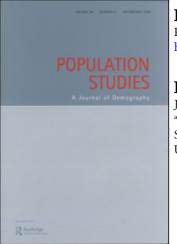
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### Population Studies

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### **Book reviews**

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# **Book reviews**

The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives. 2008. By STEPHEN T. ZILIAK and DEIDRE N. MCCLOS-KEY. Ann Arbor: The University of Michigan Press. Pp. xxiii + 320. US\$24.95 paperback. ISBN-13: 978-0-472-05007-9.

Statistical thinking pervades the empirical sciences. It is used to provide principles of initial description, concept formation, model development, observational design, theory development and theory testing, and much more. Some of these activities consist in computing significance tests for statistical hypotheses. In demography such a hypothesis is typically a statement about a regression coefficient in a specification of the transition intensity (or hazard or theoretical rate) of a chosen life-course event, such as marriage formation or death. The hypothesis may state that the regression coefficient equals zero, implying that the corresponding covariate has no impact on the transition in question (thus not affecting the behaviour it represents), or that for all practical purposes the analyst may act as if this were the case. Alternatively, the hypothesis may predict the sign of the coefficient, indicating for example that higher education leads to lower marriage rates, ceteris paribus, as argued by the Becker school of economics. (This and subsequent examples cannot be found in the book; they have been selected for illustration by the reviewer.)

The authors Ziliak and McCloskey maintain that the economic, social, biological, and medical disciplines focus too much on the statistical significance of a parameter estimate, thus detracting attention from more important things. In particular, they feel that the focus of attention should be on the *strength* of each effect, such as on *how much* impact education has on demographic behaviour, or on *how important* premarital cohabitation is for the divorce risk in marriage. The authors' main purpose is to point out the pervasiveness of this misguided focus as well as to explain its emergence and diffusion. They complain that even though scientists have been made aware of this problem, they do little about it, and the situation has not improved over time.

If this were all that there was to complain about, journals could easily remedy the situation by insisting that even non-significant effect sizes be reported and

their practical importance discussed. Apparently this would in itself be a big change in reporting practice. Unfortunately, the problem is deeper, for scientists often ignore procedures aimed at developing statistical hypotheses. These should be developed on the basis of theory and common sense as well as in the light of empirical features known from the existing literature. A strict protocol should be followed that requires initial experimentation with hypotheses to be conducted on a part of the data-set, and subsequent testing to be conducted on a virgin part of the same data-set. Only if such procedures are followed will the significance values typically calculated by a standard computer program be correct statements about type 1 errors. Unfortunately, however, scientists often feel that this strict protocol (assuming that they are aware of it) is a needless or impossible luxury, and will report a *p*-value computed by the program even if they have experimented with the full data-set, a situation which usually makes the computed p-value invalid. Sometimes experimentation with the full data-set is used to produce the very model used in the formulation of the hypothesis at issue; for example, when the scientist develops a stepwise analysis by retaining a model element if it is statistically significant by the criteria of standard singlehypothesis testing, and omits it otherwise.

Ziliak and McCloskey do not highlight issues concerning incorrect *p*-value computation, but they have been of concern to professional statisticians for a good while. For some contributions from recent decades see Guttman 1985, Cox 1986, Schweder and Norberg 1988, and Hurvich and Tsai 1990. For 20 years and more, remedies have been available to overcome the weaknesses of practitioners' normal behaviour, including rigorous methods for model development and data snooping, methods that prevent the usual loss of control over the significance level and that allow the user to handle model misspecification. (The latter feature is important because invariably a model is an imperfect representation of reality.) Demographers and other users of event-history analysis may want to consult Hjort 1988, 1992, Sverdrup 1990, and previous contributions from these authors and their predecessors.

Ziliak and McCloskey have a different take on this. With great erudition they develop illuminating documentation of the existence and pervasiveness of the

problem they see, namely, that statistical significance is often mistaken for substantive significance. Their book attempts to turn the tide and convince practising scientists to change their ways and start to draw sound operational consequences without being blinded by formal tests of significance. Like so many others, Ziliak and McCloskey deplore current practice and are frustrated that their own type of criticism has received too little attention. Similar dismay voiced by others surfaces occasionally in the book, for example Rothman's attempt (1998) to eradicate significance tests from his own journal (*Epidemiology*), but the two authors are unimpressed by the impact on colleagues in empirical disciplines. In reality, more colleagues, beyond the circle of professional statisticians we have mentioned above, may be of the same opinion. For instance, in Chapter 1 of a book written to defend the null-hypothesis significance-test procedure, Chow (1996) describes a litany of criticism appearing in the psychological literature.

