



Max-Planck-Institut für demografische Forschung
Max Planck Institute for Demographic Research
Konrad-Zuse-Strasse 1 · D-18057 Rostock · GERMANY
Tel +49 (0) 3 81 20 81 - 0; Fax +49 (0) 3 81 20 81 - 202;
<http://www.demogr.mpg.de>

MPIDR WORKING PAPER WP 2007-031
AUGUST 2007

An introduction to Anthropological Demography

Laura Bernardi (bernardi@demogr.mpg.de)

© Copyright is held by the authors.

Working papers of the Max Planck Institute for Demographic Research receive only limited review. Views or opinions expressed in working papers are attributable to the authors and do not necessarily reflect those of the Institute.

An introduction to Anthropological Demography

Laura Bernardi

Keywords: culture, agency, institutions, mixed methods, qualitative methods, fieldwork, ethnography, gender, political economy, meanings, institutional demography, social structure, symbols

Abstract

Anthropological demography is a specialty within demography which uses anthropological theory and methods to provide a better understanding of demographic phenomena in current and past populations. Its genesis and ongoing growth lie at the intersection between demography and socio-cultural anthropology and with their efforts to understand population processes, mainly fertility, migration, and mortality. Both disciplines share a common research object, namely human populations, and they focus on mutually complementary aspects of this research object: demography is statistically oriented and is mainly concerned with the dynamic forces defining population size and structure and their variation across time and space, whereas socio-cultural anthropology is interpretative and focuses on the social organization shaping the production and reproduction of human populations. The main theoretical concepts in anthropological demography are culture, gender, and political economy; its empirical research approach includes a mix of quantitative and qualitative methodologies applied to case studies. Ethnographic fieldwork and participant observation are often central to this approach as is an interpretative reading of secondary data and historical material.

1 Introduction

Anthropological demography is a specialty within demography which uses anthropological theory and methods to provide a better understanding of demographic phenomena in current and past populations. Its genesis and ongoing growth lie at the intersection between demography and socio-cultural anthropology and with their efforts to understand population processes, mainly fertility, migration, and mortality. Both disciplines share a common research object, namely human populations, and they focus on mutually complementary aspects of this research object: demography is statistically oriented and is mainly concerned with the dynamic forces defining population size and structure and their variation across time and space, whereas socio-cultural anthropology is interpretative and focuses on the social organization shaping the production and reproduction of human populations. The main theoretical concepts in anthropological demography are kinship, culture, gender, power, meanings as well as institutions; its

empirical research approach includes a mix of quantitative and qualitative methodologies applied to case studies. Ethnographic fieldwork and participant observation are often central to this approach as is an interpretative reading of secondary data and historical material.

The approach of anthropological demography is increasingly represented in population studies. Its development faces major internal challenges mainly due to the different epistemological and methodological traditions of its two 'constituent' disciplines. Demography is more positivistic and oriented to the quantification of population processes; socio-cultural anthropology is more interpretative and oriented to the qualitative specification of the behavioral and institutional mechanisms defining such processes. The consequence of this is that demographers are often puzzled by aspects of socio-anthropological work such as (i) the subsidiary role that theory testing plays in a substantial part of it, (ii) its critical approach to universal analytical categories such as the concept of age and time, and (iii) the work on non-representative case studies. In turn, anthropologists tend to be skeptical about the fact that the demographers' emphasis on the statistical representativity and on comparable nature of their data is not balanced by a corresponding emphasis on the validity of the data, of the analytical models, and of their interpretation. Despite the challenges inherent in this enterprise, scholars in both disciplines have come together in multidisciplinary research teams to create complex research designs in order to build on mutual strengths and reduce disciplinary limitations, thus launching the field of anthropological demography.

The emergence of anthropological demography has been gradual and its definition as a specialty within demography is still under development. The history of demography and anthropology does provide a few examples of scholars turning to the neighboring discipline, but the birth of anthropological demography can only really be dated back to the last two decades of the twentieth century. Theoretical and empirical papers using anthropological demography have appeared in major demographic and anthropological journals since the 1980s, and the visibility of anthropological demography in the demographic community has been enhanced by the constitution of specific interdisciplinary working groups and international committees. The mission program of the IUSSP Committee of Anthropological Demography, active from 1998 to 2002, consisted precisely of fostering interdisciplinary work in demography and anthropology. While the IUSSP Committee mainly had a focus on non western societies, the Working Group on the Anthropological Demography of Europe in the European Association for Population Studies, active since 2005, aims to produce comparable theoretical and methodological collaboration in the European context. Anthropological Demography sessions have been held since the 1990s in the most important professional meetings dedicated to population issues such as the meetings of the Population Association of America. Specific grants and graduate programs, such as the Andrew Mellon Foundation population program and the Anthropological demography program at Brown University have been established to enable junior scholars to receive appropriate training in both anthropology and demography and international organizations and funding agencies have put a special emphasis on interdisciplinary approaches.

We start this paper by briefly delineating the history of the growing interest of demographers in socio-cultural anthropology and by mentioning the major contributions of anthropological theory and methods to demographic research. We then illustrate some

achievements in anthropological demography to date and conclude with some reflection on the possible future direction of the sub-discipline.

Any text of this kind is inevitably the result of choices about where to set the borders of anthropological demography and make sure that the reader is aware of these choices. First, the following discussion of anthropology refers solely to socio-cultural anthropology (the terms are used interchangeably). There is another area of overlap between demography and anthropology, namely the large field covered by evolutionary anthropology, archeology, and paleodemography: these branches of anthropology are characterized by the use of demographic methods to understand the bio-demographic structure of past or contemporary populations, such as hunters and gatherers or isolated populations. Although there are partial overlaps with anthropological demography, their theoretical concepts of reference are different: evolution, adaptation, kinship, and the relation between population and resources. The interested reader is redirected to the specific literature mentioned in the bibliography and to the chapter on *biological demography* in this volume (Roth 2004, Howell 1986, Hammel and Howell 1987, Schacht 1981). Second, this discussion is written from a demographer's perspective and emphasizes the contributions of anthropological demography to the field of demography; no attempt is made to systematically elaborate on its contribution to (socio-cultural) anthropology.

