

## INTRODUCTION

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That faith in modern culture was a gloomy one . . . a kind of elastic prison which stretches on without ever setting us free.

—José Ortega y Gasset

In the last forty years, anthropologists have made major contributions to understanding the heterogeneity of reproductive trends and the processes underlying them. Main approaches run sharply counter to conventional modernization and economic development models that continue to hold sway over demographic data systems and their analysis. In this, anthropological demography can simply be said to have taken demographers at their word. As is well known, a host of widely cited studies beginning in the early 1970s have revealed a great diversity of declining reproductive patterns, together with the inability of conventional modernization and socioeconomic measures and models to explain them adequately.<sup>1</sup> Fertility declines, rather than a story of the rise and triumphant spread of Western birth control rationality, in which modern contraceptive technology facilitates the spread of nuclear family values and ‘stopping behaviour’ everywhere, reveal instead a diversity of reproductive means, ends and institutional arrangements continuing before, during and after relatively lower reproductive levels are reached. As demographic transition theory has proven to give too simplified an account to serve as an adequate framework for explaining this diversity, the way is open to explore alternative comparative frameworks grounded in the

evidence of contrasting case studies of populations at local and wider levels of society.

Recent developments have begun to crystallize around two complementary approaches. At a local level, reproductive 'choice' is experienced by persons and couples over their life course in what Johnson-Hanks (2006, 2015) has called 'vital conjunctures'. Events such as pregnancy and birth, alternatives such as abstinence, contraception and abortion, and ever-present concerns and constraints like infecundity, maternal health and age are the object of norms and expectations that reflect a complex intersection of family, kin, community, economic, religious, educational and other pressures. In the junctures that bring some or all of these forces together, women and men negotiate possible futures for themselves and their offspring, and do so in the awareness that these negotiations carry compound implications across their life courses. Observation and analysis of vital conjunctures thus enables consideration both of agency and social structure, and examination of their interrelations in the context of specific events – without supposing that people prioritize the demographic ideal type of parity-specific birth control, or that reproduction in all societies consists of a more or less linear trajectory to replacement level fertility. Similar reproductive trends and levels may be achieved in different ways and with differing motives. Evidently, to understand the realities of personal and collective fertility histories, we need to construct models that do not come down to a single stereotype – a supposed rational 'fertility decision-making' that is, as in the Gunter Grass parody (1982), a binary choice: 'baby/no baby'.

A second development helps us to place actors and conjunctures in relation to wider fertility change. Fertility declines across national and regional populations are commonly pre-empted by certain subgroups, with other subpopulations then following, but in a far from unitary fashion. These differences reflect the varying composition, structure and social position of subpopulations, which open up differing access to social, economic and political hierarchies, and the differing advantages and disadvantages that go with them. We may therefore expect that differences between subpopulations and the relationships that articulate these differences are of crucial importance in understanding the contrasting reproductive patterns observable in such groups. Social and economic inequalities between subpopulations and the relationships that some but not all group members have with those in other groups are, as we shall see, important examples.

Anthropological approaches here join a wider interest in compositional demography that has also become important to social history and theory, network sociology and historical demography (e.g. Garrett et al. 2001; Johnson-Hanks et al. 2011; Kreager 2011; Kohler et al. 2015). While disciplinary vocabularies vary, family dynamics and fertility change in these several approaches are helpfully understood in terms of ‘communication communities’ (Szreter 2015), i.e. subpopulations in which gender, class and other local hierarchies, network relationships and collective identities shape the flow of information and practices. Fertility trends may vary within and between communication communities according to how members are placed and relations between such groups.<sup>2</sup> Individuals’ and families’ negotiations of vital conjunctures are the micro-processes that effect reproductive and other adjustments within such groups and may incorporate other groups’ influence on them.

With time, the accumulative impacts of conjunctural adjustments often come to be seen as important and even typical characteristics distinguishing some constituent groups in a society or state. The practice of highlighting reproductive differences has, of course, a notorious history, from the eugenic claims of colonial states and national socialist parties about dire implications of racial and lower-class fertility to the problems of Puerto Ricans as portrayed in *West Side Story*. Anthropological demography here adjoins a large body of writings on the nature and development of collective identities (e.g. Barth 1969; Anderson 1993). Looking at population change from the bottom up – i.e. beginning from individual and local conjunctures, and their agency in the context of group differences – carries implications on several levels. For example, at the level of relations between subpopulations, it provides some reality against which the often exaggerated discourses that try to stigmatize reproductive behaviour in certain class, ethnic, religious and other groups may be assessed critically (e.g. Cohn 1987; Kertzer and Arel 2002; Szreter et al. 2004; Pauli, this volume; Roche and Hohmann, this volume). As Basu (1997) remarks, there remains a need for some check on the tendency of party and governmental interests to employ fertility trends and theories to the political and economic advantage of some groups over others. And, at higher levels of analysis, taking a bottom-up approach to national population trends enables us to recognize them as the composite outcome of the agency of a number of different constituent groups with different reproductive values and associated behaviour.

In short, subpopulations and their differences are the collective building blocks that together compose demographic change at the national level and may be the locus of political and cultural identities that feed back differentially on the reproduction, mortality and migration of each subpopulation. Fertility trends, rather than standing as a monolithic outcome of externally stimulated 'modernization', reflect a more fundamental internal dynamism of conjunctures and social differentiation that varies across the several subpopulations or communication communities that make up a society or state and that respond differently to external factors.

### **History Confounds Modernity**

As a research strategy addressed to reproduction, the study of conjuncture and difference draws on intellectual movements that began to take shape in the 1970s and 1980s. With the benefit of hindsight, we can say that three related movements in anthropology and related social sciences created the conceptual space in which this strategy, and anthropological demography more generally, became possible: (i) a rethinking of theories of social structure; (ii) a re-alignment with historical scholarship; and (iii) a reassessment of how qualitative and quantitative models and methods may be combined.

First, within the wider field of anthropology, there was considerable dissatisfaction with the rather static portrayal of cultural logics and social structures, whether in classic colonial ethnography or subsequent structuralist analysis. Rather, cultures are in a continual state of creation in which enduring institutions and forms of expression may be renegotiated repeatedly by groups and the actors that compose them (e.g. Bourdieu 1977; Hammel 1990). As the discipline developed from the 1970s, changing reproductive trends and behaviour provided anthropologists with one helpful focus for this critique, for example, by enabling anthropologists to consider how family and community institutions distribute people, power, information and practices, then observing the differing agency this process gives to specific groups, with consequently differing fertility levels and trends (e.g. Bourdieu 1972; Kertzer and Hogan 1989; Das Gupta 1997; Bledsoe and Banja 1999; Tremayne 2001). Over the latter decades of the twentieth century, reproduction further proved to be an important domain in emerging specialisms in anthropology and other disciplines that are also concerned with distributional

issues and inequalities. Gender (Greenhalgh 1995), medical practices (Inhorn and Tremayne 2012), the political economy of development (Schneider and Schneider 1996) and the environment (Hill and Hurtado 1996) are well-known instances. It became common for anthropologists to note that, even when fertility change reflects the use of ostensibly ‘the same’ technologies in different cultures (whether those techniques are directed at reproduction, production or the market), their adoption means very different things to different social groups. ‘Fertility transition’, ‘modernization’ and ‘development’ are not unitary processes.

Second, historical demographers also noted the diversity of fertility declines, together with the inability of generalized modernization and economic development hypotheses to account for it (e.g. Wrigley 1972), making clear the power of historical examples to subvert prevailing assumptions. Of course, international and national institutions founded in the postwar era were predicated on modernization and development models, which in important respects accounts for these models’ continuing prevalence despite their inability to explain heterogeneity (Demeny 1988; Szreter 1993; Greenhalgh 1996). The scientific and scholarly puzzle of why and how fertility variation is sustained nonetheless remains.<sup>3</sup> Historical demography, in opening up archival sources that enabled historians to move beyond histories confined to elite groups, facilitated collaboration with comparative studies of the family, local economy and politics, and created rich new avenues for collaborative research that revealed a diversity of mechanisms underlying European demography (e.g. Bonfield et al. 1986; Engelen and Wolf 2005). Anthropological demography made major contributions here too (e.g. Kertzer 1984; Segalen 1991).

The inadequacy of prevailing notions of modernization and economic development to explain heterogeneity (even in the restricted sense of broad levels or thresholds of development necessary to account consistently for fertility patterns, or ‘explanation’ as reliable, general statistical correlations between demographic and economic trends (e.g. Knodel and van de Walle 1979; Szreter 1993)), naturally led to a second strand of historical rethinking. It was realized that prevailing population concepts and hypotheses in the postwar era relied on an intellectual basis that privileged a narrow strand of nineteenth- and twentieth-century European social and economic theory. On the one hand, major traditions of population thought were ignored, notably developments before 1800, as well as later immensely fruitful ones in evolutionary biology (Kreager 2015).