Documenting the ills of current practice, insisting that they must be corrected, and showing how this can be done, are worthy goals of a book. Faced with the book under review this reviewer cannot help asking whether these goals could not have been achieved more efficiently, however. One may doubt whether a text of 25 chapters over some 250 pages is a productive way of going about the task. Perhaps their operational intentions would have been served better if these authors had written a much briefer account, or at least stopped after Chapter 17 and then suggested how the current situation could be remedied (now Chapter 24). As it is, they use six further chapters to trace undesirable practices to some of the fathers of modern statistics and then provide unflattering portraits of them. The two authors are incensed by the attitudes and behaviour of Karl Pearson and particularly of Ronald Fisher, and deplore their and their pupils' influence that continues to this day. Conversely they have any amount of sympathy for William 'Student' Gosset, who still seems to have a lot to teach modern practitioners but who has had much less impact on how people go about using statistical methods. It is of course interesting to gain insights into the actions of the people who started a movement whose direction the authors want to change, but this must be a different story. How relevant is an account of the personalities active in the infancy of modern statistical theory to a revision of current statistical practice? Perhaps readers would be well advised to skip Chapters 18-23 if they are primarily interested in statistical methods and not in how certain scientists dominated undergraduate instruction in the field long ago, albeit with far-reaching repercussions.

Be that as it may, the book has some attractive features that are unusual for an argumentative treatise. First, the list of contents is not only an enumeration of the chapter titles of the book; it also contains a summary of the authors' main arguments for each chapter. Second, the book contains a guide to the introductory statistical literature for readers who need a firmer theoretical basis. (Readers who need such a guide will find it difficult to read the accounts by professional statisticians listed below references that are conspicuously absent from the literature cited in the book.) Third, the book contains the most informative (but also most opinionated) person-and-subject index this reviewer has ever seen.

#### References

- Chow, Siu L. 1996. *Statistical Significance: Rationale, Validity and Utility.* London: Sage.
- Cox, D. R. 1986. Some general aspects of the theory of statistics, *Journal of the American Statistical Association* 49: 559–575.
- Guttman, L. 1985. The illogic of statistical inference for cumulative science, *Applied Stochastic Models and Data Analysis* 1(1): 3–10.
- Hjort, Nils Lid. 1988. On large-sample multiple comparison methods, *Scandinavian Journal of Statistics* 15(4): 259–271.
- Hjort, Nils Lid. 1992. On inference in parametric survival data models, *International Statistical Review* 60(3): 355–387.
- Hurvich, C. M. and C.-L. Tsai. 1990. The impact of model selection on inference in linear regression, *The American Statistician* 44(3): 214–217.
- Rothman, K. J. 1998. Writing for *Epidemiology* [Special article], *Epidemiology* 9(3): 333–337.
- Schweder, Tore. 1988. A significance version of the basic Neyman–Pearson theory for scientific hypothesis testing, *Scandinavian Journal of Statistics* 15(4): 225–235, with a discussion by Ragnar Norberg, pp. 235–242.
- Sverdrup, Erling. 1990. The delta multiple comparison method: performance and usefulness, *Scandinavian Journal of Statistics* 17(2): 115–134.

### JAN M. HOEM

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Kinship and Demographic Behavior in the Past. 2008. Edited by TOMMY BENGTSSON and GERALDINE MINEAU. Dordrecht: Springer. (International Studies in Population, Volume 7.) Pp. x + 284. €94.95. ISBN: 978-1-4020-6732-7. This volume is a beneficiary of the Eurasian Demographic Project (Bengtsson et al. 2004; Allen et al. 2005), which gave a new impetus to historical demographic studies and attempted to go beyond the usual aggregate analysis by introducing microlevel data, event-history analysis of individual trajectories, and the combination of aggregate and individual-level analyses. Its introduction clearly explains how to extend such an approach to kinship studies, which is the main topic of this volume, now that new historical databases allow for the reconstruction of kin networks and provide highly detailed information on individual and local communities. Together with new methods of contextual and multilevel analysis, these databases can be used to make important contributions, of both substance and method, to our understanding of the role of kinship in demographic behaviour in the past. However, while the previous volumes clearly demonstrated that demographic outcomes are determined by society, not biology (Bengtsson et al. 2004, p. ix), in this volume the editors introduce biological processes and genetic effects, taking into account developments in behaviour genetics, especially in relation to fertility (Rodgers et al. 2001).