2 Demography turns to Anthropology

Kertzer and Fricke (1997:1) characterize the relationship between anthropology and demography as “long, tortured, often ambivalent, and sometimes passionate” and recognize that anthropological demography is mainly the result of the opening of the demographic community towards anthropological insights into population processes, while the majority of anthropologists still hesitate about learning and adopting demographic techniques. In the early decades of the twentieth century the situation was quite different, British anthropology made great use of population data, with a main focus on the study of kinship as one of the pillar of the social organization of production and reproduction. Together with extensive fieldwork census-taking in the local population was one of the basic tools for understanding family processes such as household structure, marriage, divorce, and childbearing (see classics, among others Radcliff-Brown 1964, Firth 1968[1936], Fortes 1946). In contrast to this approach, anthropology in the United States put an emphasis on the cultural and ritual manifestations of populations rather than on their social organization; therefore, its development remained immune to demography for many years, with the exception of research in cultural ecology and cultural materialism, which focused on population issues and paid attention to the balance between population and resources (Harris and Ross 1987).

Demography began turning to the wisdom of the anthropological literature in the early 1950s, when a few anthropologists were invited to join the Committee on Population Problems in Non-industrial Societies of the International Union for the Scientific Study of Population. The necessity of addressing the influence that local forms of social organization and culture had on population dynamics became even more evident between the 1960s and 1970s: in this period two major demographic projects showed the methodological and theoretical boundaries within which demography had been contained

until then. One project was the ambitious data collection program of the World Fertility Survey, which aimed at producing comparable population estimates for countries with incomplete data and which highlighted the necessity of contextual information in order to achieve valid data collection and interpretation. The other project developing in the same period was the European Princeton Project, whose declared aim was to test and confirm the demographic transition theory by documenting the empirically changing patterns of marital fertility, infant mortality, urbanization, industrialization, and literacy in historical European populations; this reached the conclusion that cultural factors played an important role in determining the onset and the rhythm of the transition.

The large representative sample surveys of the World Fertility Survey were employed as an alternative to registers and censuses in most African and Asian countries in most of which the coverage and accuracy of these more traditional sources for population estimates were questionable. John Caldwell, an Australian demographer, was the first in his field to lament the limitations in the use and interpretation of such data, echoing to a great extent a common criticism of quantitative data collection in empirical social science. The criticism is that data of this kind only reflects what is included in the questions, and the social reality they seek to represent is distorted if the questions are formulated by a researcher who is not involved in the process of data collection or exposed to the social reality from which the data originate. The concern for standardized information across social and cultural settings can, on the one hand, be said to justify the inflexibility of questionnaire protocols and closed format questions. On the other hand, however, it seriously compromises the validity of the collected answers. Caldwell was himself involved in village studies in West Africa in the late 1970s. This experience and his reading of the anthropological literature about that area led him to abandon what has been regarded as an 'armchair approach' to demographic analysis (a substantial disengagement of the analyst from the field) and to launch what he defined as micro-level demography or an anthropological approach to demography (Caldwell and Hill 1988).

The main aspects of his approach were: importing some of the features of anthropological fieldwork into demography to attain intensive and continuous contact with the population studied; employing a range of flexible research methods; and directly involving researchers in all stages of the research, where possible in a multidisciplinary team. Additionally, echoing parallel calls for small scale studies in demography (Leibenstein 1981), Caldwell's approach implied the use of village studies to gather contextual information and to understand the complexity of the social realities in which demographic behavior is embedded. He felt that only with such information can one correctly interpret the association between variables. Similarly, the presence of the researcher in the field and the daily collaboration with anthropologists within a common project would allow a better evaluation of the validity of the data because of the use of unprompted information on local meanings, on motivation for actions, and on sensitive topics.

In recent years other demographers have employed micro-demographic approaches (Lesthaeghe 1980, Massey 1987), partially inspired by the body of pioneering research generated by Caldwell and his numerous colleagues during those years. An *ad hoc* IUSSP committee on anthropological demography gave further visibility to this approach and contributed to a widening debate on anthropological demography and its foundation.

The main reason for using fieldwork in survey research was to add an explorative open component to data collection in order to ensure valid data and their correct interpretation. In this sense, mainstream demography perceived the contribution of anthropology to demography as a methodological one: the main interest remained explaining quantitative change in population dynamics and did not include the application of anthropological theory to population dynamics. This failure to make use of anthropological theory has subsequently been criticized by anthropologists engaged in population studies (Fricke 1997).

The other source of renewed interest in anthropology among demographers came at nearly the same time from the group working on the European Fertility Project and their effort to empirically prove the transition theory with historical data from Europe. The main aim was to determine the social and economic circumstances that prevailed when the modern decline in fertility began in order to clarify the causal mechanisms of the fertility transition. The teams involved in the project created an original quantitative record of the profound demographic and socio-economic change occurred in European provinces within the XIX and the XX century. Two sets of measures were collected and analysed: indicators of demographic characteristics (primarily marriage and fertility) and indicators of social and economic circumstances. The project showed that the classic formulation of the transition theory was at best an inaccurate depiction of the historical process of demographic change and an incomplete account of the determinants of demographic change. The principal investigators of the project concluded that cultural settings had an influence on fertility decline which was independent of socio economic factors, and they felt that a transition theory which could incorporate culture and ideational change was needed (Cleland and Wilson 1987, Knodel and van de Walle 1986, Watkins 1996).

3 Theoretical challenges: culture and gender as institutions

With a renewed interest in culture as one of the most influential contextual dimensions reflected by demographic behavior, demography started from the 1990s to welcome anthropology as a social science discipline from which it could also borrow societal concepts and theories and not only methodology. However, this could not occur in a completely straightforward way. Major challenges were represented by a) the operationalization of the concepts of culture, gender and institutions; b) the consistency of interpretations of empirical data collected by intensive fieldwork on the one hand, and estimates produced by large representative sample datasets on the other; c) the combination of the holistic approach involved in case study analysis and analyses based on statistical relationships among variables.

