twentieth century the neuter theory has assumed several forms: from the so-called demographic transition theory (Notestein, 1953; Davis, 1963), to the more recent explicitly defined asexual theory of inequality and intergenerational mobility outlined by the Nobel Prize-winner in Economics Garry Becker (Becker and Tomes, 1979). In the analytical model families are substituted for the individual, while children are assumed to have the same utility function as their parents and are produced without mating, or asexually. Since this model shows little interest in being empirically relevant this is not the appropriate place to discuss it further.

Without turning, once again, to the 1950s and 1960s modernization and diffusionist theories it may be helpful, however, to give some attention to a contemporary variant of a neuter approach, which in spite of not being crystallized in the social sciences like those mentioned above, is increasingly becoming influential in population studies. This is the so-called institutional theory, developed in the past two decades in population studies as, for instance, McNicoll's (1980, 1993) institutional

approach to demographic behaviour, and Greenhalgh's (1990) attempt to embrace diverse political economy theories of fertility in a more systematic framework.

In some of his most recent papers, McNicoll (1991, 1993) has used the core ideas of the institutional approach to sketch a general typology of population and fertility paths. Part of that typology deals specifically with the scale and intensity of social change that the Asia Pacific region as a whole has experienced during the past half century, and which directly or indirectly is significant for understanding the changing structure and forms of organization of families and households. The originality of McNicoll's typology, used specifically to identify patterns of fertility transition is in his effort to place the orthodox geographical classification of major subregions within a society-specific institutional context. The terminology he uses, though unconventional and rather metaphoric, is consistent with his analytical perspective.

McNicoll (1991, 1993) identified in Asia-Pacific Region three major paths, which he denotes as follows: 'Growth with equity', 'radical devolution', and 'soft state'. The three main paths are distinguished on the basis of family, community, and state roles in influencing population changes and the amount of pressure applied by the state. None of these paths include the experiences of fertility transition, in countries such as Australia, customarily seen in the region as an alien experience much more akin to the secular fertility transition of the European industrialized countries, and Japan, where fertility transition took place substantially in the first half of this century. It may be worthwhile to briefly describe such paths, for it provides, as one can expect from any neuter discourse, a good and quick snapshot of some aspects relevant to the understanding of family change in the Asia-Pacific Region.

According to McNicoll (1991: 10; 1993: 18-19) the type of 'growth with equity' is found in East and Southeast Asia, which despite 'a few exceptions (Burma, Indochina, lately the Philippines), has been the stellar performers in the third world economic stakes over the last several decades'. In this path he identifies two main 'tiers': on the one hand, the hyper growth economies, led by Japan, but whose standard model of 'growth with equity' is best epitomized by the South Korea and Taiwan development policy with its counterpart on the demographic side. Both countries are

now at fertility levels below replacement. The Korea-Taiwan model emerges as an experience which contrasts not only with what McNicoll calls the 'traditional capitalist' (i.e. Brazil and Mexico), but also with 'the former orthodoxy of development theory that saw redistribution as in conflict with growth' (1993: 19). On the other hand, there are the so-called 'second-tier' countries of Southern Asia, especially Thailand, Malaysia and Indonesia, which have also shown strong economic progress and substantial fertility declines. In short, in the words of this author, 'the decline depicted, notably the halving of family size in East and Southeast Asia, are among the major social changes of our time'.

The singularity of China is epitomized by McNicoll, at least in his more recent paper cited here, as the 'radical devolution'. In his 1993 paper McNicoll tries to place the experience of China in its right place, that is: 'the most distinctive model of fertility transition in world experience'. Irrespective of the more or less success of Chinese development strategies, and in particular 'the brutal but in their own terms successful' programs, it is now widely accepted that overall the Chinese political, administrative and governmental institutions have led to considerable achievements: the efficiency in delivery of health services resulting into 'life expectancy reaching 65 years by the late 1970s, well above the levels that experience elsewhere would predict to correspond with China's economic status at that time'; and a falling in the total fertility rate from 6 children per woman in the 1960s to below 2.5 by the end of the 1970s.

For the third path McNicoll uses the epithet of 'soft state', borrowed from Gunnar Myrdal, to refer to the countries of South Asia where the governments have generally been unable or reluctant to impose obligations on the people. This model is epitomized by much of the Indian subcontinent, specially the northern swathe encompassing Pakistan, Bangladesh, and some of the largest Indian states: Uttar Pradesh, Madhya Pradesh, and Bihar. While in this part fertility decline has been slow and fairly slight, in many other Indian states and in Sri Lanka it has dropped significantly: total fertility is 2.6 in Sri Lanka, about 3 in Kerala, and below 4 in Punjab (McNicoll, 1991: 11). Overall, this author identifies a major contrast between the two regional giants, South Asia and East Asia:

United Nations projections, even though they assume rapid fertility decline to replacement level in South Asia, point to a 70 percent population increase over the next 30 years in that region, in contrast to 28 percent for East Asia. India is expected to overtake China in population by about 2030 (McNicol, 1993: 16-17).

McNicol (1993:2) defines institutions as 'clusters of behavioural rules governing (or, to put it more neutrally, regularities describing) human actions and relationships in recurrent situations.' Strictly speaking the institutional approach directs its attention 'to the embeddedness of community institutions in structures and processes, especially political and economic ones, operating at regional, national, and global levels, and to the historical roots of those macro-micro linkages (Greenhalgh, 1990: 87). While McNicol writes that 'institutions by definition have to do with structure' (1990: 2), conversely to what Greenhalgh suggests it is less so for actual processes, if by process is meant a systematic and continuous series of actions, operations of changes taking place in a definite manner. It is certainly true that institutions are not, as McNicol commends, 'hard-cast channels that, once set in place, demand compliant behaviour. They are constantly being made and remade by those coming into contact with them, emerging renewed or marginally changed, or falling into disregard and disuse' (p. 2). But they appear, in fact, as the crystallization of outcomes rather than dynamic processes enhanced by the modes of organization between people..