These traditions rely on direct observation of local relationships between subpopulations as the source of population changes, establishing heterogeneity as a significant and inevitable force that needs to be accounted for. Observing the renewal of heterogeneity as it arises from subpopulation dynamics thus becomes a central object of inquiry and an essential element of scientific and historical explanation. Although these traditions of thought were marginalized in the nineteenth- and twentieth-century rise of statistics, major conceptual advances have continued to be made in them (Kreager et al. 2015a). On the other hand, the notion of modernity itself (or the conventional trope that opposes ‘modern’ to ‘traditional’ society) has been recognized as problematic – notably for erasing local institutions and their history, thus depriving them of agency. The ‘modern theme’, as Señor Ortega observed nearly a century ago ([1930] 1957), is a peculiarly tenacious habit of European thought.

An apt example of how ethnography combines fruitfully with awareness of longer-term conceptual developments is Tim Jenkins’ (2010: 129–58) reconsideration of Pierre Bourdieu’s analysis of family, marriage and reproduction in Béarn, southwest France. Bourdieu was, of course, a major player in the critique of postwar anthropology and sociology, and his seminal work on mechanisms of low fertility (1962) and marriage strategies (1972) exemplifies the role that demographic variables came to play in it. Bourdieu is an important advocate of bottom-up analysis of the dynamics of social and population change, arguing that key theoretical formulations – such as the conceptualization of habitus, practice and symbolic violence, for which his work is best known – should arise from sustained reflection on conjunctures revealed by ethnography and not simply from preconceived social and economic models. However, whether Bourdieu actually follows this method and whether his analysis is shaped more powerfully by the modern theme are important matters that Jenkins’ own Béarn ethnography raises. His sympathetic but critical assessment of Bourdieu’s approach is worth careful attention, as it clarifies not only the empirical and theoretical fallacy of modernism, but also how the tenacity that Ortega noted is perpetuated.

Bourdieu’s early important work on Béarn, ‘Célibat et condition paysanne’ (1962), was a synthesis of ethnographic and census data: the former describes the strict system of marriage, property and gender norms characteristic of traditional Béarnais rural society; trends from the latter then reveal this system in crisis. Tradition focused on the central value of the transmission of family property

to a single heir as the means of sustaining family position in local hierarchies. Demographic correlates of this system guaranteed its proper functioning: heirs married late; younger sons commonly did not marry; control over daughters' marriages, and especially the size of dowries, ensured that families did not get too much in debt; and fertility was kept low. However, census data revealed a mechanism that, in Bourdieu's view, spelled the terminal decline of this system: a steady rise in proportions of men, and hence of heirs, not married in rural areas. As the whole system is predicated on the controlled marriage of heirs, how could this happen?

A major consideration in Bourdieu's account is the changing balance of power and influence between market towns and the hamlets in which traditional farms are located. While heads of household and their heirs continued traditional marriage and reproductive controls, the opportunities for marriage expanded in the towns, such that celibacy there was seven times less for men and half of rural levels for women. Modern attractions and employment in towns contrasted with continued hard and long labour required on farms, and familiar tropes of modernization like the role of education, individualism and loss of parental authority are all noted – Bourdieu suggests that these attractions had particular appeal to mothers and daughters. The political power of towns likewise grew with the rise of commerce and a professional class of outsiders, French replaced patois in discussion of policy and the peasant proprietor came to feel himself an alien in social contexts outside rural farms.

Bourdieu's 1972 paper 'Les stratégies matrimoniales dans le système de reproduction' returns to his earlier ethnography, now presenting its conclusions as a systematic, general model of marriage; again, in a later analysis, he emphasizes this step as 'a break with the structuralist paradigm' (2002: 12), also remarking the essential role of low fertility in the maintenance of the system. Models, he argues, should thus be grounded in observed indigenous practices, not sociologists' externally hypothesized decision-making rules of behaviour. His term 'habitus' was coined to describe this ground, defined as 'the system of dispositions inculcated by the material conditions of existence and by familial education' (2002: 171). Jenkins notes the importance of this conceptual shift in terms that anticipate the anthropological demography of conjuncture noted above: habitus enables the choices made by actors in pursuit of their ends to result in the reproduction of wider group social structures (2010: 147). The model reveals both the strengths of the traditional system and

how the limits imposed by its demography cannot compete with the opportunities that modernity offers.

For those familiar with the wider literature on modernization and fertility regulation, Bourdieu can be seen to have presented a sophisticated, locally grounded version of a wider orthodoxy in which modernity always trumps tradition. There are, however, problems. Jenkins carried out his own fieldwork in Béarn over an extended period from the 1970s to the 1990s and witnessed the demise of farms where no heir was available or willing to succeed to the entail. Yet, as his ethnography shows, the system continues to function. As he notes, its imminent demise was first forecast in the early nineteenth century, and a series of eminent sociologists including Le Play and Weber have continued for two centuries to believe they are witnessing its near-death throes, up to and including Bourdieu. Jenkins' combined historical and ethnographic account shows how marriage and property arrangements have varied between recognized subgroups, enabling more adaptive capacity than Bourdieu allows; as Jenkins demonstrates, the system continually projects an image of vulnerability, while in practice sustaining its existence. The workings of this and related processes are best left to the reader to investigate for himself or herself in Jenkins' book. However, his account of the chimera by which modernity displaces tradition and how it comes to infest Bourdieu's argument is of direct importance here and repays close attention.

Two main points in Jenkins' analysis may be summarized as follows. First, census categories do not reflect accurately the local groups or subpopulations in which conjunctures or adjustments in habitus are occurring, nor distinctions between them that are crucial to their demography. The census records large, medium and small properties according to area farmed, using arbitrary cut-off points between each; it is not possible from the records to identify the differing paths to marriage and non-marriage followed by siblings (2010: 138). As Jenkins shows, the categories that guide choices in the traditional system differ markedly from this classification. Local hierarchy is defined by 'great' and 'small' 'houses', 'house' being the term for ancestral property and family reputation that it is the objective of the system to preserve. The primary importance of ensuring the marriage of the heir (and marrying him or her well) that Bourdieu and Jenkins describe articulates the traditional system from the point of view of 'great' houses. This has always been the challenge that they face; 'small' houses, in contrast, are usually not in this position, are often reduced to tenancy or dissolution and thus



frequently face a corresponding dispersal of members and capital. Thus, in the terms of local categories and agency, two main groups or subpopulations are understood to exist, the conjunctures they face are different, and their options and reputations vary accordingly. Dissolved 'small' properties create opportunities for 'great' ones to expand. Some 'great' houses decline, while the adroit marriage of a female heir and management of smallholdings can lead some members of the 'small' category to rise. The system has, in all history for which we have record, relied on an elasticity amongst units that is not apparent in Bourdieu's account and that clearly contains more options for preserving 'great' houses than he considers. Meanwhile, the continuing problems faced by 'small' houses are not a threat to the system, but are part of its normal adaptive variation.

Second, similar issues arise in the census distinction between towns and hamlets, and Jenkins remarks that Bourdieu's reliance on these categories is accompanied by a curious change in his account of local agency. Under the traditional system, peasants are wily managers of a complex demographic and property calculus. Yet, confronted with the modernity of the towns, they suddenly become automatons fixated only on marriage and heirship. However, as the dialectic of great and small houses indicates, the 'old' calculus was predicated on adaptation to circumstance. Jenkins notes a series of major changes in local economy and society that the two subpopulations of proprietors have had to adjust to. The area has accommodated the familiar transformation of agricultural techniques that comes with tractors, fertilizers, new crops and irrigation. Changing transportation means that work in local industries is accessible for younger sons, whether they reside in the towns or the hamlets, and important new industries have emerged. New sources of farm finance are readily available. And so forth. Farm families, in short, are mixed economies with several possible revenue streams that can be varied if necessary. It is difficult to believe that the contrasting measures of non-marriage between the market town and hamlets on which Bourdieu's argument depends exists independently of all of these adaptive elements in the system, but the census of course provides insufficient detail to enable tracking individual patterns of employment in relation to marriage, or to relate them in turn to the fate of houses or particular siblings' marriage patterns.<sup>4</sup>

The apparently inevitable triumph of modernity in Bourdieu's account thus depends not on the historical evolution of the system or on the experience of those participating in it, but rather on

an elementary shift in the classifications on which description and analysis rely. Distinctive subpopulations like the great and small houses – which exist simultaneously and occupy differing places in the social structure – are replaced by an argument in which the analyst displaces these subpopulations and networks with standard census and other survey categories. A shift from one classificatory scheme of description to another is read onto society as a historical succession from one homogeneous ('traditional') form of existence to another ('modern') one. Where standard census and other survey categories displace the subpopulations and networks that actually shape people's experience and the options they are pursuing, not surprisingly, their agency disappears. With Jenkins we might ask: where do all of these bright, new modern people emerge from? The answer is that they are not produced merely by modern influences coming from outside local society (although people are, as noted above, able in some cases to adapt these influences their own purposes). Nor are they simply an artefact of analysis; they are one aspect of differences generated internally in a society by the differing positions of long-established subpopulations and their members, and their experience in handling the options available to them. Failure to recognize this, together with failure to give local categories and experience their due, dooms analysis, as Ortega observed, to the endless pursuit of a homogeneous modernity that never arrives.

