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## The Global Fertility Transition: The Need for a Unifying Theory

JOHN C. CALDWELL

THE FERTILITY TRANSITION has a dominance in demography possessed by no other theme. Its study is largely responsible for the growth of demography as a discipline over the last half-century. Yet current accounts of the transition often treat the earlier transitions, unassisted by national family planning programs, as qualitatively different from those that received such assistance. If one writes on the former the paper goes to *Population and Development Review*, while analyses of the latter are directed to *Studies in Family Planning*. In the US National Research Council's compilation of the *Determinants of Fertility in Developing Countries* (Bulatao and Lee 1983), the *Supply and Demand for Children* constituted volume 1 and *Fertility Regulation and Institutional Influences* volume 2. The chapter in Coleman and Schofield's *The State of Population Theory* devoted to shifts in the determinants of fertility in developing countries (Boserup 1986) does not address government family planning programs.

This is the gulf that has to be bridged. The divide between economic and social explanations will be resolved only by assigning each group specific expository tasks. The underlying contrast between illiterate, fully subsistence, agricultural societies where fertility control serves little purpose, and highly educated, urbanized, market economies where the majority of adult males and females work for wages and where for the majority small families are inevitable, is ultimately the domain of the economist. So, although to a lesser extent, are short-term changes in industrialized society in family size preferences. Even here economists will have to learn to be more sociologically sophisticated, taking into account the fact that most families are constrained to make choices similar to those of other families

in the society and that “high quality parents” can identify themselves as such only if they choose to have “high quality children.” But between the extremes lies the fertility transition, which will probably remain largely the preserve of social historians and the more sociologically inclined social scientists. The reasons are the demonstrations that the onset of fertility decline occurred at very different socioeconomic threshold levels in different societies (Knodel and van de Walle 1979) but spread rapidly through linguistically but not economically homogeneous societies once started (Watkins 1986: 432–433).

The thesis of this essay is that there have not been two fertility transitions, a largely spontaneous one in the West, and a contrived manmade one in developing countries, one socially natural and the other not preordained by historical forces but the product of social engineering. The argument here is that there has been a progression of largely inevitable changes that could have been predicted, although perhaps not in their exact timing. It was inevitable that the changes would accelerate, that the onset of fertility decline would begin at ever lower thresholds, and that the organized component of decline would expand just because human beings interested themselves in change, try to explain it, are often tempted to justify it, and not infrequently advocate more change of the same type. To a considerable extent, the archeologist Gordon Childe (1936), although considering matters happening millennia ago, expressed the nature of the historical process when he titled his study *Man Makes Himself*.

Two processes have militated against our regarding the fertility transition as a unitary process. The first is the desperation that “social science” feels to be an objective science dealing with undifferentiated mass phenomena rather than with a type of history. This feeling is particularly strong among demographers, and was strengthened by the failure of the 1941 Indianapolis Survey to support psychosocial theories of fertility differentials in contrast to its demonstration of socioeconomic causation. The result is that histories of the birth control movement (e.g. Fryer 1965) have lain outside the interests of most transition theorists.

The second process is a battle over the purity of demography and the role of demographers as activists rather than scientific observers. Two articles by Dennis Hodgson (1983, 1991) can be read as suggesting that a few individuals created effective population policies that otherwise would not have come into existence then, or perhaps for a long time. The same impression has probably been unwittingly given by those who attempted to chronicle the succession of events as global population policies came into being, for instance Caldwell and Caldwell (1986), Harkavy (1995), and even Szreter (1993).

Let us turn first to the supposedly spontaneous Western fertility transition. It certainly did not happen as soon as the economic calculus was

right. The Abbé Dubois (1906), a refugee from the French Revolution who subsequently lived and worked in rural South India, marveled in the 1790s that Indians did not fear large families in the way that Europeans did. That fear did not remain inaudible but found in Robert Malthus, especially in his eminently quotable First Essay of 1798, a publicist whose central concepts, that population growth tends to press on resources and that large poor families suffer individual pressures, became part of the thinking of the English-speaking world and beyond. It was almost irrelevant that the Essay also contained an attack on contraception. Malthus's views fitted in with, and helped form, English classical economics, and they suited Protestant temperaments. Most of the English-speaking world thereafter had doubts about the benefits of unlimited population growth in England and had no doubt at all that it was undesirable in India. A study of nineteenth-century English literature shows that pride in large families declined earlier than the beginning of widespread fertility control (Kane 1994). Another (Carey 1993) shows that the English literary elite have long been opposed to high rates of population increase and unrestricted breeding.