In its essence the institutional approach is structure-oriented, for it basically captures the 'outcomes of continual negotiation and renegotiation, of "conversation"' (McNicol, 1993: 2). In fact, the actual process over time, the actual behaviour of the true actors engaged in any process of acting or 'conversation' certainly are not captured by the institutional approach lenses. On the contrary, this perspective treats the institutions, both material and ideational, as the subjects rather than the objects and outcomes of the relations depicted by the modes of organization among people. The latter, whether considered as featuring demographic, economic or socio-cultural relations appear in the neuter institutional discourse but only peripherally.

In terms of the earlier discussion in this paper, the institutional approach illustrated here is essentially neuter, not only in its language but also in the content of

its reasoning. Though McNicoll refers to the sexual division of labour as one of the most important institutions, he does not fully appreciate its implications when he deals with population changes or family systems. For instance, as far as concerns the definition of institution considered here, the two institutions which confront and at the same time complement each other in reproductive behaviour are females and males.

As yet, probably the most striking feature in the contemporary institutional approach is its similarity to the early thirties sociological school usually called structural-functionalist, or functionalism for short. In 1964, Homans characterized this school in his suggestive Presidential Address delivered at the annual meeting of the American Sociological Association in Montreal: 'Bringing men back in':

First, the school took its start from the study of norms, the statements the members of a group make about how they ought to behave, and indeed often do behave, in various circumstances. It was especially interested in the cluster of norms called a role and in the cluster of roles called an institution. It never tired of asserting that its concern was with institutionalized behavior, and that the unit of social analysis was not the acting individual but the role. The school did not ask why there should be roles at all. Second, the school was empirically interested in the interrelations of roles, the interrelations of institutions: this was the structural side of its work. It was the sort of thing the social anthropologists had been doing, showing how the institutions of a primitive society fitted together; and the sociologists extended the effort to advanced societies. They would point out, for instance, that the nuclear family rather than some form of extended kinship was characteristic of industrialized societies. But they were more interested in establishing *what* the interrelations of institutions were than in *why* there were so (Homans, 1964: 809-810).

Homans considers a third feature, that the school was more interested in the consequences than in the causes of an institution, particularly in the consequences for a social system considered as a whole. The similarities are remarkable. The contemporary institutional approach also makes propositions about the characteristics of societies or other social groups as such, rather than about what Homans calls 'the behavior of "individual consciousnesses"' (p. 810) or, in his own way, 'about men'. He adds that one carries out functional analysis,

when, starting from the existence of a particular institution, one tries to find out what difference the institution makes to the other aspects of social structure (Homans, 1964: 811).

In short, overall the neuter approaches both in population and in family studies focus on the institutions of society, not on the behaviour of people. In the worst cases, they treat family as an individual and the individuals as things-in-themselves, or as if their reproduction was not sexually organized and the type of mating relations predominantly monogamic did not matter. Some of the positive and negative aspects of this approach have been pointed out above with specific reference to the major patterns of socio-demographic change in Asia Pacific Region. It has been stressed that to show the interrelationships of institutions is not the same thing as explaining, as Homans would say, why the interrelationships are what they are. This is a practical issue not a philosophical one: not whether it is legitimate to take the role as the fundamental unit, nor whether institutions are really real, but whether the theoretical program of institutional approach has in fact led to explanations of social phenomena, including the findings of institutional analysis itself.

3.2. Between the economic man and the demographic woman: The one-sex approaches to family

The second most important approach underlying family studies is the one outlined on behalf of the experience and activities of one sex only, whether male or female. While often it already takes into consideration the structure of population by age and sex, the one-sex theory can only make sense if disregards population functional organization. As compared with the former standard neuter analytical framework, instead of conflating females and males into an undifferentiated whole, the one-sex theory assumes the sexes to be completely independent and deals with one sex at a time. For quite a long time the sex of the one-sex theory was mostly male; in demography, as in social sciences in general, the most dominating views on population and family matters were characterized by an overwhelming slant towards men's experience, as workers, breadwinners, performers, and protectors of their

families. But over the twentieth century there has been a dramatic shift in the focus of the one-sex approaches, from a male to a female centred stream. Besides the fallacy of the often mentioned technical convenience, this shift has come from a combination of factors, including the influence of dramatic social changes in the twentieth century and the insights provided by women's movements and feminist ideology, as well as the persistence of a bias towards gender polarization and biological essentialism.

Most of the current literature on family studies focused on Asia Pacific Region and which goes beyond the standard neuter approach consider above, are mainly one-sex focused. In a recent article attesting the importance of gender in studying migration and development, Chant and Radcliffe (1992: 2) justified their slant towards women as aiming 'to compensate for the relative paucity of detailed studies on women's experiences in migration compared with those of men'. This view corresponds to the so-called 'women's studies' of 1970s, which were solidly grounded in traditional modernization theory (Rathgeber, 1990). Thus its apparent novelty may be attributed to specific emphasis given now to the word 'gender'. But though fashionable, the great majority of the so-called 'gender studies' are in fact just 'women studies', for the term 'gender' is used in place of 'sex' to legitimize the slant towards women. The above article of Chant and Radcliffe (1992), like many others, shows a very strong concern with women, but very little interest in the gender construction of the social interactions between the sexes.