3.1 Culture

The role of culture in the analysis of demographic processes is at the center of demographers' renewed interest in anthropological theory. Culturally sound explanations of demographic behavior seemed essential to shed light on the otherwise inexplicable observed variation in demographic behavior. However, the issue of how to define culture and how culture should be taken into account in empirical research are questions which

have yet to yield a definitive answer that meets with unanimous agreement. This debate has been raging for a long time in anthropology and definitions range from a “historically transmitted pattern of meanings embodied in symbols”, a “learnt repertory of thoughts and actions exhibited by members of social groups”, the “application of criteria of right and wrong”, to an “organized system of shared meaning”. In his seminal paper of 1990, Hammel describes how the concept of culture in anthropology has been used alternatively as “an identifier of social groups, a body of autonomous traditions, a set of coherently patterned behaviors, a determiner of human action, an artistic expression of human experience, and a set of symbols negotiated between social actors” (Hammel 1990: 457).

Inspired by Clifford Geertz’s (1973) distinction between models *of* reality and models *for* reality, and addressing the related dialectic between structure and action, Hammel proposes a parallel distinction: “culture *for* the people” versus “culture *by* the people.” In the former sense culture has the function of actually determining people’s actions by providing them with blueprints of how their lives ought to be conducted. Individuals learn the norms existing in their social environment and either internalize them and conform, or rebel against them after they have taken into account the cost opportunities of their conduct. This “culture for the people” is useful in order to justify the inclusion of cultural dimensions into behavioral models providing an explanation as to why people in the same cultural context act the way they do. However, this vision of culture is criticized by mainstream anthropology since it treats individuals as “cultural dopes,” underestimates the role of individual agency¹, and leaves little room to explain cultural change. A “culture by the people” represents the way in which social actors perceive the world and attribute significance and symbolic meaning to social behavior. In this sense culture represents a frame of the possible paths available, while the actual path taken is a matter of individual choice. In this definition of culture individual agency and practices are central. Cultural symbols are susceptible to be transformed and interpreted by individuals for their own purposes in specific circumstances. Since this process of transformation and interpretation takes place in social interaction, in conversation and in practices, individual agency appears to be “socially distributed” (Carter 1995) and to take place in “dialectical relation between persons acting and the setting of their activities”. This vision of culture as an “evaluative conversation” is consistent with the fact that individual subjective attributes like values or attitudes on specific behavior may be ambiguous and even contradictory within a specific cultural context.

According to Fricke: “Culturally sensitive population studies require an assumption that people engage their world in terms of highly various and local systems of meaning, and a willingness to explore existing sources with an eye to relating those meanings to demographic outcomes” (Fricke 1997 : 186). Anthropological demography needs to face three challenges in trying to incorporate culture in demographic studies.

First, it needs to ensure that standard demographic variables such as education or age at marriage are informed by the cultural meaning that this variable assumes in the specific context. For example Johnson-Hanks finds that education is related to higher age at first birth among Beti women in Cameroon mainly because formal schooling is closely connected with a higher motivation to have a good reputation and behave according to a

¹ Agency can be defined as the capacity of human beings to affect their own life chances and those of others and to play a role in the formation of the social realities in which they participate.

local concept of respectability. Schooling functions as a socialization factor that reinforces the characteristics of an honorable conduct through specific practices, one of which is self-domination. This explains why education is also consistent with the widespread use of natural non-western contraception in this context (Johnson-Hanks 2006).

Second, anthropological demographers need to be attentive to the symbolic systems of reference in the population they study and thus open to the necessity to modify standard variables or introduce new contextual variables into behavioral models. The fieldwork by Susan Short's team in China indicated a much more refined and valid definition of the characteristics of women's employment than the classic division into waged and unwaged. It was only by accounting for the different level of intensities and degree of compatibility with childrearing in specific non-wage activities that the relation between working time and childrearing time could be appreciated in full (Short et al. 2002) Similarly, in research aiming at counting the homeless people in Paris, the explorative fieldwork phase of the research design needed to account for the multiple definitions of 'home' held by the informants in order to allow the researchers to collect valid data in enumeration (Marpsat 1999).

Third, anthropological demographers need to interpret the complexity of individual motivations that are beyond local patterns of behavior. An example of such complexity was found by Bledsoe and colleagues in rural Gambia. They showed that the use of western contraception there actually is consistent with Gambian women's interest and motivation in bearing as many children as possible, and thus does not directly serve the goal of limiting fertility. The social organization of this community makes having adult children the most important source of wealth and social respect for women. The local idea of reproductive biology identifies childbearing life as *body resource expenditure* (Bledsoe 2002) and reproductive capacity is thought to diminish not with age but with the stress suffered by a woman's body. One of the most stressful events in this sense is considered to be the experience of a mishap (miscarriage, still birth or the early death of the infant). A woman in this society considers resting between pregnancies as the most effective way of restoring her own reproductive capacity (her own "body resources"). This combination of a local social organization and a concept of fertility that depends on physical stress rather than on ageing leads Gambian women whose pregnancy ended in mishaps to use western contraception in order to maximize the survival chances of their next child. In this last example anthropological demography refutes the conceptualization of culture and social organization as separate forces affecting demographic outcomes.

In a manner similar to social history, anthropological demography pays much attention to the intersection of global and local forces and in its resulting agency-structure dynamic. This focus is best represented in the political economy approach to demographic processes, which aims at analyzing the impact of economic forces within their cultural and political context and not in opposition to it (Kertzer 1995, Greenhalgh 1990, Schneider and Schneider 1984).

A good example of such approach is Kertzer and Hogan's study of the differential timing of fertility decline by occupational category in Casalecchio di Reno, Italy. People's behavior at the local level seems to have been clearly influenced by a set of factors ranging from the introduction of compulsory school attendance, the promulgation of child labor laws, and the type of class-specific living arrangements which affected the

economic value of children to parents in a different way for sharecroppers compared to all other social classes (Kertzer and Hogan 1986). Similarly the reconstruction of fertility decline in Sicily by Schneider and Schneider (1984) and that in the Swiss Alps by Netting (1981) are both role models of studies of political economy applied to fertility. They employ oral memories and archival data to define the forces behind the fertility transition; using historical data on vital events they also test how the fertility transition was experienced by the various social groups. In the words of the Schneiders:

“A political economy approach is above all concerned with the power differences that have emerged, and will continue to emerge, in the course of history: differences of age and gender within families and kin units; between the official institutions and their clients, customers or followers; between classes or ethnic groups; and across these lines as a result of interactions. And it is oriented towards embedding any kind of change, population change included, in history as distinct from evolution” (Schneider and Schneider 1996 : 8).