The point is that the fertility decline was preceded by an intellectual battle. Peter Fryer (1965) chronicled the story of a dozen major activists and writers. They were not all widely heard or read, but the trial of Charles Bradlaugh and Annie Besant in 1877 attracted immense interest; indeed in the three months preceding the trial 125,000 copies of the offending book, their new edition of Charles Knowlton's *Fruits of Philosophy*, were sold, as were subsequently 175,000 copies of Besant's *The Law of Population* (Fryer 1965: 180–184). All this occurred in a population with around 1,800,000 married couples of reproductive age and 200,000 new marriages a year. It was no accident that these events took place just as mass literacy was being attained. Furthermore, they were already the product of international intellectual networking: Bradlaugh and Besant were English and never met Knowlton, who was American. The opposition was constituted by an even wider intellectual network. Societies for the Suppression of Vice existed in both Britain and the United States and it was primarily these bodies that launched prosecutions to suppress the promoters of birth control.

The argument here is that ideological debate and the intervention of activists were important in the first, or Western, fertility decline, as they were to be in the second, or contemporary third world decline. Furthermore, the first decline (always excepting France, which will later be mentioned) began successively in domino fashion, moving outward from the countries bordering the North Sea, with high socioeconomic thresholds, to others with much lower thresholds (Coale and Watkins 1986) as it was to do almost a century later in the third world (Bongaarts and Watkins 1996). The intellectual battle, as can be seen clearly in the works and legal arguments of those opposing birth control (which contemporary social histori-

ans are less given to studying than those of its proponents), was not mercantilist in favor of unlimited population growth. It was almost entirely in terms of Christian religious principles and the suppression of vice, which was defined as drawing attention to or causing changes in sexual behavior, especially as these matters impinged on women. The battle for birth control was won through secular change, as Lesthaeghe (1977) has shown, sexual revolution, and a change in attitudes toward women, revolutions that were interwoven. At least in the short run, a period of several generations, the central issue was not economic change or the knowledge of contraceptive methods. Rather it was the legitimation of married couples discussing the sexual act and cooperating so that it was less likely to lead to childbirth. It was a rolling back of religion's grip on—indeed concentration on—sexuality, or an ignoring of the religious view. It was a *legitimation* of sexual activity not aimed at procreation and specifically of the use of methods to prevent conception. When that view won over significant segments of the population and captured a few of society's commanding heights, fertility decline began. Doubtless there was person-to-person diffusion, of both legitimation and knowledge of the means, but the major battle was probably won through the printed word.

France, with the onset of its marital fertility decline in the late eighteenth century, is the exception to all generalizations about the Western fertility transition. It was by this time no more economically advanced than England, although, admittedly, there were no Poor Laws to mitigate the impact of high fertility on the worst-off sections of society. It now seems that major decline awaited the critical years during and after the Revolution (Weir 1994), and the most plausible suggestion is that the key factor was the secularizing of society, perhaps especially a Catholic society without a Puritan approach to sexuality and with responsibility laid upon the individual. Here, even the legitimation of birth control, in the sense of removing sexuality from religious supervision, was probably achieved by person-to-person diffusion in a very unusual time, when ideas were being challenged and behavior being debated. But even this conclusion may play down the role of antireligious handbills and organized opposition to church domination.

When one turns to the second fertility decline, any reading of the evidence to suggest that the post-World War II movement to curb third world population growth was a chance event, with the key players restricted to Princeton's Office of Population Research, is untenable. They may have helped produce the precise shape that the Western intervention assumed and may have accelerated events by a few years, but the intellectual roots of that intervention were deep and they ensured that intervention would occur as the postwar population surge began in the developing world.