In other recent studies there is even a mild suggestion that the study of women's position and unique ability can be seen as the only study relevant to understanding the causes of demographic change. A recent book edited by Federici et al. (1993) has just been structured in term of 'women's position as a cause of demographic change' and 'women's position as an outcome of demographic change'. The emphasis of the book is a more or less tacit insistence, obfuscated by the rhetoric of a so-called gender perspective, on the one-sided belief that in studies of fertility change only women matter. McKinnon (1994), in a speech opening a Workshop at the ANU (*The Institutions of Gender/The gender of institutions? Feminist theory and the reshaping project*) praised this book for frequently placing women at the centre of its analyses. However, she regretted that the book did not go far enough, not because the centre in

which the book places women is what one would call a centre without periphery, but simply because women are not central enough. While she suggested that the book should address as central the changing balance of power between the sexes in fertility she has difficulties in acknowledging that, for instance, in current fertility analyses men are generally not counted; or if, and when, they are considered, they are treated as ghosts using their 'invisible hand' to manipulate fertility decision-making. The suggestion that men are not counted in most demographic analyses is certainly controversial for someone who naively embraces the ideology of women's total subordination to the patriarchal regime. This is consistent with the idea that while demographers have little to offer to the development of gender theory, feminists can teach them a great deal. But this overlooks completely the significance of the findings of Karen Mason, one of the editors and authors in Federici et al. (1993), some years ago. In 1987, Mason and Taj pointed out that one of the most striking findings of their search of the literature comparing women's and men's reproductive goals was the general paucity of studies attesting to the reproductive role of men. In their intensive search in order to find statistics on fertility ideals or desires that were simultaneously collected from both women and men they had to ignore 'the vast majority of published statistics on family size desires or sex preferences because they were collected from women only (Mason and Taj, 1987: 619-620).

The slant towards one sex only is somewhat, but only partly, shared by Watkins (1993) in her article 'If all we knew about women was what we read in *Demography*, what would we know?'. There is no doubt this author assumes a more balanced stance as to the meaning of gender studies and the demographic importance of studying both men and women. Yet by insisting on drawing the attention to the issue of what we can know about women by reading the mainstream journal *Demography*, Watkins's (pp. 566-570) concern with men and women sounds ludicrous; the title and the focus of her article become specially puzzling when she asserts that while 'we learn from *Demography* a great deal about a limited range of women's activities and characteristics ... we would learn even less about men' (p. 553).

Bearing in mind what demography is all about, the following two questions would have been more relevant to the celebration of 30 years of *Demography*: if all we knew about the interaction between women and men was what we read in *Demography*, what would we know? If we knew as much about both sexes as we know about females, what could we know that we don't know yet? If only one sex is studied what can we really learn about it? Once again we are before a practical and not a philosophical issue: the question is not whether one should be interested in either women or men *per se*.

3.2.1. The statistics on the one-sex theory

It would be easy to multiply examples of the increasing slant towards the female-sex theory, but for the time being little can be gained from it. The important point still to make is that, explicable as the recent woman-centred family demographic researches may be, they are definitely misplaced as far as the construction of a gender theory in demography is concerned. Any research carried out on behalf of women or men only, rather than on behalf of both sexes, is certainly not committed to transcending the artificial gender polarization that men are said to have invented. Table 3 below provides some measures of fertility, mortality, and reproduction based for females in countries of the Asia Pacific Region.

The data provided by Table 3 may not appear immediately focused on family and household characteristics. But as Bumpass (1990: 483) wrote, because fertility cannot be isolated theoretically from the institutional context in which it is embedded, theories and statistical data about fertility change are intrinsically also theories and data about change in the family as an institution.

3.2.2. The one-sex views of family and households

The way out from the neuter and structure-oriented institutional approach is a process-oriented perspective, which can only be possible when the focus of analysis is the mode of organization. In contemporary demographic theorizing Caldwell's transition theory has emerged, at least in its initial form outlined between 1976 and 1982, as perhaps the closest to identifying it in the field of family demography. Its author has attempted to find the empirical support for his approach through extensive field work carried out in several countries of Africa and Asia.

One of the most important theoretical features in Caldwell's approach is probably the shift from a macro and generally neuter analysis to a micro and sex-age specific focus. Specifically, Caldwell's theory has to do mainly with the intergenerational flow between the parent-children dyad. The gender flow between spouses or even the specificities of the differential generational relations between fathers and children as compared to those between mother and children seldom are featured in Caldwell discourse, but these aspects have never been conceptualized as the core of his theory.

As far as the discussion outlined in the first part of this paper is concerned, at least two important features in Caldwell's theory are controversial. First, the undifferentiated term 'parents' portrays an identity of interests, roles and conditions between males and females or fathers and mothers which has little empirical support. When he discusses the transactions between parents and children the two entities are regarded as being opposites to one another. This is well illustrated by one, if not the most, important proposition in Caldwell's theory:

the fundamental issue in demographic transition, is the *direction and magnitude of intergenerational wealth flows* or the net balance of the two flows - one from parents to children and the other from children to parents - over the period from when people become parents until they die (Caldwell, 1976: 344)

However, this proposition contradicts the anthropological and sociological evidence suggesting that the patriarchal, generational and gender interrelations between men, women, and children are much more complex. In trying to capture the intergenerational relations between parents and children the proposition simply overlooks the fact that fathers and elders often share the social, moral and economic benefits with their own children in a way wives or mothers cannot expect to enjoy. In other words, in many societies of contemporary Asia and specially most of Africa 'women never attain the status of "elder"' (Mafeje, 1991: 9), while male elders and juniors favour one another over the course of their lives. Thus, an interpretation of the intergenerational dyad as a mere unilineal relationship between both parents and children may lead to too much confusion, specially if the empirical evidence in many societies suggests that often there are more common interests between fathers and sons than between husbands and wives.