It is important to be very cautious with the introduction of such developments because, as Vetta and Courgeau (2003) have already shown, calculations of the heritability of fertility, or of any other human trait, are based on erroneous assumptions, incorrect formulae for kinship correlation, etc. For research on demographic behaviour, molecular and genomic sciences offer better avenues than heritability analysis. Fortunately, the use of the latter is reported by few of the papers in the volume. The majority report the use of new methods of social analysis.

In the studies reported in the first section, eventhistory and multilevel analyses were used to investigate the immediate impact of family, household, and kin structures on the demographic behaviour of household members. Chapter 1 reports an analysis conducted at both household and individual levels, using a nominative linkage between such different sources as vital registers, parish 'state of the souls' records, and tax registers. The study shows the key role of kin in modifying the individual's risk of marriage in a nineteenth-century rural community in Italy. The subject of Chapter 2 is the role of health characteristics in the selection of marriage partners in a Flemish village over a long period-from the eighteenth to the twentieth century. The authors explain that they deliberately declined to take account of biological factors purported to influence partner selection because to have done so would have risked failing to recognize the numerous social causes that play an important role in this selection. They are able to show how familial health characteristics can influence marriage patterns without any recourse to the idea of an unconscious disposition to detect good genes. Chapter 3 moves from Europe to China to show the role of social organization in determining the individual chances of attainment, fertility, marriage, and mortality during the eighteenth and nineteenth centuries. In order to introduce different levels of analysis, the authors use a contextual event-history model. This model leads to interesting results but, as the authors themselves say, multilevel models would allow for more precise estimates at each of the levels. However, the multilevel linearprobability models they use in their own experiments are not the best ones for this purpose. They would have been better advised to use multilevel eventhistory models that are able to take into account the time dimension of their data (Courgeau 2007).

In the second section the focus is more on cohort and life-course effects, though the immediate effects of family, household, and kin structure are always present. Chapter 4 examines the effects of the presence of parents on childhood survival in the Netherlands between 1880 and 1922. Again, eventhistory analysis, based on population register data, was used to show the importance of the mother for the survival of her children. Chapter 5 reports the effects of cohort-specific and parity-specific kin on fertility behaviour in a Polish parish in the period 1730–1968. Unlike the authors of Chapter 3, this author used a multilevel event-history model that was able to show clearly that kin effects, understood as a reduction in the costs of childbearing, were strong especially at higher parities. Chapter 6 introduces territory and migration in France for cohorts born between 1847 and 1900, and presents a study that used data from the TRA survey (based on a patronymic method: all people whose surname begins with the letters T, R, and A are recorded from various sources), linked with Military Registers, which provide a continuous record of residence between the ages of 20 and 46. Using contextual event-history analysis and the concept of a family's spatial capital, the study showed clearly that migration decisions were influenced not only by individual characteristics or contextual effects, but also by the family's past migration behaviour. The subject of Chapter 7 is the weak connection that has been found between length of life of parents and that of their offspring in Southern Sweden for the period 1813-94. After controlling for a number of

individual and contextual characteristics, the authors found a persistent influence of parents' longevity on the mortality of their offspring at older ages. However, as the authors recognize, this did not show that the length of life of parents was linked genetically to that of their children, because they had considered only the effect of measured characteristics in their sample, though they had introduced a frailty factor.

The third section of this volume considers kinship as a marker of individuals' genetic proximity. As we will see, this does not necessarily imply that heritability analysis and behaviour genetics are required.