### **Combined Methodologies**

The example of Bourdieu's sociology is important not only because it shows how the agency and history of peoples can be erased by the classifications and measures of conventional quantitative databases. It also shows that, despite the efforts of anthropologists – indeed, the very ones who have taken a major role in trying to develop ethnographically grounded anthropological theory – this same erasure comes to prevail in their models. In the process, it is not only peasants' agency that disappears – it is anthropology's.

Under the circumstances, it can come as little surprise that the third intellectual movement underpinning anthropological demography has been recognition of the urgent need to reassess how qualitative and quantitative methods and models may best be combined. It is important, at the beginning, to note that what is at issue is not the competition or incompatibility of two methodological traditions. Just as the encounter of the peasant world and modernity is not the

collision of two isolates, there is a long history or interface shared by qualitative and quantitative approaches.<sup>5</sup> The root of this relationship, as the doyen of modern demographic modelling, Alfred Lotka (1925: 35), insisted, is the same elementary fact that Jenkins emphasizes: the reliability of any quantitative compilation or model rests on the classification it employs; hence, classification powerfully shapes the lines along which formalization subsequently develops. The convention that opposes the quantitative and the qualitative is, in any case, recent. It obscures the priority that earlier thinkers gave to compositional factors – i.e. how the several differing groups that compose a society are formed, sustained and relate to each other – in the very emergence and development of the concept of population in European science and society, and its formalization as an object of scientific study.<sup>6</sup>

As ethnographers and historians from the 1970s onwards turned their attention increasingly to processes of fertility variation and decline, the question of the empirical validity of standard classification systems immediately became problematic. Census and survey demography offered potentially promising means of assessing the generality or particularity of local findings, with the possibility of giving them greater relevance and influence. However, when these sources were analysed in order to compare local data to the wider communities to which groups belonged and to national populations, analysts often found themselves blocked. Many subpopulations (variously ethnic communities, regional cultures, regionally defined labour sectors, religious groups, etc.) are not distinguished in survey and census compilations; even where such groups are recognized, considerable problems often confound the accuracy of their enumeration. A great many substantive and methodological shortcomings in consequence emerged, of which six may be briefly listed.

First, standard sources use conventional administrative and geographical units that cut across and subdivide a group's distribution. Second, provinces, household units, occupational and other categories in these sources generally reflect metropolitan or European models, or perhaps the dominant national culture. Such classifications tend to assimilate distinctive subpopulation patterns to external norms. Third, they also often become fixed over long periods, thus failing to pick up the emergence of significant new cultural and informal sector economic groups. Fourth, household classification schemes generally do not address population mobility and changing family composition across the lifecycle. For example, different types

of marriage, which commonly have very different implications for fertility, are rarely noted, and factors that can strongly influence reproduction, like patterns of migration that differ between subpopulations, can be inferred only very approximately. A fifth problem, in consequence of these several shortcomings, is that demographic data systems do not capture key relationships (such as how networks link households and how different ethnic and occupational groups are linked in social and economic hierarchies). Finally, randomized samples used in national surveys may capture too few members of constituent subpopulations to enable a representative account of them to be given. Limitations such as these began to be noted as soon as combined historical anthropological and demographic perspectives became a major avenue of population research (e.g. Goody 1972; Berkner 1975), and they continue to attract important clarifications (e.g. Randall et al. 2011). As these problems affect demographers' interpretation and analysis in contemporary societies, a common ground of methodological concern has gradually emerged, with fruitful dialogues between disciplines (e.g. Caldwell et al 1988; Gillis et al. 1992; Jones et al. 1997; Szreter et al., 2004; Johnson-Hanks et al. 2011; Petit 2013).

As Walters (this volume) remarks, registration and other standardized population data systems have a powerful censoring capacity. That important subpopulations and social categories are left out, either permanently or over long periods, was a repeatedly debated concern of the nineteenth-century vital statisticians who erected national data systems in Europe; that no solution was found at the time has had the consequence that key economic and cultural variables are absent from the record – variables that the Princeton European Fertility Project (Coale 1969) and other research subsequently came to regard as essential to explaining European fertility declines (Kreager 1997). National statistics in the developing world are now based largely on European models and several chapters in this volume (Bochow; Roche and Hohmann; Hukin; Randall, Mondain and Diagne) note how censoring continues. Such systems need not be set in the concrete of past European norms; Kroecker (this volume), for example, notes how in Lesotho, classifications have been added to accommodate local reproductive and marital arrangements.

Arguably, the foremost problem facing the study of reproduction as a dimension of population heterogeneity is lack of agreement on which populations and subpopulations provide the best units for comparative purposes and how to characterize the several levels at

which they function. From the bottom-up perspective of conjuncture and difference, key initial questions are: what local processes sustain, alter and give rise to groups, and how are childbearing and childrearing shaped by these processes? What feedbacks exist between reproduction and these processes? From the characteristically top-down perspective of statistical institutions and of historians and social scientists dependent on them, the corresponding questions are: how, given the welter of subpopulations contributing to national and provincial trends, can we arrive at accurate, regular and comparable units and classifications that together compose national levels and trends of reproduction? How can an understanding of local processes be integrated into surveys and census systems to provide accurate identification of subpopulations and their composition? Both bottom-up and top-down perspectives are clearly needed.<sup>7</sup> Given the diversity of subpopulations, it is inevitable that the way in which groups are specified in survey and census tabulations will in some cases oversimplify their distinctiveness, such that anthropologists are bound to remain critical of them. That said, there can be little doubt that if anthropologists addressed themselves concertedly to this issue, survey and census organizations would have to hand much more useful information and an incentive to clarify heterogeneity. Working together would then assist the design of classifications and data collection. Collaborative research is essential. No less important is critical historical work of the kind Jenkins provides in the Béarnais case, which is needed in most countries to help unpack oversimplifications that already exist and to understand what their impact has been on the perception of demographic and related change, and how such perceptions have influenced policy.

### **New Evidence**

Historical demography, together with social and intellectual history, thus provide natural allies of anthropological demography. Historians have provided much of the energy and argument that the heterogeneity of declines forms the central problematic in understanding contemporary as well as long-term demographic change, and that this requires serious questioning of conventional population units and the development of new ones that can reflect local realities. The demographic history pursued in Cambridge has long been a fount of innovation in this respect and can serve as a brief

case in point here, especially as the English case was supposed by Notestein (1945) to be the very model of fertility transition. In his view, transition was the more or less monolithic consequence of industrialization and modernization, leading to new reproductive institutions (small families) and rational contraceptive behaviour (parity-specific birth control). Parish reconstitution, however, soon began to build a more diverse picture of national population history from the bottom up. It demonstrated the contrary of what Notestein had supposed: small family forms were widespread more than two centuries before the spread of factory industry, together with reproductive patterns that varied considerably between groups before and during its spread; longstanding checks on reproduction relating to marriage, abstinence and contraception preceded industry and remained important during the marked fertility declines that began from 1870 (Wrigley 1961; Hajnal 1965; Flandrin 1976). As historians' attention turned to reanalysing nineteenth- and twentieth-century census data on declines, pioneering research showed that patterns varied significantly between subpopulations depending on gender, class and occupational sectors (Szreter 1996), with major declines in some subpopulations before 1870 (Szreter and Garrett 2000), together with distinctive regional patterns (Garrett et al. 2001). The need to explore local variations on several levels has thus become imperative and the important contributing evidence of oral history data is now recognized (Fisher 2008; Szreter and Fisher 2010). Recent availability of integrated census micro-data now enables analysis at the registration subdistrict level, opening up the reconstruction of local and regional fertility profiles that can be analysed in conjunction with other social data. 'A more finely grained geographical analysis, identifying the occupational or social mix of the smaller spatial units, is thus essential in the identification of the forces behind the fertility decline' (Reid and Garrett, in press).