A second feature in Caldwell's theory, when seen in terms of the perspective of this paper, is its strong slant towards females. When it is compared with, for instance, the discourse of McNicoll commented on above, the distinction between the neuter and the one-sex in the two authors is apparent.

3.3. The two-sex theory

For quite a long time demographers have become well aware that female fecundity, to say nothing of that of males, has never been close to what they perceive as the theoretical biological maximum. One would expect that the putative mainstream approach of fertility determinants and other family matters in terms of women only would by now be seen as perverse as the naked assertion that the market place and economic man are sufficient metaphors for studying the labour force experience. Disturbingly, while the former stereotype is still badly acknowledged as a demographic issue, the later has generally become offensive. This state of affairs does no justice either to the commonsense view of human reproduction, nor to the growing scientific endeavours within and outside demography.

The forces that can contribute to stabilizing the institution of family in a given society may be manifold, and certainly vary by time and space. For a long time a third postulate has germinated under the mainstream social sciences, including demography: the complementarity between the sexes. But it was only in the middle of the twentieth century that this new postulate has blossomed as a scientific possibility. Since then the discovery that we could stop adhering to unrealistic frameworks of analysis, by simply adapting the elusive principles of gender polarization and biological essentialism to reality, through means of artificial additional assumptions, is gathering momentum.

From different fields the new postulate has started pointing in the same direction: the possibility of what is called here a gender-generational theory. The common longing of the main sources of this alternative perspective is to overcome the most perverse stereotype of contemporary mainstream perspectives: that is, the belief that uncertainty and indeterminacy emerge whenever both sexes are considered simultaneously. In the past four or five decades such sources have been driven by the intuition that there is much to be learnt from a very simple idea not strange to commonsense views upon population reproduction: rather than treating the interaction of the sexes as a problem, a puzzle, or an anomaly, we need to approach it as the fundamental source of feasible and realistic solutions for the problems rooted in the slant towards gender polarization, or the consideration of the experience of one sex separate from the other. This is a crucial issue with major implications, both for the construction of adequate theories and the formulation of feasible political and social strategies on family issues. And there is still much to be learnt from a very simple idea not strange to many commonsense views on family: rather than treating the interaction of the sexes as a problem or a puzzle, we should approach it as the fundamental source of realistic solutions for the problems derived from the slant towards gender polarization, or the consideration of the experience and concerns of one sex separate from the other. Families may benefit more in the future if we try to devise models, views and strategies not on behalf of one sex only, but on behalf of both male and female.

3.3.1. Selected statistics on the two-sex theory

Table 4 portrays what in formal demography is called the male and female conflict. On the basis of the conventional one-sex stable population theory it is possible to calculate the net reproduction rate and true rate of increase for each sex separately. The two one-sex models can be used to describe the future behaviour of the population, for both the female and the male net reproduction rate give the rate at which each sex will ultimately grow given the mortality and fertility conditions. But as the Table clearly shows the reproductive measures are very different for males and females, and thus rather different and contradictory results may be inferred depending on which part of the population is used. Probably even more fundamental is the problem that Karmel pointed out back in 1948: 'the absurdity of such a system is further seen when it is realised that such a system would imply that the males produce males and the females produce females, each without the intervention of the other sex, i.e. it would imply that the male and female populations were two completely independent populations' (p. 29).

Although Table 4 shows very little relevance to Asian-Pacific countries, its inclusion here is intended to highlight exactly the failure of contemporary students of this region to follow up the issues on the measurement of human reproductivity raised over forty years ago by the Australian economist Peter Karmel. The data gathered in Table 4 were published in 1968 by Keyfitz and Flieger as part of a wider analysis of vital data, which had no intention of taking up the issue on male and female conflict. Besides that work the two-sex issue in formal demography remained a curiosity of very few demographers and other scholars, specially some biologists and economists. This is an extraordinary and intriguing situation for two reasons. On the one hand, as at the beginning of this century Lotka set the strategy for the one-sex theory to be a useful way of demographic research, Karmel sowed the seeds for a major breakthrough in the science of population. Only the entrenched one-sex perspectives and, even more importantly, the resistance to the potential challenge that a two-sex approach represents for the currently established ways of thinking, have obfuscated the breakthrough offered by Karmel in 1947-48. On the other hand, one would expect that

particularly those who are only concerned with the empirical aspects of population and family matters would find a two-sex approach rather more interesting. During the past two or three decades there has been an increasing awareness of the significance of gender relations, and so it would be understandable that a two-sex approach became more easily accepted; specially because of its underlying assumption that reproduction and fertility can hardly be well understood if the full implications of the complementarity between the sexes are not addressed.

From this preliminary investigation of the contemporary research focused on the Asian-Pacific Region one is led to think that students of population are still not interested in the relations between male and female measures of reproductivity. Over the past four decades, Karmel's work has remained virtually ignored, as if the issues he discussed in length in his Ph.D. thesis (a work which is cited for the first time in this paper) were too transcendental and irrelevant to deserve the attention of empirical contemporary researchers.

It becomes clear that the domination of the one-sex theory is rather more widespread and powerful than one could expect. This state of affairs affects not only the more formal and deductive works but the whole range of theoretical and empirical research on population and family studies. For those inspired by mainstream economics the New Home Economics (Becker, 1991) continues to provide, if not the best at least the 'necessary illusion' that it remains a useful approach on family studies. Other applications of mainstream economics, such as the one proposed by Easterlin (1975, 1978), have even raised stronger expectations that a strictly neuter supply-demand economic theory could successfully be converted into a useful one-sex economic theory of fertility.