Chapter 8 examines the influence of consanguineous marriage on reproductive behaviour, as revealed in a study using register data from a region in Sweden during the period 1780-1899. The study found an increasing consanguinity during the nineteenth century, which made the expression of otherwise rare recessive genes more probable. The excess mortality for first-cousin children may have been associated with the expression of these detrimental recessive genes, although non-genetic factors may also have been involved. The data used for this study did not permit a more definitive analysis. Chapter 9 presents a study of the effects of reproduction on the longevity of men and women married in Quebec before 1740, and compares the findings with those obtained from the analysis of a database in Utah. The main result was that women bearing their last child late in life had longer post-reproductive lives, while increased parity had the opposite effect. The genetic interpretation of this result is presented without any substantive proof, even though many factors unrecorded in the database could have led to varying rates of ageing. Presented in Chapter 10 is a study of the impact of family's disease history on cause-specific mortality after 65 years, in a cohort from the Utah Population Database. The study showed that family history greatly affected the risk of death by the same cause. However, as the authors say, only a small number of genes are known to affect the risk of death from major killers, and genes are not known to affect accident proneness. Since shared environments are unlikely to have been replicated among many very distant relatives, the authors speak of a collective experience, though without any clear definition of what they mean by this. They also say that biases may have occurred as a result of the data or methods used. The last chapter in this section reports a study of the origins of the founders of the population of Quebec. It showed that virtually all genealogies (99.2 per cent) contained at least one French founder. Kinship

coefficients and the founder's genetic contribution were calculated, but the numerous assumptions that lie behind such calculations were usually not verified. These calculations cannot provide a reliable answer to such questions as: what is the probability that an individual will be affected by some deleterious gene, if one of his past relatives manifested it?

To the extent that it follows the aims of the previous volumes, this book extends their results. For example, to fertility and mortality the book adds a migration process and the concept of spatial capital in order to improve our understanding of the links between demographic behaviour and changing economic conditions and different socioeconomic contexts. However, the introduction of behaviour genetics in some of the chapters adds little because the authors of these chapters do not use the good tools of molecular and genomic science. For the present it seems better to analyse the social determinants of demographic outcomes in a more detailed way than to attempt to measure biological and genetic effects without adequate tools.

### References

- Allen, R. C., T. Bengtsson, and M. Dribe. (eds.). 2005. Living Standards in the Past. New Perspectives on Wellbeing in Europe and Asia. Oxford: Oxford University Press.
- Bengtsson, T., C. Campbell, J. Z. Lee et al. 2004. Life Under Pressure. Mortality and Living Standards in Europe and Asia 1700–1900. Cambridge, MA: MIT.
- Courgeau, D. 2007. *Multilevel Synthesis. From the Group* to the Individual. Dordrecht: Springer.
- Rodgers, J. L., H.-P. Kohler, K. Ohm Kyvik, and K. Christensen. 2001. Behavior genetic modeling of human fertility: findings from a Danish twin registry, *Demography* 38(1): 29–42.
- Vetta, A. and D. Courgeau.. 2003. Demographic behaviour and behaviour genetics, *Population E* 58(4/5): 401–428.

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*Food, Economics and Health.* 2008. By ALOK BHARGAVA. Oxford: Oxford University Press. Pp. xi + 221. £45.00. ISBN: 978-0-19-926914-3.

A distinguished economic historian once observed, of his subject's roots in both economics and history, that 'One man cannot think in two ways.' How much more difficult is it to do what Bhargava regards as essential, to think simultaneously as a scholar in economics, nutrition, psychology, demography, epidemiology, and public health. But these are the disciplines on which Food, Economics and Health is based and, on the whole, Bhargava manages to integrate an impressive range of modes of thought within his treatment of the subject. He considers demand for food, child health in relation to food availability, the cognitive development of children, fertility and mortality, health and productivity, and finally obesity. As a whole, the book, which originated in a series of lectures, is an excellent summary of a wide literature and of the models that underlie the approaches of different disciplines. With the exception of some short sections, it should also be accessible to anyone with a basic training in social statistics or econometrics.

There are some problems. First, the book should have been more tightly edited. The injunction to adopt a multi-disciplinary approach is repeated so often that—correct though it is—it becomes tedious. Most of the quantitative studies, which are discussed at length, are drawn from Bhargava's own published work; relevant though these studies are, it would have given greater balance to the book to have included more examples of work by other scholars. On some occasions, the detailed descriptions of research results seem unnecessary. But these are minor flaws in a book which should prove useful to a wide range of disciplines and which certainly demonstrates that a distinguished econometrician can express his ideas clearly and concisely.

More puzzling is Bhargava's final comment on the disciplines on which he draws and which he consistently argues must be integrated: '... a key difference between the biological and social sciences approaches is that social scientists invoke assumptions that are often untested and are often context-specific. In contrast, assumptions in the biological sciences are based on evidence from experimental studies and can be invoked under similar circumstances in other situations'. While examples can certainly be found to support this dichotomy, most social scientists would argue that their assumptions are founded both in logic and in numerous earlier studies; they are contextspecific, certainly, but only because social scientists are acutely conscious of the importance of culture and history in shaping behaviour. This leads them to be suspicious of experimental studies in the biological sciences, which are often based on what seem to social scientists to be extremely small samples and which thus ignore the range of human experience and the fact that it is path-dependent or context-specific.