In this approach, the population and subpopulation units in which demographic changes occur cannot be taken simply as those supplied by standard census reports or in conventional macro-/micro-level analyses. Identifying and tracking the boundaries and composition of groups in society that experience changes, whether similarly or differently, is a primary object of research. The study of conjunction and difference, as outlined in the preceding pages, parallels and complements this approach, since it is addressed to understanding processes that give rise to diversity in contemporary fertility declines. At present, the methodological issue of units and levels best suited for comparative purposes remains, as in historical

demography, provisional. In anthropology, the identity, composition and structure of subpopulations making up a society are the product of ethnography and analysis, often also entailing specially designed local censuses and surveys.<sup>8</sup> As in evolutionary theory, units cannot be decided in advance.

To begin with, different subpopulations or constituent groups in society tend to be defined by anthropologists on the basis of local features that stand out in the ethnography. These commonly include socioeconomic hierarchies, communal, ethnic and religious groups, generations, gender, and an array of family and kin structures. The field enjoys one advantage over history (that reproductive processes can be observed and discussed with participants), but there can also be a relative disadvantage (lack of historical depth). In consequence, anthropological demographers – as several chapters in this volume show – commonly take considerable care to conduct research into historical contexts and use them to formulate their analyses. Contextual data are likewise critical to assessing national demographic survey series that may be relevant. Coming from the historical demographic side, Sarah Walter's chapter shows that longer-term demographic records that enable a bottom-up approach may actually be available in places like tropical Africa, where it has generally been assumed that they do not exist; as she notes, the experience of several generations of administrators, missionaries and anthropologists turns out to be very helpful in constructing and interpreting this long-term picture.

Ethnography brings together observation of local behaviour and of the way people express values and attitudes. Censuses and surveys can only record what people are prepared to say, subject to the inevitably artificial conditions of interviews based on structured questionnaires; such data record the outcomes of events and processes, not their direct observation. Because standardized sources commonly rely on household and official geographical units, they only explore some – and not necessarily the most relevant – subpopulations. People participate in multiple groups and networks, the boundaries or memberships of which can frequently change. Subpopulation or network memberships are by nature open and shifting, for example, across the life course or in the context of wider structural changes in society. Observing these processes is essential to understanding what factors are or are not included in standard data sources. Some but not all subpopulation memberships will be important to understanding reproductive patterns. Membership in some groups not directly concerned with reproduction – say, units of production or

political hierarchies – may nonetheless be crucial to social statuses that have a real bearing on the conjunctures in which reproductive options are weighed. It is thus crucial not to confine research only to networks of communication about, say, reproduction, contraception or AIDS, but to study historical and contemporary relationships that bring people together into subpopulations for other purposes and that provide contexts in which people evaluate such communication (e.g. Bochow, this volume; Kroeker, this volume; Pauli, this volume; Roche and Hohmann, this volume; Gregson et al. 2011). While ethnography provides the means to identify memberships and observe how groups are formed and change their composition, at some point an analyst has to test whether such subpopulations have a reality beyond the case studies and communities he or she has observed. Local censuses and representative surveys designed to capture language categories and practices of local subpopulations provide means for checking group compositions and relationships. Where the validity of these units is confirmed, they can be compared or contrasted to findings that rely on standard units used in mainline survey programmes.

Combined approaches that begin in ethnography and historically documented contexts have proven undoubtedly rich in their capacity to generate new and surprising results, which lead, in turn, to a healthy questioning of widespread assumptions about fertility declines as a monolithic process of ‘transition’. This capacity is evident in the chapters collected here. In the remainder of the introduction we will note some of the ways in which the chapters continue to develop the three principal movements from which recognition of the central importance of the heterogeneity of declines and the role of anthropological demography have grown.

*Relations between Subpopulations as Mechanisms of Reproductive Change*

Modernity arrives in different forms and has been arriving in a great many parts of the world for a long time – as Ortega’s remarks, written nearly a century ago, remind us. Wrigley, in his seminal assessment (1972) of the concept of modernization, addressed the classic test case – the era of England’s Industrial Revolution. Carefully and extensively reviewing its main components,<sup>9</sup> he noted two central problems that leave it unable to account sufficiently for England’s pre-eminent modern development. One is that key technical innovations necessary for rapid economic growth did not derive solely from the general rationality that modernization is supposed always to entail, but were a consequence of specific, local circumstances. The



second is that, amongst these circumstances, changes in the structure of social groups and of relationships between them (notably in the division of labour and in social conventions regarding acceptable living standards) were fundamental. The values and practices that came to be associated with modernity and thence with economic improvement spread unevenly; local valuation of what is 'modern' became part of what differentiated groups in society from a much earlier date than the emergence of key technical innovations. As Wrigley says, there was 'a long gathering process of change' that helped to prepare the way for economic growth; his observation that 'a society might become modernized without also becoming industrialized' (1972: 236–37) has with time become mainstream to the revision of standard development models and to understanding how and why fertility patterns have varied so widely.<sup>10</sup>

Earlier in this chapter, we noted that the social and life course issues arbitrated in vital conjunctures become basic characteristics that distinguish groups in society. Changes in the timing and arrangement of marriage, alternatives to marriage, the incidence of childbearing, schooling, the division of labour, the acceptability of different occupations and other family norms are bound up in wider social statuses and opportunities. Take-up of values and practices perceived as modern need not require general economic development and, indeed, began in many places under colonialism in which the incomes and material conditions of the great mass of people usually changed modestly (and not necessarily for the better). Beginning in the 1950s and 1960s, the international and governmental agencies that sought to promote family planning in the developing world, together with modern values associated with Western family, marriage, education and employment patterns, likewise belonged to the 'gathering process of change' that Wrigley noted. As this history is part of people's experience, it continues to be influential, and because their experience was far from uniform, the roots of modernity are often not what models used by population and development planners suppose.

We see, for example, in Julia Pauli's Namibian data how in early stages of modern development, a single society can give rise to a number of coexisting subpopulations in which the means and purposes of modern contraception, and consequent fertility levels, vary. The subpopulations are characterized by generational and emerging class differences, each with different forms of marriage and reproductive patterns. The relationships that came to define these groups in the late colonial period have continued to shape the

conjunctures people faced in the ensuing decades. The historical context of this modernization is of particular note: modern methods of fertility control arrived in Namibia with the imposition of apartheid. The main methods available from the 1970s – sterilization and injections – were employed by the South African government to counter the ‘black threat’ posed by high fertility in local populations. The control policy was accompanied by administrative, educational and commercial development that created a small, wealthy African elite of ‘big men’ who cooperated with the government’s strategy of rule by artificially created ethnic ‘homelands’.

National demographic data on these generations show the onset of fertility declines, but also that declines were modest. Namibians maintained African patterns of early marriage and high fertility in differing ways. The situation on the ground, as indicated in Pauli’s study of one ‘homeland’, clarifies this variation: distinctive life course and reproductive patterns emerged and came to characterize different subpopulations as people faced the conjunctures to which the context of the new regime gave rise. On the one hand, marriage became so expensive that it was largely an elite prerogative. Wives of big men became model housewives following a perceived Western pattern, although their fertility remained above four children per woman. Contraception was used in this group on the Western model of ‘stopping’, i.e. adopted once a sufficient number of children had been reached. However, their embrace of contraception and marital fidelity was not matched by their husbands, who maintained multiple relationships outside of marriage. Continuity of this widespread African pattern was possible because the ‘homeland’ structure created vulnerable lower strata subpopulations that provided services to the local elites. In these groups there was great economic insecurity and little prospect of upward mobility. Similar to the ‘outside wife’ pattern observed elsewhere in Africa (Bledsoe 1990), some of these women had continuing relationships with married big men, bearing them children and gaining some support from them, while others had children in multiple and usually brief affairs. The conjunctures of lower-strata women thus form two vulnerable subgroups and it is in these that most uptake of contraception has occurred – for spacing rather than stopping purposes. Their fertility is notably lower than among the elite. Meanwhile, there are signs of generational change in the latter group. Young daughters of elite women are now being discouraged by their mothers from accepting the unhappy inside/outside wife regime and encouraged instead to delay marriage and childbearing. The situation is aptly

symbolized by a ceremonial key awarded to girls on reaching age 21 without children and that they see as a crucial step in shaping their life courses.