Table 4: Male and Female Conflict								
	1959 -61		1962		1963		1964	
	Male	Female	Male	Female	Male	Female	Male	Female
USA								
GRR	1.963	1.717	1.896	1.696	1.838	1.624	1.777	1.567
NRR	1.837	1.66	1.779	1.634	1.724	1.564	1.666	1.51
TFR	3.833	3.528	3.705	3.474	3.585	3.333	3.473	3.208
Generation	29.067	26.11	29.074	26.076	29.153	26.17	29.222	26.25
Sex ratio	104.947	105.468	104.795	104.795	105.272	105.272	104.719	104.719
Chile								
GRR							2.751	2.18
NRR							2.167	1.824
TFR							5.416	4.43
Generation							32.839	28.553
Sex ratio							103.235	103.235
Trinidad & Tobago								
GRR	3.063	2.643						
NRR	2.665	2.43						
TFR	6.006	5.402						
Generation	32.09	26.864						
Sex ratio	104.11	104.405						
Cyprus								
GRR	1.916	1.7						
NRR	1.777	1.602						
TFR	3.746	3.481						
Generation	27.602	27.993						
Sex ratio	104.734	104.734						
Hungary							1964	1965
GRR							0.99	0.876
NRR							0.916	0.833
TFR							1.913	1.808
Generation							29.794	25.756
Sex ratio							107.244	106.516
Norway								
GRR					1.454	1.419		
NRR					1.384	1.383		
TFR					2.843	2.905		
Generation					31.204	27.595		
Sex ratio					104.676	104.676		
U.K.								
			1960-62					
GRR			1.406	1.347				
NRR			1.336	1.305				
TFR			2.731	2.777				
Generation			30.314	27.253				
Sex ratio			106.101	106.101				
Source: Keyfitz and Flieger, 1968.								

So far the alternatives offered specially by feminism theorists, are not convincing, but there is much to be learnt from their useful criticisms, particularly

from the way they have unveiled the limitations of androcentric approaches and the policy and social implications of women's neglect. However, most of the feminist theory shows very little potential to provide a way out from the one-sex orientation. On the one hand, many feminist theorists are too naive to even contemplate the possibility that something like the two-sex models born in formal demography can throw some light on a more systematic and comprehensive gender theory. On the other hand, the fact that even those scholars who have been explicitly concerned with methodological aspects of feminism (see, for instance, Harding, 1987) are completely unaware of the conceptual and methodological importance of the two-sex models in demography is intellectually afflictive. Even Watkins (1993: 570), who in her recent paper claims to follow Scott's definition of gender, reduced the significance of the two-sex modelling to a mathematical difficulty, an acknowledgment made in one footnote, saying: 'For attempts in *Demography* to solve the difficult mathematical problems inherent in modelling a two-sex population, see Keyfitz (1964); Pollak (1986); Schoen (1981)'.

It needs to be noted, however, that away from the explicitly mathematical demography (i.e. Pollak, 1990) the attempts to reconcile the male and female reproductive behaviours in empirical work are not totally absent. Over the past two decades some scholars have addressed issues on changing relationships between the sexes. To mention just some studies relevant for the Asia-Pacific region the following papers provide a good precedent for further work: Beckman, 1984; Coombs and Chang, 1981; Coombs and Fernandez, 1978; Clifford et al., 1987; Mitchell, 1972; Mott and Mott, 1985; Malhotra, 1991; Nyblade and Menken, 1993; Thomson et al., 1990; Yang, 1993).

In short, it is my conviction that recent theoretical, mathematical and empirical works are converging towards what may soon become a unified gender-generational demographic theory. This conviction is supported by the perception that some of the most recent developments in population and family studies share a common feature: they place the complementarity rather than the separation of the sexes at the centre of their analyses. Such developments can be traced to three main sources, which though rooted in a more remote past have generally blossomed in the second half of the

twentieth century: (1) the general-system theory developed in association with several fields; (2) the behavioural analysis derived from the emerging theory of gender, as well as some sketched ideas on intergenerational relations between parents and children; and (3) the 'two-sex models' emerging in formal demography aiming to overcome the 'one-sex problems' of classical stable population theory.

The past two or three decades of research on families, including that focused on the Asia Pacific Region, has demonstrated that the diversity of family structures and forms of organization may not necessarily be an obstacle to development. Moreover, in understanding the 'postmodern family' in Western countries the best researchers have now come to where the contemporary family is heading is 'the unknown' (Shorter, 1977: 269). Whether the emerging gender-generational approach briefly sketched in this paper will in the next future contribute to grasp the future of the families remains to be seen. But as part of that objective there is still much that needs to be said on the past and the present of the existing families.

References

- Altman, J.C. and K.H.W. Gaminiratne. (1992). 'Establishing trends in ATSIC regional council populations using census data: a cautionary note'. *Discussion Paper N° 20/1992*. Centre for Aboriginal Economic Policy Research. Canberra: Australian National University.
- Becker, Gary S. and Nigel Tomes (1979). 'An equilibrium theory of the distribution of income and intergenerational mobility'. *Journal of Political Economy*, Vol. 87 (6): 1153-1187.
- Becker, Gary S. (1960). 'An economic analysis of fecundity', in *Demographic and Economic Change in Development Countries*, ed. National Bureau of Economic Research. Princeton: Princeton University Press, pp. 209-217.
- Becker, Gary S. (1965). 'A theory of the allocation of time'. *Economic Journal* 75, pp. 493-517.
- Becker, Gary S. (1977). 'An economic analysis of fertility', in *The Evolution of Population Theory*, ed. Johannes Overbeek. London: Greenwood Press, pp. 164-170.
- Bem, Sandra L. (1993). *The Lenses of Gender: Transforming the Debate on Sexual inequality*. New Haven: Yale University Press.
- Berquó, Elza and Peter Xenos (ed.). (1992). *Family Systems and Cultural Change*. Oxford: Clarendon Press.
- Bongaarts, John (1978). 'A framework for analyzing the proximate determinants of fertility'. *Population and Development Review* 4 (1):105-132.
- Bongaarts, John (1982). 'The fertility-inhibiting effects of the intermediate fertility variables'. *Studies in Family Planning* 13:179-189.
- Bongaarts, John (1986). 'The transition in reproductive behavior in the Third World', in *World Population and U.S. Policy: The Choices Ahead*, ed. Jane Menken. New York: W.W. Norton, pp. 105-132.
- Bongaarts, John (1993a). 'The relative contributions of biological and behavioural factors in determining natural fertility: A demographer's perspective", in *Biomedical and Demographic Determinants of Reproduction*, ed. Ronald Gray, Henry Leridon, and Alfred Spira. New York: Oxford University Press. pp. 9-18.
- Bongaarts, John (1993b): 'The supply-demand framework for the determinants of fertility: an alternative implementation'. *Population Studies*, Vol. 47: 437-456.
- Bongaarts, John and Jane Menken (1983). 'The supply of children: A critical essay", in *Determinants of fertility in Developing Countries - volume 1 supply and demand for children*, ed. Bulatao and Lee. New York: Academic Press, pp. 27-60.