It is regrettable, therefore, that the two social sciences which Bhargava largely ignores are history

and anthropology. Both have much to contribute, in considering the context of economic and societal development and in providing at least the range and variability of data on which science thrives; moreover, in recent years the accessibility of historical sources has so greatly increased, with improved methods of data collection, that these disciplines can make an important contribution to the topics that Bhargava discusses. But it is perhaps unreasonable to expect one man to think in eight ways! Even without those two additional disciplines, *Food*, *Economics and Health* deserves to be read by anyone interested in any of those topics.

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Population Aging, Intergenerational Transfers and the Macroeconomy. 2007. Edited by ROBERT CLARK, NAOHIRO OGAWA, and ANDREW MASON. Cheltenham: Edward Elgar. Pp. x + 307. £69.95. ISBN: 978-1-84720-099-0.

This book comprises ten papers presented at a conference on population ageing held in Tokyo in June 2006. Ageing is a topic that cuts across a wide variety of research disciplines, and ten papers may have been a good compromise between having so many that the conference would have been unfocused and having too few to have done justice to the field. The restriction is also justified by the fact that the organizers of the conference wished to focus on the impact of population ageing on the macroeconomy, a wide enough subject that can more than stand on its own.

A variety of issues are discussed in the book's chapters: the productivity of an ageing workforce; social security; intergenerational transfers; intertemporal fund management; aggregate investment; windfall gains of capital accumulation in the process of ageing; changes in societal wealth accumulation through life-cycle savings; dynamics of age structure; retirement law; health expenditure; and international migration as a remedy for the problems posed by population ageing. The ten chapters cover Austria, Australia, Japan, OECD countries, Southeast Asian countries, Taiwan, and the USA.

The first group of papers (Chapters 2–4), entitled 'Aging, Productivity and Retirement', covers the impact of a growing proportion of older workers, a proportion that varies of course among the states, institutions, and industries to which the older work-

ers belong. The second part (Chapters 5–8), entitled 'Population Aging and the Macroeconomy', focuses on investment, consumption, the health service, and capital accumulation. The third part, entitled 'Changing Policies in an Aging World' discusses international migration, fund management, and the general policy readiness of some Asian countries. From these group titles alone, one can infer that the chapters in the third part are the less focused ones, for the economic policy of almost any government is related to the age structure, and almost every dimension of the society can be related to readiness.

The detailed background information provided on the area institutions will be helpful to readers ready to go deeper into particular topics in the same country. But it is also true that sometimes the benefit of reading a chapter is less than expected. For instance, Chapter 10 presents the reader with six pages of introduction to the future fund scenario of Australia before finally the author's proposed analytical and simulation models are described, yet the background information given does not seem to be detailed enough to make it possible to judge the appropriateness of the analytical model, or to verify the persuasiveness of the simulation.

The question of whether Asian countries are 'prepared' for the problems of population ageing is a complex one. To tackle population ageing we need to coordinate our work on many fronts, including social security, health insurance, family-support systems, nursing institutions, and even cultural support. For instance, to my knowledge family-support systems and family-member interactions are quite different in East-Asian countries from those in other Asian countries. It is also well known that filial piety has long been the traditional force in supporting the old in many Chinese societies. To have an accurate assessment of the policy preparedness of a country one has to take into account that country's culture. In Chapter 11 there seems to be relatively little information in the 23-page discussion for readers to truly understand the preparedness of the Asian countries.

Some chapters—less so those on major countries such as the USA and Japan than on other countries leave the reader with the feeling of having learnt some facts but not having been fully convinced by the argument. Nevertheless, the analysis in each chapter is of high quality and there are also novel theoretical and conceptual points in almost every chapter. The book may not be appropriate for those students or laypersons who have just started to be interested in the issue of population ageing, but for those who already have a particular research idea in mind, the book can be a useful source of frontier information on related topics. Compared with some other collections of papers on population ageing turned into a book, the editors of this one have done a fine job.