In sum, to understand the dynamics of fertility declines in Namibia, we need to identify a number of subpopulations and how reproduction has shaped the composition of these groups as part of the ongoing formation of classes in a particular political context. Lower strata, not higher, have led the decline; for these groups, modernization as a mechanism of fertility change works by increasing insecurity (economic and marital), not by the uniform and happy adoption of Western family size desires and values. Subsequent chapters by van der Sijpt, Kroeker and Hukin all show that this is a recurring theme: a wider historical conjuncture of nascent class formation and its inequalities impacts on the vulnerability of young women in lower strata, leading them to specific vital conjunctures in their lives in which they adopt abortion and modern contraceptive techniques in an attempt to limit the effects of vulnerability in their lives (cf. Johnson-Hanks 2006).

The second chapter, by Sarah Walters, is a groundbreaking synthesis of ethnography and long-term parish register demography in East Africa, which enables her to track attempts to introduce values and practices deriving from modern, Western culture for nearly a century. The agency of these changes is, again, not one that usually figures in the demographic literature: the colonial state and, more particularly, the Catholic Church. Since the end of the nineteenth century, missionaries brought to East Africa modern medicine and childcare, education, famine relief, agricultural improvements and systematic vital recordkeeping, together with Christian values of conjugality and individual choice in respect of matters of family and faith that are intimately bound up with modern, European values. As Walters says, the whole approach constituted a 'moral demography' in which Church teaching and other activities potentially opened wider access to opportunities in the colonial state and the later, independent nation-states.

Of course, not all of this package was immediately acceptable. The insistence on monogamy and that reproduction must follow rather than precede marriage proved to be a sticking point in polygynous societies. Pastoral activities naturally focus on principal life course events – birth, marriage, death – and adherence to Church teachings brought parishioners and priests into conflict with local secret society organizations also focused on the control of these conjunctures. The registers in consequence give us a detailed account

only of one subpopulation – members of the faith – there being other groups who remained outside the church, or who joined other churches, with resulting tensions in the wider community. However, as Walters shows, the records do enable us to track events both at the individual and population levels, showing how vital conjunctures play out and how this constructs membership of the Church population. Because registers and ethnography together give us a detailed picture of the conjunctures of parishioners who struggled with key modern elements in the Church's teaching, they enable us to study an influential subpopulation in the process of its formation, how its composition grew not only by births but also by conversion (or was decreased by local conflicts, migration and excommunication), and how its age structure and other demographic features evolved.

Moreover, it shows how priests' long experience of working amongst several local subpopulations gradually produced a significant change in their understanding of their role. By the 1960s and 1970s, when social demographers began to write about the need for rapid population change and the imminent spread of modern nuclear family values across Africa (e.g. Goode 1963; Caldwell 1976), clergy were coming to accept that attempts to bring about rapid change in marriage, ritual and related practices could be counterproductive and that the normalization of modern Christian values would take a number of different forms in African cultures, as part of a long-term process. Priests' familiarity with indigenous moral codes and realities of marriage now gives them an important role to play as preservers of African culture.

Sophie Roche and Sophie Hohmann's Tajik study provides a third face of modernity: Soviet colonial policy and its impact from the 1920s. This chapter provides a major case study that reveals important processes and variations characterizing a wider system (cf. Hirsch 2005). In creating the 'republics' of Central Asia, the Soviet system separated historical centres of Tajik culture (Samarkand, Bukhara) from the area that became Tajikistan. Modern medical care, bureaucracy, education and central economic planning were introduced to replicate the model of Soviet identity elsewhere. Culture was part of this top-down project: each 'republic' was supposed to have its own folkloristic tradition, and therefore Tajik was declared a distinctive language and ethnicity shared by groups in the area. The methods employed to restructure local society on this model were, as elsewhere in the Stalinist period, brutal: better-off agriculturalists and their families were removed in the purge

of 'kulaks'; whole villages were forcibly relocated to uncultivated regions to bring them into an expanded production model; the collectivization and mechanization of farming were intended to break down existing family structures by removing private property and replacing traditional family and community authority; instead, collective farms ('Kolkhoz') were organized as workers' 'brigades' in which local leaders were rewarded by links to the political elite in the new capital of Dushanbe. Women's equality as producers was not matched by equality in domestic and political spheres: they continued to bear the main family care and childbearing responsibilities, while their full-time employment was enforced by doctors who had exclusive right to attest women's age, pregnancy status and access to contraception – ensuring, for example, that they worked until childbirth and, from the 1960s, the promotion of sterilization.

However, the draconian enforcement of the Soviet ideal of modern identity could not erase local differences. As whole communities were often forcibly relocated, they could retain much of their internal structure; while a Kolkhoz might be formed from several such groups, all shared the experience of relocation and desire to retain their values. Roche and Hohmann's research combines ethnography and a carefully conducted local census to examine evolving relations between two subpopulations in one of the relocation sites. Data on marriage within and between these groups, their respective fertility levels and distinctive sibling-based family strategies show how relationships preserving subpopulation differences have continued. Tajik ethnicity as a uniform and primary locus of identity remained a construct of central authority; rather, reproductive and other norms followed the interests and relationships of the subpopulations. A striking feature of this research is that the addition of local census to ethnographic data enables Roche and Hohmann to disentangle precisely the kind of differing sibling life-course, marriage and procreation trajectories that Bourdieu's use of standard census data failed to track in the case of Béarn: older, middle and younger siblings exhibit distinctive patterns, a variation that is fundamental to the preservation of family and subpopulation identities and that reveal the composite nature of fertility adjustments.

Patrick Heady's study of Ovasta, a community in Carnia, north-east Italy, provides an example of the southern European family and community systems that Jenkins and Bourdieu describe. However, Heady's case study differs in two important respects. One is that

Ovasta appears to conform much more to a scenario in which modern developments in the regional economy appear to overwhelm traditional relationships. Fertility has fallen to a level well below that needed to sustain the community. At the same time, older patterns of seasonal migration have given way to permanent moves to urban areas, taking more than one in five young people from the community. Unlike B  arn, there was no core of big houses; the pastoral economy was more marginal and the community in consequence relied on labour pooled between households, for which bonds built up amongst men were instrumental. As sufficient solidarity and numbers no longer exist, principal economic activities, like cheese making, have become impossible. While Heady's analysis, like that of Walters, focuses on only a single subpopulation (in this case, those who stay in Ovasta, not those who leave), he adds a second focus by employing comparative data on nineteen communities in eight European countries (see Grandits 2010). This perspective opens up examination of a key component of reproductive change that cuts across the communities and that current approaches to European fertility declines have struggled to explain. Reduced fertility in itself is not surprising, given that reproductive controls, as Bourdieu and Jenkins describe, have long been a basic mechanism of these family systems. What demographers did not anticipate, however, and that remains unexplained by the several competing hypotheses Heady reviews, is why fertility has fallen so low – to levels of one child per woman.

A Malthusian take on emigration from Ovasta, for example, would expect the opposite outcome: as emigration opens up niches in the local economy, there should be no incentive to limit reproduction – on the contrary, Malthus would expect fertility levels to continue or even for a time increase, filling the empty productive places. However, as Heady describes, this kind of maximizing of reproductive numbers for economic purposes is a mentality that has no place in local economy and society. Social convention historically welcomed fertility somewhat above replacement as evidence of success and status, but levels were tempered by a collective recognition of environmental constraints on the pastoral economy. A compromise between reproductive success and environmental constraints was achieved, as Heady describes, by a balance of two mechanisms that appears to have worked in Ovasta and a wider set of Mediterranean communities. One was strong marriage endogamy: kin and family ties were focused on securing good local marriages and parenting that favoured investment in children and continuity of family

honour. This habitus, as Bourdieu observed, was important long before the supposedly modern innovation of limiting reproduction to enhance child 'quality'. Local families in effect competed for good marriages, and secure childbearing and rearing, while recognizing that they could not maximize fertility if that undermined a second key factor – the solidarity with other community members necessary to achieve pooled labour in the context of limited production opportunities. There was thus awareness that moderate childbearing was an advantage amongst families in competition for limited resources, and this norm has not changed. Why, then, have fertility levels moved downwards to the point where the very continuity of families is in question?

Heady's thesis is that longstanding norms to moderate fertility remain strong, yet emigration has removed the second support to childbearing: the role of community solidarity. Family and kin certainly continue to focus on good marriages and parenting, but in current conditions this no longer extends to fertility somewhat above replacement as a correlate of status. Rather, with much greater tendency to emigrate, a key social and economic support for the security to reproduce (whether babies or family status) has been removed. It may thus be, as modernization theorists suggest, that the appeal of opportunities in the wider economy and of enhanced individualism work generally to lower fertility – but this is not all that is at issue, nor is it sufficient to account for specific reproductive levels, such as below-replacement fertility in rural communities. To explain why one level of reproduction occurs rather than another, we also need to consider which 'traditional' practices remain, together with the structural implications of the retreat of certain others. Heady provides a preliminary test of this model, which yields striking regional differences in kin networking between the European communities in his sample. As he notes, models then need to be tested by observation at the local level in order to examine and measure whether hypothesized mechanisms actually have the influence attributed to them.