- Bongaarts, John (1983). 'The formal demography of families and households: an overview'. *Newsletter* N° 17 (January-April). Liège: IUSSP: 27-42.
- Boulding, Elise (1992). *The Underside of History*. Newbury Park: SADE Publications.
- Bulatao, Rodolfo A. and Ronald D. Lee (ed.) (1983). *Determinants of fertility in Developing Countries - volume 1 supply and demand for children*. New York: Academic Press.
- Bumpass, Larry L. (1990). 'What's happening to the family? Interactions between demographic and institutional change'. *Demography* Vol. 27, N° 4: 483-498.
- Burch, Thomas K. (1979). 'Household and family demography: a bibliographic essay'. *Population Index*, Vol. 45, N° 2 (April): 173-195.
- Cain, Mead, S. R. Khanam, and S. Nahar (1979). 'Class, patriarchy, and women's work in Bangladesh'. *Population and Development Review*, Vol. 5, N° 3: 405-438.
- Cain, Mead (1981). 'Risk and insurance: perspectives on fertility and agrarian change India and Bangladesh'. *Population Development Review*, Vol. 7, N° 3: 435-474.
- Cain, Mead (1982). 'Perspectives on family and fertility in developing countries'. *Population Studies*, Vol. 36, N° 2: 159-175.
- Cain, Mead (1983). 'Fertility as an adjustment to risk'. *Population and Development Review*, Vol. 9, N° 3: 688-702.
- Cain, Mead. (1988). 'The material consequences of reproductive failure in rural South Asia', in *A Home Divided: Women and Income in the Third World*, ed. Daisy Dwyer and Judith Bruce. Stanford: Stanford University Press, pp. 20-38.
- Cain, Mead. (1993). 'Patriarchal structure and demographic change', in *Women's Position and Demographic Change*, ed. Nora Federici, Karen O. Mason and SØlvi Sogner. Oxford: Clarendon Press, pp. 43-60.
- Caldwell, John (1976). 'Towards a restatement of demographic transition theory'. *Population and Development Review*, Vol. 2: 321-366.
- Caldwell, John (1982). *Theory of Fertility Decline*. London: Academic Press.
- Caldwell, John (1983). 'Direct economic costs and benefits of children', in *Determinants of fertility in Developing Countries - volume 1 supply and demand for children*, ed. Rodolfo A. Bulatao and Ronald D. Lee. New York: Academic Press.
- Caldwell, John C. and Pat Caldwell (1992). 'Family Systems: Their Viability and Vulnerability', in *Family Systems and Cultural Change*, ed. Elza Berquó and Peter Xenos. Oxford: Clarendon Press.
- Chant, Sylvia, and Sarah A. Radcliffe (1992). 'Migration and development: the importance of gender', in *Gender and Migration in Developing Countries*, ed. Sylvia Chant. London: Belhaven Press. pp. 1-29.

- Clifford, William B., Jeffrey L. Lake, and Yevonne S. Brannon (1987). 'Spousal agreement on the value of children and fertility behavior'. *Population and Environment*, Vol. 9, N° 3 (Fall): 148-159.
- Coombs, Lolagene C. and Ming-Cheng Chang. (1981). 'Do husbands and wives agree? fertility attitudes and later behavior'. *Population and Environment*, Vol. 4, N° 2 (Summer): 109-127.
- Coombs, Lolagene C. and Dorothy Fernandez. (1978). 'Husband-wife agreement about reproductive goals'. *Demography*, Vol. 15, N° 1: 57-72.
- Datta, S. K., and J. B. Nugent. (1984). 'Are old age security and utility of children in rural India really unimportant?'. *Population Studies*, Vol. 38, N° 4: 507-509.
- Davis, K., and J. Blake (1956). 'Social Structure and Fertility: An analytic framework'. *Economic Development and Cultural Change*, Vol. 4, pp. 211-235.
- Davis, Kingsley. (1963). 'The theory of change and response in modern demographic history'. *Population Index*, Vol. 29: 345-366.
- Dyson, Tim, and Mick Moore (1983). 'On kinship structure, female autonomy, and demographic behavior in India'. *Population and Development Review*, Vol. 9, N°1 (March): 35-60.
- Easterlin, Richard A. (1969). 'Towards a socio-economic theory of fertility: a survey of recent research on economic factors in American fertility', in *Fertility and Family Planning*, ed. J. Behrman et al. Ann Arbor: University of Michigan Press.
- Easterlin, Richard A. (1975). "An Economic Framework of Fertility Analysis". *Studies in Family Planning* 6 (3): 54-63.
- Easterlin, Richard A. (1978). "The Economics and Sociology of Fertility: A Synthesis", in *Historical Studies of Changing Fertility*, ed. Charles Tilly. Princeton, N.J.: Princeton University Press, pp. 57-133.
- Federici, Nora, Karen O. Mason, and Sølvi Sogner (ed.). (1993). *Women's Position and Demographic Change*. International Studies in Demographic. Oxford: Clarendon Press.
- Ferree, Myra. (1990). 'Beyond separate spheres: feminism and family research'. *Journal of Marriage and the Family*, Vol. 52 (November): 866-884.
- Folbre, Nancy (1982). "Exploitation comes home: A critique of the Marxian theory of labour power". *Cambridge Journal of Economics* 6, N° 4: 318-329.
- Folbre, Nancy (1983). "Of patriarchy born: the political economy of fertility decisions". *Feminist Studies* 9, n° 2: 261-284.
- Folbre, Nancy (1984). 'Household production in the Philippines: A non-neoclassical approach'. *Economic Development and Cultural Change* 32, N° 2: 303-330.
- Folbre, Nancy. (1986a). 'CLEANING HOUSE - New Perspectives on Households and Economic Development'. *Journal of Development Economics*, Vol. 22: 5-40.