Ideally, approaches inspired by political economy include five key elements: they focus on multilevel analyses; they are historical in perspective; they are practice-oriented; they account for economic, political, and cultural forces; and they use mixed-methods research approaches. A political economy approach challenges the tendency in demography to perpetuate a rather artificial distinction between the effects on behavior of cultural and social organization, as if these represented two independent institutions. For instance claims that religion as a cultural force and industrialization as the main economic force acted separately on fertility transition should account for the political role of the Roman Church in defining what was a legitimate birth and the effect of such a definition on infant mortality. The bottom line is that relationships between cultural and social institutions need to be explored in their local context. This type of approach has the potential to identify the relevant unit of behavioral decisions (whether the individual, the couple, the patrilineal unit, the nuclear family, or other networks) and the level at which the situational framework for decisions is defined (local, regional, national, or global). The challenge for anthropological demography is to move beyond single case studies and promote comparative research designs which would enhance theory testing and the generalization of theories.

3.2 Gender

After ‘culture’, ‘gender’ is the analytical category whose use by demographers has been most widely criticized in anthropology; it also represents one of the prime theoretical challenges in anthropological demography. The conceptualization in anthropological demography of the relationship between gender and demographic behavior has been compellingly summarized by Susan Greenhalgh in her introduction to the essay collection ‘Situating Fertility’. In her words, the way demographers account for gender in reproductive processes is at best “suggesting the emergence of a demography of women” that considers a narrow range of women’s characteristics as demographically important and ignores the rethinking of analytical categories related to gender which has been achieved in anthropology, sociology, and social history.

By focusing on indicators of “women’s role”, “women’s status,” and “female autonomy” rather than on the contextual dimension of gender, a large part of the demographic literature has considered gender as an individual attribute rather than an institution. In comparison, the conceptual redefinition of gender as a social institution means recognizing it as a structuring principle of social life and of power distribution. As such it affects reproduction as well as other life domains and it entails the study of both men and women and the consideration of both the socio-economic and the ideological dimensions of gender. Anthropological studies looking at socio-economic inequalities have shown that the growing equality between men and women in this domain does not necessarily correspond to a growing empowerment of women. Gender appears to be a multidimensional concept whose change is not necessarily unidirectional. The conceptualization of gender as a macro variable (i.e. a societal structuring principle) makes anthropological demography very close to the institutional demography delineated in its clearest formulation by Geoffrey McNicoll (1980).

Institutional demography also stresses the importance of looking at local institutions to explain demographic behavior. One way to do that is to look at formal and informal social institutions as a framework for individual decision-making at any given point in time. In this sense institutions constitute the background context for demographic behavior. For instance, to return to the relationship between gender and fertility, an institutional approach would be to look at the way in which gender concepts structure relationships between men and women in the market, in the legal arena, and in the private sphere of the family. Peter McDonald (2000), a demographer, uses this approach, tests it on a macro level, and concludes that in contexts where gender equality is guaranteed in the public sphere but not in the sphere of private relations, fertility is likely to be lower than in other contexts where gender relations are consistently equal or unequal. A second way to consider institutions is to take a transactional approach to institutional change and to look at how local institutions as an environment change as a consequence of historical patterns or of changes at a higher institutional level (national or global). Because of its focus on case studies and their historical development, institutional demography is one of the more solid bridges between demography and anthropology, particularly the area of anthropology which follows a political economy approach.

As Susan Greenhalgh (1990) puts it, these are complementary ways to look at the same issue and the difference between the two is only in their point of departure. Institutional demographers would start from individual decision making and go up to define local context and how this is modified by global forces. By contrast, “a political economy demographer is more likely to work from the top down beginning with an understanding of the historically developed global forces – the world market, the international state system, and so on – that shape local demographic regimes, next identifying the ways in which these impinge on regional, national, and local environments, and finally tracing their effects on individual fertility behavior” (Greenhalgh 1990: 87). In other words, while institutional demographers insert institutions as the context defining opportunity structures for decision-makers who have their own values and goals, political economy anthropology sees them as a context that defines values and goals through the definition of power and moral structures.

4 Methodological challenges: combining fieldwork and statistical approaches

Empirical research in anthropological demography is generally carried out through qualitative and quantitative approaches either used separately or merged in a coherent and complex research design. The combination of these two methodologies is not straightforward.

A minimalist approach to anthropological demography is to employ anthropological methods to produce better data and to use them to better model the forces shaping population dynamics. In a multidisciplinary fashion, anthropological methods are 'only' asked to contribute to the improvement in the validity of measurements and to the interpretation of results by providing local context and clarifying the local ideational and cultural dimensions (meanings and values). The open approach of these methodologies is, for instance, a good way to explore the different definitions of apparently similar terms and get around one of the biggest problems encountered in cross-cultural comparison. Apparently straightforward terms indicating such concepts as kin relationships, living arrangements, union status, or migration may have very different behavioral consequences because they have very different meanings. In her study of intra-household fostering strategies in Sierra Leone, Bledsoe (1990) shows the way in which intra-generational obligations among kin are not rigidly regulated and univocal, but rather spread across a network of ties which is in constant flux. Future support from biological children cannot automatically be assumed by parents: it has to be negotiated. The very nature of anthropological fieldwork, in which the researcher is engaged with the empirical context under examination and can observe people's behavior directly, makes it a very powerful methodological strategy to gain a critical reading of reported behavior and to spot potential systematic biases which undermine data quality. Anthropological demographers place particular emphasis on fieldwork methods which represent the basis of ethnography; however when researchers aim at historical depth, fieldwork needs to be complemented by the use of archives, registers, and other documentation, such as that provided by oral history. This latter approach in anthropological demography translates into careful interpretation of historical statistical data; it parallels the work of social history, and complements work in historical demography (Hammel 1995, Kertzer 1987).