Amongst the fundamental inequalities that modernity is supposed to alter are relations between genders. In general, modernization is believed to enhance female equality directly via the spread of education, wage labour and contraception, while patriarchal family structures are likewise supposed to be diminished. The issue is, of course, complicated by the many subpopulations and networks to which the two broad groups, men and women, also belong. Gendered inequalities also arise, as we have seen in the chapters by

Pauli, Walters, and Roche and Hohmann, where modernity was fostered by colonial, medical and professional models that carried their own structures of male dominance. Other examples in which 'traditional' and 'modern' male preferences combine are readily available in the literature (e.g. Das Gupta 2009). Tropical Africa has become an obvious focus for research on these issues, since it combines powerful indigenous male precedents (established in lineage and marriage systems that continue to shape family life), postcolonial states and limited national fertility declines. The seemingly obvious implication is that male-dominated structures remain an obstacle to African reproductive modernization. In their chapter, Sara Randall, Nathalie Mondain and Alioune Diagne show that the conjunctures in which men and women confront and try to resolve these issues in contemporary Senegal reveal a subtle balance in which normative male prerogatives are preserved while being extensively circumvented.

Randall, Mondain and Diagne completed two rounds (1999 and 2007) of in-depth interviewing of randomly selected men and women in a Senegalese town that has experienced extensive labour migration to Europe, education and integration into the national market economy. Women as well as men have been involved in the latter two developments, which have led to a general acceptance of modern material values and significant improvements in domestic standards, albeit with problems of recurring absence and unemployment that often make family life insecure. The town is also the locus of strict Muslim brotherhoods that uphold the conjunction of longstanding ethnic and Islamic gender values, both in the community and in migration sites. Married men are supposed to have unquestioned authority over their wives and economic responsibility for them; women's maternal role is idealized and sacred, and submission to their husbands is the foundation of their social reputation and spiritual wellbeing. As the authors note, this configuration leads men to answer questions posed in national survey programmes in strict conformity to Islamic norms, regardless of practice. The idea of controlling the number of births was in particular considered an act against God's will. In-depth interviewing in many cases showed a similar 'correct' line, but also revealed a wider range of secular attitudes, including acceptance of birth control, particularly for preserving wives' health. The 'correct' line, in other words, can often be something of a rhetorical stance. On the one hand, anything less than strict orthodoxy in public conveys disrespect for Islam and for others in positions of authority;



it is likely to be disastrous for the couple's reputation and runs counter to deeply held beliefs. On the other hand, there are many conjunctures in which the 'correct' line is unrealistic and private alternatives are quietly found – for example, periods of economic vulnerability in which women's continued productive role is critical, women's health and the role of spacing of children in preserving it, and sexual relations outside of marriage. These conjunctures are, in the author's view, slowly but steadily shifting reproductive norms, even while leaving wider cultural and religious norms in place. They also show that female agency is not produced simply by an external modernizing stimulus, but by the incorporation, for example, of new technologies and material improvements, into local ends.

#### *Altering Life Courses*

As all of these chapters demonstrate, diverse compositional demographics arise out of historical and personal conjunctures that need to be understood on several levels. At the level of the state and of constituent populations that compose it, conjunctures are defined by historical circumstances that bring together external agencies, local social structures and cultural modes of problem-solving. Local and external agents may each have their own view of what is modern and about what aspects of behaviour are appropriate for modern values and practices. Access to major benefits that can come with education, healthcare, improved economic infrastructure and social welfare is in most places very unequal. Such differences, as we have seen, often reflect the differing positions that groups and their members hold in local hierarchies. Adopting standard and national-level classifications of population units and indices to the exclusion of these differences frequently erases them. Population statistics, instead of an essential avenue to identifying mechanisms of population change, becomes a powerful censor.

At the local level, in which individuals, couples, families and kin are situated in the historical setting of the communities, regional identities, economic sectors or other subpopulations in which they live, there is the opportunity to observe actual processes of population change, the moments or, as Johnson-Hanks says, *vital conjunctures* in which people construe and arbitrate amongst the possible courses of action that wider and changing historical conjunctures pose. People do this through the medium of immediate issues in their lives, of which reproduction and its control are a prime instance. This process may sustain the subpopulations of which they

are members, alter them or lead to the emergence of new groups and kinds of groups.

Reproduction is, of course, only one mechanism of subpopulation formation and change. As the chapters show, vital conjunctures that arbitrate different reproductive patterns are commonly bound up with other compositional processes like migration, the division of labour, alternative routes to forming marriages or partnerships and the formation of religious and community memberships. Reproductive choices are commonly guided by these processes, the opportunities and constraints they entail, and the group ties and identities they compose. At one extreme, as in Patrick Heady's Italian example, vital conjunctures combining migration with low fertility may imperil a longstanding local demographic system. More commonly, as in the studies by Pauli, Jenkins, and Roche and Hohmann, we see how marriage alternatives linked to differences in status, migration histories and the division of labour lead subpopulations to achieve a range of different reproductive outcomes that define the differing social positions of group members. Walters' chapter provides an example in which religious conversion and associated marriage and reproduction lead to the formation and development of new religious subpopulations, while Randall, Mondain and Diagne show how established religious groups maintain their values while adopting reproductive controls that many, if not most, members regard as forbidden.

Research that tracks population heterogeneity by showing how individual women's and men's reproductive trajectories evolve differently in particular subpopulations thus establishes an important baseline for understanding the dynamics of population change. First, it restores the agency of individuals and the groups to which they belong, rather than supposing that they are, in effect, mere unwitting followers of a uniform economic or other rationality. Second, within this compositional demography, it becomes possible to connect demographic differentials that are key to declining fertility (such as the timing of reproduction across individual and family life courses) to the actual problems of childbearing that people are trying to resolve. Declining fertility, like other trends, emerges as a composite outcome of many conjunctures that determine birth intervals and the priority amongst proximate determinants of fertility (Bongaarts et al. 1984) across the life course. Problematic conjunctures, how people cope with them and how their actions combine to change reproductive patterns are the subject of detailed case studies in the final four ethnographic chapters of this book,

which address childlessness, delayed childbearing, abortion, partnership issues and why the prevalence of one or another contraceptive technique remains a matter of local moral demography.<sup>11</sup>

The anthropology of the colonial and postcolonial era laid down a comparative approach that anchored reproduction as a central object of control in societies across Sub-Saharan Africa (e.g. Evans-Pritchard 1951; Turner 1957; Douglas 1966; Godelier 2009). The status of lineages and their members was supported by higher numbers of children, the exchange of daughters and bridewealth in marriage, the advantages of multiple wives and their children in productive activities, and elaborate ritual and supernatural controls (e.g. witchcraft) over life course events like sex, pregnancy, childbirth, initiation into adulthood, inheritance and marriage. The relative success of men and their kin groups in managing this system defined local hierarchies; male dominance and female obedience, as described by Randall and her colleagues, defined gender relations. Underpinning this system were demographic controls expressly favourable to childbearing and rearing (early marriage and breastfeeding practices coupled with women's extended postpartum abstinence), as well as mechanisms for ensuring the prompt remarriage of widows and the incorporation of children conceived outside marriage. However, the anthropologists to whom we owe this important work were only secondarily concerned with tracking variations within and between subpopulations, or with the quantitative documentation of them.

The several chapters on Sub-Saharan Africa by Bochow, Kroeker and van der Sijpt (as well as by Pauli, Walters, and Randall, Mondain and Diagne, discussed above) show the considerable extent to which understanding of population and subpopulation variation has moved to the fore. In Erica van der Sijpt's Cameroonian ethnography, we find a fascinating, detailed account of how conjunctures pose a complex and often conflicting set of alternative life-course paths and how people navigate them. Plural marriage patterns, which were traditionally polygynous, have not been replaced by the Western norms of monogamy, education and nuclear family values. Rather, forms of plural partnership have proliferated, along the lines of 'inside and outside wives' described by Bledsoe (1990), with markedly different implications for women's career aspirations and reproductive trajectories. As van der Sijpt shows, the conjunctures in which young women find themselves pregnant in advance of formal marriage arrangements (a well-established African pattern) arbitrate the full range of potential life courses, from an urban life of

educated formal sector employment, to a lifetime of shifting, provisional 'outside' statuses, to being a polygynous co-wife in an outlying village.