- Folbre, Nancy (1986b). 'Hearts and Spades: Paradigms of Household Economics'. *World Development*, Vol. 14, N° 2: 245-255.
- Freedman, Roland. (1970). 'The sociology of human fertility', in T. R. Ford and G. F. DeJong (ed.), *Social Demography*. Englewood Cliffs. New York: Prentice-Hall: 44-53.
- Freedman, Ronald. (1993). 'Elza Berquó and Peter Xenos (ed.). (1992). *Family Systems and Cultural Change*.' Book Reviews. *Population and Development Review*, Vol. 19, N°3 (September): 621-623.
- Friedl, Ernestine (1975). *Women and Men: an Anthropologist's view*. New York: Hold, Rinehart and Winston.
- Goode, William J. (1963). *World Revolution and Family Patterns*. New York: Free Press of Glencoe.
- Greenhalgh, Susan (1985). 'Sexual stratification: the other side of "growth with equity" in East Asia'. *Population and Development Review*, Vol. 11, N°2 (June): 265-314.
- Greenhalgh, Susan (1988). 'Intergenerational contracts: Familial roots of sexual stratification in Taiwan', in *A Home Divided: Women and Income in the Third World*, ed. Daisy Dwyer and Judith Bruce. Stanford: Stanford University Press, pp. 39-70.
- Greenhalgh, Susan (1990). 'Towards a political economy of fertility: Anthropological contributions'. *Population and Development Review* 16 (1):85-106.
- Handwerker, W. Penn (ed.). (1986). *Culture and Reproduction: An Anthropological Critique of Demographic Transition Theory*. Boulder: A Westview Special Study.
- Hannan, Michael T. (1982). 'Families, markets, and social structures: an essay on Becker's *A Treatise on the Family*'. *Journal of Economic Literature*, Vol. XX (March): 65-72.
- Hartman, Heidi I. (1981). 'The family as the locus of gender, class, and political struggle: The example of household'. *Signs: Journal of Women in Culture and Society* 6, N° 3:366-394.
- Hartmann, Heidi. (1981). 'The family as the locus of gender, class, and political struggle: the example of household'. *Signs*, Vol. 6, N° 3: 366-394.
- Hobcraft, John. (1985). 'Family-building patterns', in *Reproductive Change In Development Countries: Insights from the World Fertility Survey*, ed. J. Cleland and J. Hobcraft. Oxford: Oxford University Press.
- Höhn, Charlotte (1992). 'The IUSSP programme in family demography', in *Family Systems and Cultural Change*, ed. Elza Berquó and Peter Xenos. Oxford: Clarendon Press: 3-7.
- Homans, George C. (1964). 'Bringing men back in'. *American Sociological Review*, Vol. 29, N° 5 (December): 809-818.
- Karmel, Peter H. (1948). *The Measurement of Reproductivity in Relation to The Conflict Between Male and Female Measures*. Unpublished Ph.D. dissertation. Cambridge.

- Keyfitz, Nathan and Wilhelm Flieger. (1968). *World Population: an analysis of vital data*. Chicago: The University of Chicago.
- Keyfitz, Nathan (1977). *Applied Mathematical Demography*. New York: Wiley.
- Leibenstein, Harvey. (1957). *Economic Backwardness and Economic Growth*. New York: John Wiley.
- Mafeje, Archie. (1991). 'African households and prospects for agricultural revival in Sub-Saharan Africa'. *Working Paper 2/91*. Dakar: Council for the Development of Economic and Social Research in Africa (CODESRIA).
- Malhotra, Anju (1991). 'Gender and changing generational relations: spouse choice in Indonesia'. *Demography*, Vol. 28, N° 4 (November): 549-570.
- Mason, Karen O. and Anju M. Taj (1987). 'Differences Between Women's and Men's Reproductive Goals in Developing Countries'. *Population and Development Review* Vol. 13, N° 4: 611-638.
- Mason, Karen Oppenheim (1992). 'Family Change and Support of the Elderly in Asia: What do we Know?'. *East-West Center Reprints*. Population Series N° 286. Hawaii: East-West Center.
- Mason, Karen O. and Taj M, Taj. (1987). 'Differences between women's and men's reproductive goals in developing countries'. *Population and Development Review* Vol. 13, N° 4 (Dec.): 611-638.
- McCrate, Elaine (1987). 'Trade, Merger and Employment: Economic Theory on Marriage'. *Review of Radical Political Economics*, Vol. 19, N° 1: 73-89.
- McDonald, Peter. (1992). 'Convergence or compromise in historical family change?', in *Family Systems and Cultural Change*, ed. Elza Berquó and Peter Xenos. Oxford: Clarendon Press.
- McKinnon, Alison (1994). 'The Institutions of gender/the gender of institutions? Feminist theory and the reshaping project'. *Workshop at the ANU*. Canberra: Australian National University.
- McNicoll, Geoffrey (1980). 'Institutional determinants of fertility change'. *Population and Development Review*, Vol. 6, N° 3:441-462.
- McNicoll, Geoffrey (1990). 'Are Australian Families Like Others?'. *Working Papers in Demography*, N° 17. Research School of Social Sciences. Canberra: The Australian National University.
- Mead, Margaret (1967). *Male and Female*. (First published 1950). Harmondsworth: Penguin Books.
- Mitchell, Robert E. (1972). 'Husband-wife relations and family planning practices in urban Hong Kong'. *Journal of Marriage and the Family*, Vol. 34 (February): 139-152.
- Mott, Frank L. and Susan H. Mott. (1985). 'Household fertility decisions in West Africa: a comparison of male and female survey results'. *Studies in Family Planning*, Vol. 16, N° 2 (March/April): 88-98.
- Nelson, Julie A. (1993). 'Value-free or valueless? Notes on the pursuit of detachment in economics'. *History of Political Economy* Vol. 25, N° 1 (Spring): 121-145.