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Applied Demography in the 21st Century. 2008. Edited by STEVE H. MURDOCK and DAVID SWANSON. Dordrecht: Springer. Pp. xiii + 371. €134.95. ISBN: 978-1-4020-8328-0.

'Applied demography' in the USA is a movement within demography's professional association to break from the restrictions of the academic focus on mortality, fertility, and the formal modelling of these. The hallmark of applied demography is its imaginative use of current data sources to illuminate management, planning, and marketing priorities, often with a sub-national dimension.

This collection of 21 papers from a general US conference makes for an eclectic mix of subject matter, approaches, and quality. Its first and last chapters provide a good introduction for the formal demographer who is suspicious of this sub-discipline, and give some pointers for applied demographers to the threats to their work. These threats (or opportunities) are the multiple data-sets and technological advances that provide volatile and conflicting estimates of population characteristics and population change. This is the context in which the applied demographer strives to reduce 'the interpretation burden' for policy-makers.

The data available vary very significantly across national boundaries, as to an extent do management, planning, and marketing priorities too. The US focus of this collection (with two chapters from China and one from Italy) provides opportunities for lateral thinking for those in other countries, rather than instruction. But it provides those opportunities in plenty.

Howard Hogan reviews issues that are of relevance wherever annual surveys are used to supplement population estimates, including countries in which they are intended to replace censuses. He gives an excellent summary of the US Census Bureau's population estimates, rolled forward in cohort components from the latest census, to give sex-age-race-Hispanic-origin details for very small areas. He discusses how these differ conceptually from estimates based on the annual American Community Survey (ACS), which since 2006 has provided detailed census-like profiles for small areas. The Survey's methods of controlling population estimates reduce sampling variance and coverage bias, but at the cost of confusing 'current' and 'usual' definitions of residence. The ACS sample is poor for measurement of change over time but inevitably is used for this purpose. The need for a dialogue with users for appropriate dissemination and analysis of the results is further illustrated by Patricia Becker. Unfortunately no references to technical background are given.

Mary Bollinger uses a US national health interview survey to show that those at most risk of tuberculosis, especially immigrants, have least awareness of that risk. Nazrul Hoque evaluates a variety of methods of small-area estimation applicable in Texas Counties and Places, showing as others have done before the increased accuracy of the mean of a set of reasonable estimates over the accuracy of any one of the set. The book includes a poor example of applied demography too: a paper on local-area projections of elder abuse based only on population structure, whose authors nonetheless recommend larger elder-care homes as a way of reducing costs and a concentration of homes as a way of avoiding forecast hotspots of abuse.

Murdock and Zey describe and justify the first US PhD programme in applied demography. They justify the programme by invoking the expansion of the body of knowledge, the theory and creativity involved in applications, employer's expectations, and the inability of 'host disciplines' such as sociology, health studies, and statistics to cater adequately for demography at a time when their own knowledge base is increasing. What they do not address is the underlying dependence of applied sciences on clients, and the likelihood that such an academic programme will be swayed towards where the money happens to be (and away from where it is not). One might predict instability at the least, and the growing domination of one or two applied specialities within the programme.

The many topics covered in the book and not mentioned above include: population estimates for New Orleans in the wake of Hurricane Katrina as an example of 'disaster demography'; combined shortterm and long-term projection methods; uncertainty measures for projections; the relationship of firerelated death and injury to low income and other demographic factors; an assessment of mortality data on causes of death through the growing diversity of causes with age; the use of housing characteristics to improve school-roll projections; turnover in the labour force; the continuing importance of the rural–urban divide in product markets in China; and child time-use studies. This is not a textbook and at 134 euros your library may be reluctant to acquire it. However, the editors have done well to present readers with a stimulating collection of current applied demography in the USA.

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The Global Family Planning Revolution: Three Decades of Population Policies and Programs. 2007. Edited by WARREN C. ROBINSON and JOHN A. ROSS. Washington, DC: The World Bank. Pp. xviii + 470. US\$45.00 paperback. ISBN: 978-0-8213-6951-7.

This book describes a major intervention-cumrevolution as important or more important for human society than the green revolution. In fact, without the family planning revolution, population growth would very likely have outpaced food production over a decade ago. In the immediate future there will be problems feeding the 6.7 billion persons on the planet, but without the family planning revolution, the population now might have been 10 billion or higher.