The British intellectual tradition is clear from Malthus through the classical economists, to William Jevons's extension of the pressure of popu-

lation on food to its pressure on other resources, and on to the direct concern of Alfred Marshall and Maynard Keynes. Furthermore, this analysis was applied to the third world—especially to India, which played a unique role in forming the West’s attitude to global population growth. British administrators in India almost invariably saw that country’s great numbers and proneness to famine and pestilence through Malthusian eyes. It was less that Malthus taught all those leaving Britain from 1805 to 1834 in the East India Company’s College than that India appeared to so clearly embody his fears. The prefaces to the Indian censuses from their beginning in 1872 invariably reflect apprehension about population size and growth. The 1921 *Census Report* was strongly influenced by Alexander Carr-Saunders’s (1922) *The Population Problem*. J. H. Hutton, the 1931 Census Superintendent, wrote in his *Report* (1933: 31–32):

It appears to be the general opinion of Indian economists who discuss the population problem of this country that the only practical method of limiting the population is by the introduction of artificial methods of birth control. . . . [A] definite movement towards artificial birth control appears to be taking place and is perhaps less hampered by misplaced prudery than in some countries which claim to be more civilized. . . . [A] move ... has already been made by the Governor of Mysore State, which in 1930 sanctioned the establishment of birth control clinics in the four principal hospitals of the State.

Many of India’s educated elite interpreted the situation in much the same way as the British officials did. Indeed, Hinduism, too, saw virtue in sexual restraint. This was expressed in P. K. Wattal’s book, *The Population Problem in India* (1916). The All-India Women’s Conference annual meetings passed motions in favor of Indian government provision of family planning services from 1935, and invited Margaret Sanger to address them in 1936 (Sanger 1938: 461). The India Famine Inquiry Commission’s *Final Report* in 1945 on the Bengal famine advocated teaching birth control through maternal and child welfare centers. The Bhore Committee, whose hearings started in the late War years, brought out in 1946 the report that was the basis for subsequent health planning and that advocated governmental provision of free contraceptives, admittedly quoting extensively from a paper by Kingsley Davis (1944; India 1946: 483–487). The Population Subcommittee of the Congress Party’s National Planning Committee published at India’s Independence in 1947 a book-length report, *Population*, recommending a government family planning program as a necessity and outlining the full range of activities of modern national family planning programs (Shah 1947). Unaware of these events, William Vogt in *Road to Survival*, published in 1948 but addressing colonial India, urged Britain to seek United Nations help in developing a program in India to reduce birth

rates sharply (preface to English editions). Finally, in 1951 Prime Minister Nehru appointed an advisory committee, which included C. Chandrasekaran, later to be president of the IUSSP, R. A. Gopaldaswami, Secretary of the Bengal Famine Inquiry and 1951 Census Commissioner, and, breaking the British neo-Malthusian link, three Americans, Kingsley Davis, Pascal Whelpton, and William Ogburn (Caldwell and Caldwell 1986: 40–41). When releasing the committee's report in 1952, Nehru announced the formation of India's family planning program.

There were other intellectual movements toward population control during the first half of the twentieth century. The 1927 World Population Conference (attended by many demographers who, as a reaction, formed the International Union for the Scientific Investigation of Population Problems, the ancestral body of the IUSSP, the following year) invited delegates

to grapple with one of the most fundamental problems which mankind faces today . . . populations [which] keep on growing and in so doing . . . are creating social, economic and political situations which threaten to alter profoundly our present civilization, and perhaps ultimately to wreck it. (Sanger 1927: 5)

The largest single bloc of delegates was provided by the eugenics movement, which was, during this period, one of the strongest advocates of global population control. In the same year Edward Ross (1927) put the case for intervention to lower world fertility in his *Standing Room Only?* as did George Knibbs (1928) the following year in *The Shadow of the World's Future*, which included estimates of global population trends. Wendell Cleland, an American resident in Egypt from 1917, published *The Population Problem in Egypt* in 1936, and was by 1944 advocating that the Egyptian government should intervene to control fertility.

These examples will suffice to show that before World War II the intellectual and ideological underpinnings existed to argue for government intervention in poor, high-fertility countries to reduce fertility. A number of factors made it inevitable that such arguments would be put to use: (1) the continuing development of this intellectual and ideological base; (2) an adoption of fertility control in the West that grew from around one-quarter of couples at the beginning of the century to three-quarters by the end of World War II—Australian figures (Caldwell 1982: 252) but probably similar to those of other Anglophone countries—which provided the real constituency for urging such practice elsewhere; (3) the experience of low levels of fertility and population growth in the West between 1930 and 1945 and an expectation that this would continue; (4) an increasing realization from the late 1940s, confirmed by the 1950/51 census-round, that the rate of third world population growth was rising as a result of the

unexpectedly rapid reduction of mortality; and (5) the move to independence of the whole developing world, beginning with India and Pakistan (including present-day Bangladesh) in 1947.