- Notestein, F. (1953). 'Economic Problems of Population Change', in *Proceedings of the Eight International Conference of Agricultural Economists*. Oxford: Oxford University Press.
- Nugent, Jeffrey B. (1985). 'The old-age security motive of fertility'. *Population and Development Review*, Vol. 11, N° 1: 75-79.
- Nyblade, Laura and Jane Menken (1993). 'Husband-wife communication: mediating the relationship of household structure and polygyny to contraceptive knowledge, attitudes, and use'. In *International Union for the Scientific Study of Population International Population Conference*, Montreal, Vol. 1: 109-120.
- Parsons, T., and R. Bales. (1955). *The Family: Socialization and Interaction Process*. New York: Free Press of Glencor.
- Pollak, Robert A. (1990). 'Two-sex demographic models'. *Journal of Political Economy*, Vol. 98, N° 2: 399-420.
- Rathgether, Eva (1990). 'WID, WAD, GAD: trends in research and practice', in *Proceedings of the Twenty-Third Annual Conference*. Toronto: APLIC International, pp. 15-27.
- Robertson, A. F. (1991). *Beyond the Family: The Social Organization of Human Reproduction*. Berkeley: University of California Press.
- Ryder, Norman B. (1974). 'The family in developed countries'. *Scientific American*, Vol. 231: 122-132.
- Ryder, Norman B. (1980). 'Components of temporal variations in American fertility', in *Demographic Patterns in Development Societies*, ed. R. W. Hiorns. London: Taylor and Francis: 15-54.
- Ryder, Norman B. (1992). 'The centrality of time in the study of the family', in *Family Systems and Cultural Change*, ed. Elza Berquó and Peter Xenos. Oxford: Clarendon Press.
- Sanchez, Laura. (1988). 'Gender and the value of children', in *Conference on Women's Position and Demographic Change in the Course of Development*. Oslo: IUSSP.
- Sandom, Basil. (1978). 'Sex, age and social control in Mobs of Darwin Hinterland', in *Sex and Age as Principles of Social Differentiation*, ed. J. S. La Fontaine. London: Academic Press.
- Shorter, Edward. (1977). *The Making of the Modern Family*. New York: Basic Books, Inc.
- Strathern, Marilyn. (1987). 'Producing difference: connections and disconnections in two New Guinea Highland kinship systems', in *Gender and Kinship: Essays Toward a Unified Analysis*. ed. Jane F. Collier and Sylvia J. Yanagisako. Stanford: Stanford University Press.
- Thompson, Linda (1993). 'Conceptualizing gender in marriage: the case of marital care'. *Journal of Marriage and the Family*, Vol. 55 (August): 557-569.

- Thomson, Elizabeth, Elaine McDonald, and Larry L. Bumpass (1990). 'Fertility desires and fertility: hers, his, and theirs'. *Demography*, Vol. 27, N° 4 (November): 579-588.
- UNDP (1993). *Human Development Report 1993*. United Nations Development Programme (UNDP). New York: Oxford University Press.
- United Nations (UN). (1989). *1987 Demographic Yearbook*. 39th Issue, Special; Topic: Household and Family Statistics. New York: United Nations.
- Watkins, Susan Cotts (1993). 'If all we knew about women was what we read in *Demography*, what would we know?'. *Demography*, Vol. 3, N° 4 (November): 551-577.
- Wilson, H.T. (1989). *Sex and Gender: Making Cultural Sense of Civilization*. Leiden: E.J. Brill.
- Wolf, Naomi (1993). *Fire with Fire: The New Female Power and How it Will Change the 21st Century*. New York: Random House.
- Wunsch, Guillaume J. (1984). 'Theories, models, and knowledge the logic of demographic discovery'. *Genus*, Vol. 40, N° 1-2: 1-16.
- Yang, Philip Q. (1993). 'The differential effects of husbands' and wives' statuses on marital fertility'. *Population and Environment*, Vol. 15, N°1 (September): 43-58.
- Young, Christabel M. (1977). *The Family Life Cycle*. Department of Demography, Institute of Advanced Studies. Canberra: Australian National University.
- Young, Christabel M. (1980). 'The family life cycle approach in demography', in *Beginning Population Studies*, ed. David Lucas et al., pp. 156-72. Development Studies Centre, Demographic Teaching Notes. Canberra: Australian National University.