Professionals working with national family planning programmes in less developed countries can benefit from this book. The editors state the purpose in the preface 'the story of the appearance, for the first time in human history, of organized national programmes devoted to the challenge of excessive and unwanted fertility should not be lost but should be mined for the lessons those programmes might teach. This collection of essays was undertaken to answer that need' (p. xi).

An opening chapter by Steve Sinding sets the stage by briefly documenting the origins of the birth control movement and then covering the major trends and debates that came to the fore at the world population conferences of 1974, 1984, and 1994. There follow 22 chapters describing the launching and early travails and successes of programmes in 23 countries: Egypt, Iran, Tunisia, Morocco, Turkey, Chile, Colombia, Guatemala, Jamaica, Korea, Hong Kong, Singapore, Thailand, Indonesia, Malaysia, Philippines, India, Bangladesh/Pakistan, Sri Lanka, Nepal, Ghana, and Kenya. How were these countries chosen? According to the editors they '... were the earliest national efforts to establish organized family planning programmes for entire populations' (p. 421). It is not accidental that 4 of the 23 countries are relatively small islands-population pressure is felt much earlier in these settings.

Most of the chapters are written by people involved at or near the beginning of the programmes. Historically, aside from Margaret Sanger and a few other pioneering women, most of the national programmes and international assistance programmes were run by men and this is reflected in the authorship of the chapters—22 men and 6 women. In the final chapter the editors summarize major themes.

While the focus is on the early period (1950s– 1970s), the chapters vary in the extent to which they provide information on later developments. Each chapter has a table with a timeline of key events in the programme. The latest date found in a table varies from 1970 (Colombia) to 2006 (Guatemala, Sri Lanka) and 2001–2007 for Indonesia. It would have been good if contributors had systematically provided a brief update at the end of their chapters. Many chapters do have a 'lessons learned' section that can provide guidance.

I would like to highlight several themes that cut across chapters.

First, the impetus for the family planning programmes in virtually every county was population pressure caused by rapid population growth. This is important because later, at the 1994 International Conference on Population and Development (ICPD), this demographic rationale was basically lost and unfortunately family planning became simply one of a whole list of reproductive health components. (Worse, owing to political considerations, family planning is totally absent from the more recent Millennium Development Goals and their indicators.) The resulting relative lack of interest in and poor funding for family planning is part of the reason that unmet need for contraception remains at above 20 per cent of women in many African countries.

Second, the book focuses on successes though two countries with relatively poor performance are also covered (Pakistan, Guatemala) and explanations are given. Also because of the focus on success, none of the Francophone countries in Sub-Saharan Africa is covered; fertility remains high and family planning use very low in most of these countries. The Malthusian spectre of rising mortality that brings population into balance with resources is a real possibility for this area: median projections show the populations of Burkina Faso, Mali, and Niger, for example, growing from 12–15 million now to about 50 million by 2050. But demand for food has outstripped production already in the region.

Third, it is evident that much of the stimulus for the programmes came from dedicated and sometimes even charismatic leaders in the countries, who allied themselves with and received assistance from international organizations. In this regard, the roles played by the Ford Foundation, Rockefeller Foundation, Population Council, USAID, and the United Nations were crucial to the success of many of the programmes, in terms of training and provision of commodities, and of expertise in evaluation.

Fourth, the contraceptive method mix varied widely between countries. Part of this was due to cultural setting (e.g., vasectomy acceptence is very low in some settings because of cultural barriers) and part due to biases of the programmes (e.g., the Indian programme's emphasis on the sterilization of women). In some settings the de-medicalization of contraception was important for the success of the programmes. Thus in Morocco, Chile, Hong Kong, and Indonesia, for example, oral contraceptives were commercially available from the early years and the role of Information–Education–Communication and social marketing has been crucial in some countries (e.g., Bangladesh, Nepal, India, Egypt, Morocco).

The book helps us see several ways forward. First, with the world population increasing by about 75 million persons per year, the demographic rationale for family planning programmes is still present in many settings. Second, given the influence of the ICPD and relatively low funding for family planning itself, some integration of services is a necessity. Unfortunately, because HIV/AIDS programmes have been largely vertical and medicalized, the huge funding for these programmes has typically not benefited couples seeking family planning services, though this may be changing.

A personal comment to conclude. As a researcher in the area of couples and reproductive health, it was good to see 'couples' mentioned in many chapters. I believe most observers would agree that the focus on women alone in family planning programmes has in some instances limited their success.

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