While some of these alternatives may appear new and radical, all of the life course paths that women follow and their fertility outcomes remain structured by parameters that have long shaped African compositional demography. Van der Sijpt lists five: whether women look to their patriline or matriline for support; sibling order and numbers of siblings (which determine whether marriage involves bridewealth as a key component); the position of a woman's kin group in political networks (relatively powerful ties providing greater or lesser social capital); a woman's position in the marriage market (e.g. whether she has multiple partners and therefore more options); and marriage order (e.g. being a second or third wife in a plural union, rather than the first, may provide more freedom in relation to childbearing). As van der Sijpt remarks, a woman's fertility is decided not in one, but in a series of vital conjunctures across her life course in which the relative importance of these five variables changes, for example, as she grows older and in consequence of previous conjunctures and their outcomes. Thus, a young woman who becomes pregnant outside of marriage has already passed through a conjuncture in which the possibility of having a child, whether to practise contraception, what implications pregnancy may have for her continuing education and job prospects, and whether one or another partner is likely to take parental and marital responsibility have been weighed. The five variables continue to arbitrate the conjuncture she now faces, e.g. of whether a man agrees to be her husband, which man, what kind of marital and material relationships that would entail, whether her education can continue, whether she could remain single and have the child raised by her mother or other kin, whether she should have an abortion and so forth. Successive conjunctures determine which proximate determinants regulate the spacing of children and her total fertility, as well as having a major impact on her social status, reputation and network memberships. Adopting a modern, Western model of monogamous conjugality remains a realistic option for very few women in this system, although many modernization variables like contraceptive technology, education, movement to urban areas and so forth are in play. However, these factors are not independent determinants, since their influence depends on which combination of the five parameters prevail in the subpopulation to which she belongs and which life stage she has reached.

Astrid Bochow's chapter describes the vital conjunctures of elite women in Botswana, a context that counters sharply the often-stated view that Sub-Saharan Africa remains a high fertility region strongly resistant to reproductive control. National surveys show that the country has experienced a dramatic fall in fertility, from 6.6 births per woman in 1985 to 2.9 in 2006. Her case study is of particular importance as the rise of an educated, relatively wealthy urban elite that identifies strongly with professionalism and modern nation-building and that sees fertility control as fundamental to a nationwide ethnic identity, is surely a context in which we would expect to see conventional modernization theories confirmed.<sup>12</sup> The reality, as Bochow shows, is a much more interesting demographic system than the usual modernization variables would lead us to believe.

Vital conjunctures currently faced by men and women are shaped, as we have seen in preceding chapters, by changes during the colonial era. Bochow draws on ethnography of the 1930s and 1970s, which included surveys, to outline the following historical sequence. Pregnancy before marriage and other arrangements to ensure ample reproduction remain common, without specific numerical family size norms being normative. However, the ways in which people go about this began to change with new economic developments under colonialism that removed young men, both married and unmarried, to work in South African mines. This complicated bridewealth arrangements, reducing traditional lineage power and opening up new living arrangements for women (cohabitation, matrifocality), which gave them greater choice and freedom of movement, whether for economic or reproductive purposes. Contraception, as well as longstanding abstinence and breastfeeding norms, was a regular part of this picture from the 1930s onwards. While women continued to have premarital children at a young age, they aimed at long intervals between children partly for traditional health reasons and partly reflecting opportunities of their new situation. A subpopulation emerged of higher-status women and men who adopted Christian models of childbearing after marriage and were able to take advantage of newly introduced schooling. In this group, childbearing might be postponed into a woman's mid twenties. This subpopulation was well-placed when government bureaucracy expanded upon national independence and with the discovery of rich mineral resources (diamonds) in Botswana, both of which led to economic expansion and demand for educated personnel. A widely recognized pattern of childbearing then emerged, in which

a woman might have a premarital child or one early in a partnership, but would then postpone later childbearing until late in her fertile period. Partnerships often changed across the life course, as is characteristic of cohabiting and matrifocal family arrangements. This pattern was considered a characteristic national, Tswana ethnic pattern and, as it was widespread, census and survey data categories were modified to include a normative 'living together' pattern.

In sum, lower fertility came to be associated with an early and late childbearing pattern not typical of modernization scenarios. This was coupled with a fluid partnership pattern in which women and men might have a sequence of cohabitations over time. Meanwhile, other African norms not usually associated with modernization also prevail, for example, in which men may have multiple relationships, childbearing success is essential to status, and kin continue to exert strong pressures on couples to have children. Yet the elite have also entered into what is familiar in Western low-fertility scenarios, in which careers compete with childbearing, childrearing has become a major expense and conspicuous consumption is expected even though consequent debt is problematic. However, such stereotypical modern concerns depend for their influence on the three successive conjunctures that Bochow notes as defining the reproductive life course in this subpopulation: early, often unintended births before marriage; spacing and delaying during middle years, owing to uncertain partnerships and AIDS; and late attempts at childbearing, often to affirm an established partnership. Reduced fertility with modernization is thus bound up with multiple sources of insecurity, greatly augmented in recent decades by the AIDS epidemic, which the continuation of plural sexual relationships has undoubtedly helped to foster. For those women who did not succeed in having a child early in their reproductive years, the threat of childlessness is very real and may be a major factor in destabilizing partnerships. This situation is even worse for women not in the elite, who do not have adequate resources for medical assistance. Ironically, as Bochow notes, these several sources of insecurity enable elite couples to play different causes of low fertility off against each other: pressured by kin to have a child, they can plead career and financial causes for the 'delay', thus disguising the impact of AIDS on their reproduction.

Lena L. Kroeker's ethnography of urban and rural workers in a second southern African state, Lesotho, provides a striking contrast to Bochow's study of the Botswanan elite. Many of the circumstances over the last four decades are similar, including the theme of disguised fertility realities and motivations. Fertility decline, from

5.4 to 3.3 births per woman, is again impressive and has taken place against a long history of male labour migration to neighbouring South Africa, a rise of female-headed households and movement to urban areas, greater access to education (of which women have taken advantage) and the deadly impact of AIDS. As in all of the African chapters, available contraception, awareness of modern Western family ideals, desire for economic advancement into the waged economy and the implications of these values for longstanding premarital pregnancy patterns are all part of the picture. These changes coexist with the continuing influence of wider kin groups over marriage, reproduction as an indigenous criterion of full personhood (usually entailing several children) and gender relationships that continue to disadvantage women. The 'long gathering process of change' of which Wrigley wrote is thus much in evidence, yet the reality of fertility declines is bound up not in a wholesale shift to modern, Western family norms, but in a complex set of vulnerabilities that very slow and incomplete integration into the global economy have created.

The first shock was the serious decline from the 1980s in the demand for male labour, which returned many men to local unemployment. Unlike Botswana, major new male opportunities have not emerged to fill the gap. Women, meanwhile, have become increasingly accustomed to managing their own households, and major employment opportunities emerged in urban areas of Lesotho for women's economic independence based on textile production. Men have continued to head households in rural areas and to exercise power over marriage arrangements and sexuality, but have lost respect owing to their inability to provide for their families; growing domestic violence arising from this situation has provided further incentives for women to move to the towns. It is there that women, whether married or not, confront the vital conjunctures that, as Kroeker describes, create opportunities for 'secret family planning'. The theme of covert contraception use here echoes what Randall and her colleagues found in Senegal, but is part of a different compositional demography. Women may hide their marital status from lovers; single women may cease contraception and get pregnant in an attempt to 'entrap' men in marriage; contraception and abortion arise in the attempt to balance economic uncertainties, partnership issues and the desire for independence, as well as health issues. The Christian ideal of stable, marital monogamy may be an object of desire for some, but neither the economy nor gender relations make it a reality for more than a very small minority. Conjunctures

vary, as women in rural and urban subpopulations face different vulnerabilities and possibilities. The second shock, evidently, is the rapid and extensive spread of AIDS, which has complicated successful childbearing, childrearing, continued partnership and economic security.

Eleanor Hukin takes the issues raised in the several African chapters a step further, looking more specifically at how different contraceptive methods become part of the vital conjunctures that women and men face. The context of her research – Cambodian towns and countryside – is obviously very different from Africa, belonging to an Asian region noted for rapid economic growth and fertility declines. While Cambodia has not been a regional leader,<sup>13</sup> the last four decades have witnessed a fall from 6.7 to 3.0 births per woman. Hukin begins by applying accepted statistical estimates of risk to national survey data and, at first glance, the picture appears to conform unambiguously to the standard modernization story: women in higher educational and income groups, living in urban areas, have lower fertility, and there has been a significant increase in modern contraceptive use. However, other findings indicate that a closer look is needed, pointing to some interesting parallels to preceding chapters. Thus, the take-up of modern contraceptive technology (in Cambodia, usually injections or the IUD) is more characteristic of women in lower than higher economic strata; women with more education and belonging to higher income and social strata continue to employ a range of traditional methods for controlling fertility; birth regulation is not new and reflects a range of priorities other than aiming at a particular, small family size, of which women's personal and child health is a primary concern. Interestingly, there has been a greater increase in the use of traditional than of modern methods of birth control during the fertility decline, which has evidently not kept women from having fewer children.