In order to achieve the necessary contextual depth and to carry out a sound qualitative investigation anthropological demographers opt for case studies. The non-representative nature of relatively small samples based on case studies still generates skepticism about how reliably the results can be generalized to the whole population. Therefore the usefulness of their results is still the subject of discussion among some demographers. Nonetheless, it is often the case that such discussions simply shoot at the wrong target, since they fail to acknowledge that the aim and the unique contribution of case studies is less that of providing a quantification of the phenomenon under study than that of clarifying the mechanisms involved in generating it and to clarify their complex interconnections.

Within anthropology there is dissatisfaction towards this minimalist approach, in which anthropological wisdom is perceived to service as a handmaiden to statistical demography. Some voices have refused the simplistic identification of anthropology with qualitative methods and argued for a strong methodological position, which has been

labeled “critically interpretative demography” or “demography without numbers” (Sheper-Hughes 1997: 203). Anthropologists holding these views argue for the deconstruction of objective analytical demographic categories and methods in favor of the understanding of local social practices. Sheper-Hughes’s (1992) own research on infant mortality in a *favela* of a middle-sized town in Brazil started with a standard examination of the death registration of children under five. She found that one third of such children were missing from the official records; further, the existing death records were often rather uninformative as far as the child’s cause of death is concerned. Rather than limiting herself to noting the biases that a poor quality of data recording could imply for estimating infant mortality correctly, she engaged in participant observation and open interviewing. Through such intensive fieldwork, she came to realize that women (and other adults) provided maternal care to their newborns only very gradually, in the belief that a number of children are not meant to survive and are destined to become “angels” shortly after birth. Given the high infant mortality in the area, this practice can be interpreted as a way to protect mothers from an early attachment to a child in a context where the probability of child loss is high.

Such “praxis-oriented, critically applied, politically engaged anthropology”, (Sheper-Hughes 1997: 219) which is able to witness and explain the social nature of population processes hidden to official data, needs to be reconciled with demography’s orientation to cross-cultural comparison, generalizations, and theory testing.

The difficulties arising from combining qualitative and quantitative methods lead to the question as to whether it is preferable to work in multidisciplinary teams of fully trained demographers and anthropologists, or alternatively to invest in interdisciplinary training programs to form a fully rounded anthropological demographer. The first option offers the comparative advantage of specialization but risks creating barriers of communication between researchers. The second option, while remedying this latter problem by an exposure to both disciplines in the students’ formative years, may underestimate the amount of investment needed to form a good demographer and a good anthropologist.

5 Empirical research in anthropological demography

The preceding sections of this chapter have explored the theoretical and methodological issues at stake in anthropological demography; now, its contribution to population studies will be illustrated using a few selected examples of the diversity of the type of research it covers. The three selected examples are taken from different places and times, and were carried out by scholars from different disciplinary backgrounds. They also deal with different aspects of demographic investigations, namely fertility, migration, and mortality. However, they have three qualities in common, and it is for these that they have been chosen: they clearly illustrate the contribution of anthropological theory and method to the understanding of population dynamics; they contribute significantly to the interpretation of the specific demographic patterns they address; and they were published relatively recently.

5.1 Fertility

In his research on the meaning of fatherhood and fathers' involvement with children in a village in Botswana, Nicholas Townsend (2002) investigates the cultural models used to evaluate men's behavior in their role as fathers by the fathers themselves, by other men and by members of their kin and peer groups. His interest was raised by the apparent invisibility of the men's role in official data, which reported a very high percentage of out-of-wedlock births, a high percentage of women-headed households, and about 70% of men aged 20-40 living away from their village as a consequence of labor out-migration. He used interviews to reconstruct the social and economic relationships of a group of men during their life course and observed these relationships during his 11-month fieldwork.

The analyses of life histories and of fieldwork data yielded elements that were hard to see from the official data alone; this in turn enabled the researchers to draw conclusions about the dominant values surrounding fatherhood and parenting in this context and to interpret the place of male fertility in the reproduction of this population. Much of the explanation can be attributed to the marriage system and the concept of parental responsibilities in the village.

First, in this context the connection between marriage and biological fatherhood is weak. The attribution of fatherhood follows social and not biological principles: on the one hand the payment of bride wealth allows a man to attribute to himself all the children born from his wife; on the other hand there is no legal obligation for a man to provide for his biological offspring apart from a one-off compensatory payment to the parents of a woman who claims to have been made pregnant by him. Consequently, few men, and no unmarried ones, declare themselves to be fathers; this occurs in spite of the fact that most of those who do not declare themselves as fathers are known to have had biological children

Second, the fertility of men is linked across generations and siblinghood. Activities and exchanges that would elsewhere be considered typical for paternal involvement are often performed by grandfathers and mother's brothers with children who are neither biologically nor socially their own offspring. To give just a few examples: Townsend reports that he has never met any first-born children who were not born in their maternal grandparents' house. He also observes that for most children, the first peer relationships are with their own siblings and those children born to their mothers' sisters. Grandfathers provide for their grandchildren until their daughter, the children's mother, is married to a man who can pay bride wealth. In such a context men only become head of their own household in the later part of their life and at that point their household contains a number of children with whom they have different biological and social relations. A man might never co-reside with or provide for his own first child, whereas he might spend many years in close contact with his youngest one. Similarly, mothers' brothers are also very much involved with their sisters' offspring. For instance, on the occasion of marriage arrangements, maternal uncles have the right and the duty to contribute to the negotiations about the bride wealth. Such a social practice makes the attractiveness of a young man on the marriage market dependent on the characteristics of his household and kin. For instance, the union status of his sisters and the social status of their partners affect his capacity to pay a bride wealth, as do the resources of his brothers and father.

In this context, childbearing and fatherhood are relationships that stretch over more than one generation and the various aspects of parenting, such as co-residence, economic support, and emotional closeness are distributed among different people in different periods of the life course. As Townsend puts it “male fertility, in the narrowest biological sense, may continue to the end of a life time. More significantly, the varying relationships men have with members of subsequent generations influence their own reproduction, the reproduction of their sons and daughters and the life chances of their grandchildren” (T. 2000: 361).