Hukin's ethnography reveals the rich, varied and subtle awareness of ways of avoiding pregnancy in Khmer culture that lies beneath broad national trends, and uses this knowledge to unpack the reasons for the seeming puzzle of an educated, urban elite that prefers traditional methods, while the lower strata readily accept new Western technologies. Often multiple methods of reproductive control are involved, but Hukin's central finding is that Khmer culture turns the Western idea of contraceptive modernity upside-down. Central to reproductive controls is the calendar method, which requires periodic abstinence and may be backed up by



withdrawal and (sometimes, Hukin suggests) an apparently long-standing recourse to abortion. All groups agreed that the calendar approach was a 'modern' method, often called 'the doctor's way': it requires knowledge (e.g. of the Gregorian calendar, as opposed to the lunar cycle known to women with little or no schooling), and reinforces Buddhist models of moral and physical balance and of female discipline and restraint. The management of reproduction is women's responsibility, and educated and better-off men may expect, by the same moral codes, to play a supportive role. These women are likely to employ other birth-limiting practices as is consonant with good health and wellbeing, but not for the purpose of trying to control numbers of children; thus, breastfeeding is recognized to inhibit ovulation, and terminal abstinence (for older women) and complete abstinence (for the unmarried) are enjoined.<sup>14</sup> More educated, upper-strata women are also more likely to have access to a hospital abortion, although this is concealed as it is a sin under Buddhism. Poorer, less educated women are considered, and consider themselves, less able to practise the 'modern' calendar approach and therefore use methods like the IUD and injections that do not require them or their husbands to exercise so much restraint. They may be concerned, like upper-strata women, about the negative health effects of Western contraceptive technology, which is seen as unnatural and interventionist, but they lack the modern knowledge that calendar methods require. Abortion pills are easily available in the marketplace, and traditional massage practices and medicines are also used; the vulnerability of women in the poorer strata is once again an important theme.

In sum, an important theme in these four chapters, as in all contributions to the book, is to show that modern values and technologies are normally integrated into societies under the continuing influence of extant moral and gender norms, and how this process varies because of fundamental inequalities and the ways by which people search for flexible means to adjust to economic constraints and other social and personal uncertainties. Indeed, in all of the chapters, the social and economic insecurities that people face in the course of modernization loom much larger in determining the course of their reproductive behaviour than the advantages generally presumed in the demographic literature to follow directly from the embrace of modern values and economic development. Definition of the conjunctures people face and the alternative courses of action they pursue tell us a lot about how different groups in society cope, why the demography of subpopulations differs and

why the supposed homogenization of fertility behaviour does not emerge.

The more general importance of this approach is clear. One gain is to rebalance empirically our understanding of fertility change, so that the idealized vision of modernization is checked against the inequalities and vulnerabilities that people actually face. Second, from the standpoint of population theory, an approach to understanding fertility change grounded in subpopulation differences and in the several vital conjunctures that compose them helps us to understand why the modernization and demographic transition framework proved indeterminate. Moreover, the several examples provided in this book show how it is possible to rethink trajectories of demographic change once historical differences have been recognized. Of longer-term interest is the possibility of revitalizing the analysis of past census and survey series along the lines currently being developed by Cambridge historical demographers. Combining the basically bottom-up methodologies of anthropology with top-down demographic and other social science methods opens up research strategies of considerable empirical potential. What is likely to be entailed is a shift for anthropologists from the continuing preference for single community studies by individual researchers to multi-site research involving teams of anthropologists, local researchers, historians and demographers. The purposes include not only identification of significant subpopulation differences and the processes that produce them, but assisting census and survey design in order to better identify them. Applicability to pressing environmental, epidemiological, genetic and evolutionary questions is also likely to be greatly enhanced.

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## Notes

1. Fertility declines as the *idée fixe* of postwar demography begins, of course, with Notestein's formulation of 'demographic transition' (1945). A shortlist of papers documenting the heterogeneity of declines and the incapacity of Notestein's framework to explain them, would begin with Coale (1969) and proceed through Knodel and van de Walle (1979), Chesnais ([1987] 1992), Cleland and Wilson (1987), Gillis et al. (1992) and Kohler et al. (2002).
2. Much more might be said here about the potential role of network analysis to assist in the identification and exploration of subpopulations and of how differences between them (of which fertility declines are but one aspect) are altered or sustained. This is a substantial topic in its own right, with many conceptual and methodological issues yet to be answered (see e.g. McLean 2007) that go beyond what can be encompassed in this volume.
3. However, substantial progress has been made on this puzzle in evolutionary biology, since the latter systematically employs population concepts largely ignored in population statistics (Kreager 2009; Kreager et al. 2015b).
4. This abbreviated account leaves out Jenkins' more detailed observations on Bourdieu's ethnography, and particularly the absence of important constituent groups in his primary interview data. As he also remarks, Bourdieu's account, together with those of LePlay and other sociologists, need to be seen as part of a French political discourse on *soi-disant* economic and social development in which there have long been party interests. The theme of sibling variation recurs in this volume, in the chapters by Roche and Hohmann, and van der Sijpt.
5. Hence, it is not only the supposedly imminent disappearance of the traditional peasant world of southwest France that has a two hundred-year history. That history coincides with the period of the emergence and long rise and spread of statistics in European government and research. The two are no doubt related, as, for example, LePlay's account of the supposed disappearance of important peasant family forms was based on his early quantitative approach. The story that Jenkins tells is without doubt general and not peculiarly French.
6. The aggregate nature of human societies and their constituent groups was the subject of sophisticated reasoning from the Greeks to the late eighteenth century, in which the principal concern was not enumeration, but balanced and imbalanced proportional relationships between

groups' composition and size as instrumental to the formation, sustenance and decline of states. It was this reasoning that gave rise to population arithmetic as a potential science and instrument of policy from the mid seventeenth century, and has remained fundamental to evolutionary biology, in which the origin and evolution of species is defined by the way in which subpopulations are formed, sustained or decline (Kreager 2009, 2015). The science of statistics that emerged from population arithmetic beginning in the early nineteenth century took over the measures and models of population arithmetic, but assigned them an entirely different basis. Statistical methods, grounded in ostensibly complete and precise census and other databases were considered to provide a universal and completely objective basis for a science of society. In this, statistical reform was seen as an intrinsically modernizing force (Porter 1986).

7. For further discussion and examples, see Kreager et al. (2015b).
8. In addition to the chapters by Roche and Hohmann, and Pauli (this volume), see Schröder-Butterfill (2004) for examples.
9. As Wrigley details, modernization as a mechanism of economic growth focuses primarily on a conception of the inherent rationality of development, comprising a linked set of changes that come as a package, including: economic maximization of returns; development of markets, monetization and division of labour; replacing customary arrangements with legal systems; development of governmental bureaucracy; individual self-interest taking priority over the demands of kin and community memberships; and so forth.
10. As Szepter (1993) remarks, some demographers, notably Notestein, found it necessary to very quickly revise the priority of different aspects of modernization, putting the possibility of the diffusion of contraceptives ahead of industrialization. Put bluntly, if countries like Burkina Faso have to industrialize in order to go through fertility transition, the wait will be rather long. As Szepter also notes, once the idea of modernization became plastic in this way, it was conceptually indeterminate (1993: 685–86).
11. A third major gain from recognizing the renewal of population heterogeneity as a baseline for explaining population change lies beyond the scope of this book, although it is clearly implied by the first four of the topics just listed. Differing patterns of fertility decline carry implications for population ageing, as differently placed subpopulations are likely to experience correspondingly different resources in children and access to other members of younger generations (Kreager and Schröder-Butterfill 2010); the causes of this heterogeneity may be tracked in intergenerational relations and the many different shifts in support flows across the life course (Kreager and Schröder-Butterfill 2008).
12. Ethnicity as a population unit here has a different construction compared to Roche and Hohmanns' Tajik example, a reminder that the

- significance of an ethnic label can be very different depending on its source and political uses.
13. The Khmer Rouge government of 1975–79 embarked on its own definition of modern socialist state formation, entailing the genocide of some two million Cambodians, including most of the existing professional classes.
  14. Cambodian recourse to multiple methods of birth control, including periodic abstinence, suggests interesting parallels to European history (see e.g. Szreter 1996: 392–94; Szreter and Fisher 2010: Chapter 6).

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