In a subsequent paper, Townsend (2002) compares data from the Botswana case study with those from an urban setting in Northern California (US), where the set of expectations of parenthood and fatherhood are concentrated on one single parental relationship. The key message in this study is that the most relevant aspect of the way in which fathers are involved in parenting is the way in which their involvement is perceived by children. Such perception is mediated by cultural norms of appropriate parenting and fathering and “whether the children think they got what they had the right to expect” (idem 2002: 254). In order to hypothesize about how the involvement of the father has consequences for male fertility, it is necessary to understand the cultural model of fatherhood and the practices associated with it. In the US it may be the case that the fathers’ time and emotional contacts with their children are important elements in explaining children’s development and achievements in adult life. However, this is not necessarily so in a culture in which fatherhood is associated with remarkably different expectations.

5.2 Mortality

The example for the area of mortality concerns child mortality due to measles, which is one of the most common causes of child mortality in developing countries. Peter Aaby, an epidemiologist, has investigated the reasons for differential mortality by measles among male and female children; the latter appear to suffer a disadvantage. His focus is on the interaction between behavioral patterns and disease transmission and the research is fully in the spirit of anthropological demography since it addresses a typical demographic question (differential childhood mortality by sex and age) and provides an interpretation which draws on both epidemiological mechanisms and culture and gender theory (Aaby 1998).

Gender differences in childhood mortality due to infectious diseases are commonly observed in developing countries and the difference is favorable to males. However, such patterns are at odds with beliefs that females have a biological advantage because their hormonal and genetic make-up would provide them with a stronger immune system in comparison to male children. The usual interpretation of such unexpected patterns is that survival chances are linked to differential treatment of ill male and female children rather than to their biological characteristics. The argument is as follows: in contexts where there is a sex preference for males and where resources are scarce, as is the case in many developing countries, gender differential treatment (essentially feeding and care) in favor of male children would account for the higher mortality of girls. Following a rational choice theoretical framework this conclusion would be sufficient to explain the observed

patterns and demographers could consider the issue closed and suggest policy measures to address sex preferences at the household and at the society level.

Aaby questions the validity of single explanations for this gender difference. On the one hand, he argues, the explanation that nature predestines girls to a better immune response would not be sufficient to consistently account for the various patterns of measles mortality by age and sex observed in historical and contemporary populations. He presents historical data to show that girls register higher mortality by measles starting from very different ages in different social contexts, which suggests that age and sex differentials are heavily dependant on social gender-related characteristics. Aaby argues that the explanation based on sex preference biases, by attributing the cause of these social effects solely to parents' conscious preferential treatment for males, neglects the role of institutions in creating inequalities at the structural level.

Aaby suggests combining these two arguments and considering in addition how genetic, infection mechanisms and social institutions interact in producing differential mortality. His explanation consists of two main parts: one relating to the way measles is transmitted, and the second to the way sexes may be affected differently due to differential exposure to the illness. The first part of the argument is based on two facts concerning the mechanisms of transmission of measles taken from epidemiological literature. Firstly, measles (like other infectious diseases) is more likely to be transmitted by close contacts and it is more likely to be fatal if contracted from a person in the same household than if contracted elsewhere. Secondly, although younger children are less resistant than older children, for a given age and level of immune response, severity is related to exposure intensity. The second part of Aaby's argument, concerning the differential exposure of girls and boys, brings together secondary anthropological literature and his own fieldwork experiences. He hypothesizes that the observed sex difference may be related to girls being at home more often than boys and having more close contacts with other people. Furthermore, it is the girls who take care of younger siblings when they are ill, who are often kept away from school to attend to household chores, and who are therefore also exposed to infection at older ages than their male age-mates.

If there is a role for conscious differential treatments of children by parents, one should also take into account differential mortality due to social institutions regulating differential exposure to transmission occasions. "The institutional framework as well as cultural beliefs have major effects on mortality differentials through the way they construct gender differences in behavior, which in turn affect disease transmission, for example by confining girls at home and sending boys to school" (Aaby 1998 :224-225).

5.3 Migration

The late 'discovery' of migration by anthropology in the 1960s has been characterized by an initial emphasis on rural-urban migration, on the exponential population growth of urban centers in developing countries, and on the related transformation of societies from rural agrarian to urban industrial ones. Only thirty years later, in the 1990s, the attention had strongly shifted to international migration, and major studies in the area focused on sending communities, on migrants' life in the new environment, and that of their children (second generations). The theoretical aspects

concentrated on issues of *transnationalism* as an alternative model of thinking about migration to the older models of assimilation and integration, and *ethnic identity* as an issue that was becoming more and more important because of the growing migrant population in urban contexts. Other themes recurrently addressed in the literature are the role of power and gender in the *migration decision process* and the meaning of *forced migration* and its disruptive force on demographic processes. While most reviews of anthropological work on migration treat papers dealing with migration from Asia, Africa or South America to richer regions, a good example of anthropological demography in the European context is the research by Brettell on Portuguese migration to France (Brettell 2003). Individuals, households, and states all play a role in defining migratory phenomena so that migration can be studied at the micro, at the meso, or at the macro level, depending on the chosen unit of analysis. In order to gain a full picture of Portuguese migration, Brettell opts for a focus on the interrelations between these three levels and on the dynamic between structure and agency. She addresses the issue of migration - why people move, who moves and what are the consequences of such a move - from a multilevel and historical perspective. Her research is based on archival data, statistical data, narrative interviews, and anthropological fieldwork in Portugal as well as among the communities of Portuguese migrants in France, USA, and Canada.

First, from a macro-level perspective, Brettell is concerned with how population outflows were seen and controlled by the Portuguese state and the individual strategies to avoid such control. Her conclusion is that from the 1960s, out-migration became a convenient and efficient solution for the State to fight the high unemployment levels afflicting northern Portugal. By leaving the country, migrants were taking responsibility for their own economic success or failure and their efforts to sustain their families, while remittances also represented a source of wealth for the State. Second, by listening to people's accounts of their motivation to migrate and their life experience with migration, she collects detailed information at the micro level regarding individual migration decision-making processes. This information is then contextualized and interpreted in the light of the statistical data on the migratory history of the community in which the individual stories are embedded. Third, considering individuals as members of social networks (households, families, or communities) she pays attention to the group strategies and to the interdependency of decisions in a social group: "be it a nuclear family where men migrate while women tend to the fields, an extended family that sends some unmarried children into migration with or without a parent, or a village where families measure themselves against one another such that relative deprivation itself becomes a stimulus for departure" (p. 6).

Inspired by the concept of a "culture of migration" (Massey 1993), she elaborates on the effect of cumulative migration experiences in a population in which generation after generation has seen a substantial part of its youth leaving the country. On the one hand, from a sociological perspective, she analyses the networks of relationships among migrants in the country of destination. The social capital constituted by the existing community is an asset for new and potential migrants. On the other hand, Brettell deduces from her interviews that migrating in such a high-migration context is seen as an expected life course transition; it is expected in the same way as education or employment. With this characteristic of inevitability, it becomes a marker of both individual and group identity ("being Portuguese was to emigrate or to have someone in

one's family who was an emigrant" p. 4). A culture of migration in this sense implies symbolic identification.

Brettell puts the migration experiences of the Portuguese population into historical perspective and analyses both the historical trends of Portuguese immigration in the countries of destination and the consequences of a gender-biased out-migration flow in Portugal. In particular she is interested in the consequences of out-migration for household structure, living arrangements, and the economic activity of the women left behind as singles, married, and widows (either in the literal sense or as a virtual widow of the still living but absent husband). Her case study in the parish of Santa Eulalia de Lanheses in Northwestern Portugal allows her to reconstruct the necessary information for the period between 1850 and 1920. One of the most remarkable findings is that many of those households which appeared to be independent were geographically clustered along a female kinship line; in fact, they constituted a sort of extended household formed as a consequence of intense male out-migration.

6 Future perspectives

Anthropological demography is a growing research field which has brought together specialists from two disciplines who are studying the same topics. Its definition is being developed year after year across disciplinary borders by an active research community and the conceptual and analytical progress has followed the breadth of empirical research in these years. The present chapter has concentrated on the key elements of the theoretical and methodological basis and challenges of anthropological demography which are faced by its practitioners to date.

What can be expected and hoped for in the near future? First, it is desirable that anthropological demographers devote more empirical research to understanding aspects related to population phenomena in modern industrial contexts, where they already play a certain role in the areas of migration and historical demography. The demographic consequences of the culture of reproduction, union, ageing, and health of these populations are virtually unexplored by anthropological demographers. However, it is easy to envisage the interest of using anthropological demography approaches to investigate the symbolic values of new reproductive technologies or to define a political economy of ageing.

Second, the dialogue between anthropology and demography could be extended to some branches which remain at the margin of population studies. One example is cognitive anthropology (D'Andrade 1997[1992]), which could provide a systematic study of the way in which people construct cultural schema of gender roles, parenthood, care, illnesses, identity and so forth. The political economy approach has not yet fully carried out the renewal of institutional demography. In the latter, contextual level explanations are still dominated by a rigid concept of institutions. Such a concept limits institutional demography to an account of the effects of specific institutional configurations on individual behavior. What is needed is the incorporation of the interaction between individual agency and institutions and the way in which cultural, economic and political institutions are intertwined in an historical perspective.

Third, the very recent opening up of anthropology to more advanced demographic techniques such as event history analyses and to comparative work promises to make the collaboration in multidisciplinary teams smoother and the development of anthropological demography faster than it has been so far. According to David Kertzer, “much anthropological work on such topics as fertility and migration takes place without reference to the demographic literature” (Kertzer 2006:543). Similarly, although anthropological demography is gaining ground as a specialty within demography, thanks to the important contribution it has already made, the demographic community has not yet unanimously accepted it within its boundaries. Some representatives of demography prefer to define the core of their field by its formal methods of analyses, and limit it to the science that studies quantitative changes in population size and structure. With this definition, most research dedicated to the causes and consequences of demographic changes should no longer be considered part of the demographer’s job. However, if demography is thought of as the science that analyzes as well the causes and consequences population processes, which Bozon (2006) calls “comprehensive demography”, then anthropological demography will continue to provide unique insights into the role of culture and of the complexity of global and local institutional forces within such processes.

Acknowledgments

This chapter benefited from early discussions with the members of the Independent Research Group “Culture of Reproduction” at the Max Planck Institute for Demographic Research, from the critical reading of Jan Hoem, Gerda Neyer, and Annett Fleischer as well as from comments by Graziella Caselli. We acknowledge Craig Mullen’s valuable English editing.

Bibliography

- Aaby P. (1998), Are men weaker or do their sisters talk too much? Sex differences in childhood mortality and the construction of biological differences. In: in Basu, A. and P. Aaby (eds.) *The Methods and the Uses of Anthropological Demography*, Oxford, Clarendon Press: 223-245.
- Basu, A. and P. Aaby (1998). Introduction: Approaches to Anthropological Demography, in Basu, A. and P. Aaby (eds.) *The Methods and the Uses of Anthropological Demography*, Oxford, Clarendon Press, 1-21.
- Basu, A. and P. Aaby (1998). *The Methods and the Uses of Anthropological Demography*. 329 pp. Oxford, Clarendon Press
- Bernardi, L. and I. Hutter (eds.) (2007 forthcoming). *The Anthropological Demography of Europe, Demographic Research*
- Bledsoe, C. (2002). *Contingent Lives*, 396 pp. Chicago, the University of Chicago Press.
- Bledsoe, C. (1990). No success without struggle: social mobility and hardship for foster children in Sierra Leone. *Man, New Series*, 25(1), 70-88.
- Bozon, M. (2006). The Contribution of Qualitative Methods to Demography, *Demography. Analysis and synthesis*, Vol 4 (ed. G. Caselli, J. Vallin, G. Wunsch), 731-744
- Brettell C. (2003). *Anthropology and Migration. Essays on Transnationalism, Ethnicity and Identity*, pp. 238, New York, Altamira Press.
- Caldwell, J., P. Caldwell, B. Caldwell, D. Eversley, A. G. Fix, N. Howell; M. Nag, C. Taeuber, and F. van de Walle (1987). Anthropology and Demography: The Mutual Reinforcement of Speculation and Research [and Comments and Reply] *Current Anthropology*, Vol. 28 (1), 25-43. Caldwell, J, A Hill,

- and V. Hull (1988). *Micro-Approaches to Demographic Research*, 500 pp. London, Kegan Paul International
- Carter, A. (1998). Cultural Models and Demographic Behavior. *The Methods and the Uses of Anthropological Demography*, Oxford, Clarendon Press (eds. Basu, A. and P. Aaby), 246-268.
- Cleland, J., & Wilson, C. (1987). Demand Theories of the Fertility Transition: An Iconoclastic View. *Population Studies*, 41(1), 5-30.
- D'Andrade, R.G. (1997[1992]) Schemas and motivation. In: D'Andrade R. and C. Strauss (eds.), *Human Motives and Cultural Models*. Cambridge: Cambridge University Press : 23-44
- Firth, R. (1983, 1936) *We, the Tikopia*, 374 pp., Boston, Beacon.
- Fortes, M. (1943), A note on Fertility among the Tallensi of the Gold Coast, *Sociological Review* 35 :99-113
- Fricke T. (1997) Culture theory and demographic process: Towards a thicker demography, in Kertzer, D. and T. Fricke (eds.) *Anthropological Demography. Towards a New Synthesis*, Chicago, The University of Chicago Press :248-277 .
- Geertz, C. (2000[1973]). *The interpretation of cultures*, 480 pp. New York: Basic Books.
- Greenhalgh, S. (ed.) (1995), *Situating Fertility*, 304 pp., Cambridge, Cambridge University Press
- Hammel, G. (1990). A Theory of Culture for Demography, *Population and Development Review*, Vol 13 (3), 455-485 Hammel G., and N. Howell (1987), Research in population and Culture: an Evolutionary Framework, *Current Anthropology* 28(2), 141-160.
- Howell, N. (1986). Demographic Anthropology. *Annual Review of Anthropology*, 15, 219-246.
- Harris, M. and E. B. Ross (1987), *Death, Sex, and Fertility*, 227 pp. New York, Columbia University Press.
- Johnson-Hanks (2006). *Uncertain Honour. Modern Motherhood in an African Crisis*, 301 pp., Chicago, The University of Chicago Press
- Kertzer and Fricke (1997), *Anthropological Demography. Towards a New Synthesis*, pp. 294. Chicago, The University of Chicago Press
- Kertzer and Fricke (1997). Toward an Anthropological Demography, in Kertzer, D. and T. Fricke (eds.) *Anthropological Demography. Towards a New Synthesis*, Chicago, The University of Chicago Press, 1-35.
- Kertzer, D., & Dennis Hogan. (1989). Family, Political Economy, and Demographic Change. Madison, Wisconsin. MPI 775 290: The University of Wisconsin Press.
- Kertzer D. (2006), "Anthropological demography", In: Dudley Poston and Michael Micklin (eds.), *The Handbook of Population*. New York: Plenum, 17, 525-547.
- Knodel, J., & van de Walle, E. (1979). Lessons from the past: policy implications of historical fertility studies. *Population and Development Review*, 5(2), 217-245.
- Leibenstein, H. (1981). Economic decision theory and human fertility behavior: A speculative essay . *Population and Development Review*, 7(3), 381-400.
- Lesthaeghe, R.J. (1980). On the Social Control of Human Reproduction. *Population and Development Review*, 6(4):527-548.
- Marpsat M., (1999) Les apports réciproques des méthodes quantitatives et qualitatives : le cas particulier des enquêtes sur les personnes sans domicile, pp 10. Paris: INED
- Massey, D.S. (1987). The Ethnosurvey in theory and practice. *International Migration Review*, 21 (4), 1498-1522.
- McDonald, P. (2000). Gender Equity, Social Institutions and the Future of Fertility. *Journal of Population Research*, 17(1), 1-16.
- McNicol (1980). Institutional Determinants of Fertility Change, *Population and Development Review* 6:441-462.
- Netting, (1981) *Balancing on the Alp: Ecological Change and Continuity on a Swiss Mountain Community*, 270 pp. New York: Cambridge University Press.
- Radcliff-Brow A. R. (1964) *The Andaman Islanders*, 510 pp., Glencoe, Free Press
- Roth A. E. (2004). *Culture, Biology, and Anthropological Demography*, pp 217. , Cambridge, Cambridge University Press
- Schneider, J., & Schneider, P. (1984). Demographic transitions in a Sicilian rural town. *Journal of Family History*, fall, 245-272
- Schneider and Schneider (1996) *The festival of the Poor*, 322 pp., Tucson, The University of Arizona Press.

- Scherper-Hughes, N. (1992). *Death without Weeping. The Violence of Everyday Life in Brazil*, 614 pp. Los Angeles, University of California Press
- Schacht, R. (1981). Estimating Past Population Trends. *Annual Review of Anthropology*, 10:119-140.
- Scherper-Hughes (1997). Demography without Numbers, in Kertzer, D. and T. Fricke (eds.) *Anthropological Demography. Towards a New Synthesis*, Chicago, The University of Chicago Press, 201-222.
- Townsend, N. (2002). Cultural Contexts of Father Involvement. In C. S. Tamis-LeMonda & N. Cabrera (eds.), *Handbook of Father Involvement*, Mahwah, Lawrence Erlbaum Associates 249-277
- Townsend, N (2000). Male Fertility as a Lifetime of Relationships: Contextualizing Men's Biological Reproduction in Botswana, in *Fertility and the Male Life Cycle in the Era of Fertility Decline*. In Bledsoe, C. , S. Lerner, and J. Guyer (eds.), Oxford University Press, Oxford: 343:364
- Watkins C., S. (1986). Conclusions: The Decline of Fertility in Europe. In A. J. Coale & S. C. Watkins (Eds.), *The Decline of Fertility in Europe*. Princeton: Princeton University Press