The leadership in the postwar move toward supporting and encouraging third world population programs was taken by Americans, and Frank Notestein and the group around him at Princeton's Office of Population Research played a key role. This was inevitable in view of America's role as the Western superpower in the Cold War. It is possible that in the competitive atmosphere of the Cold War the Point Four Program, and technical aid more broadly, also reduced third world mortality more rapidly than would otherwise have occurred, thus bringing forward in time the confrontation with high rates of population growth. It is also true that the American taxation system and traditional attitudes supported the establishment of private foundations, thus allowing the Population Council to come into being in the mid-1950s and the Ford Foundation to enter the field directly in the late 1950s.

If other countries had been in the situation of having the Western leadership thrust upon them, they might well have urged the containment of world population growth earlier. Britain certainly had the intellectual history for such a role, and Scandinavia had the appropriate social context. Such first-world leadership may not even have been an essential element of the development of national family planning programs. India led the world here, and it did so on the basis of an Anglo-Indian intellectual tradition extending back for one-and-a-half centuries. Within a few decades China would have inevitably followed no matter what its political history. The organized activities that led to the onset of fertility decline in Singapore and Hong Kong, and probably Jamaica, from the late 1950s, owed much to the British nongovernmental family planning tradition; and that tradition, together with those of other northwestern European, American, and South Asian countries, led to the founding of the International Planned Parenthood Federation in Bombay (Mumbai) in 1952.

The historical detail need not be spelled out here. What is important is the conclusion that the global fertility transition was inevitable and that demographic pressure was intertwined with ideas, ideologies, and organized assistance both in nineteenth-century Europe and in the developing countries of the second half of the twentieth century. A unified theory of fertility transition can cover the whole process.

That process had its surprises, although in hindsight they appear inevitable. The challenge to reduce high third world fertility necessitated the development of a morality that made contraceptive practice in the West not merely expedient but respectable and increasingly praiseworthy. Almost incredibly—and lately with the assistance of the AIDS epidemic—the discussion of “condoms” changed in half a century from being regarded as



lewd and obscene to demonstrating moral merit. The crusade to control global fertility sped up the invention of the oral contraceptive and the IUD, as well as the legitimation of abortion, and so lowered fertility in developed as well as developing countries.

How should demographic historians and theorists approach the global fertility transition? John Bongaarts and Susan Watkins (1996) have recently made a most interesting attempt to chronicle its onset. This shows for Asia a "domino" progression, whereby over a 30-year period the onset began in country after country at progressively lower socioeconomic threshold levels. The dominant process, it seems to me, is not the intracountry personal networks on which their article concentrates but the kind of international diffusion in which most individuals cannot participate. A group of us (Khuda et al. 1996) presented an analysis of how the Bangladesh movement to control fertility gained momentum. This analysis documented the conversion of government and national elites through meetings and dissemination, a new intellectual experience fed by ideas from the long interaction between the British and a portion of their former Indian colony. It also supported the thesis that fertility control ideology drew upon an ancient tradition of moral leadership by political and social elites (Caldwell 1993). But the Bongaarts and Watkins figures clearly showed something very different in Latin America, with, in that continent, the great majority of fertility declines beginning in an eight-year period, 1966–74, with little correlation to the socioeconomic threshold indexes. Those thresholds were on average higher than in Asia, perhaps because there was little resort to Asian-type national family planning programs and perhaps because of church opposition to contraception. After 1965, as the new contraceptives became available from nongovernment sources and as an intellectual slide toward legitimating fertility control was reported everywhere but Brazil in a single language (Spanish), Latin American fertility transition began. The legitimation of birth control and government assistance with access to contraception do not create fertility transitions in opposition to underlying economic forces, but they almost certainly can hasten the onset of decline and make it steeper.

The unitary theory of fertility transition will have to embody both long-term underlying economic and demographic trends and ideas and ideologies, legitimation, and assistance in access to contraception. No one could seriously maintain that the nineteenth-century British, had they found themselves in circumstances similar to those in contemporary India or China—where the government and the elites insist that family limitation is a social and a moral duty and where the pill, sterilization, and abortion are approved and easily obtainable—would have delayed the onset of strict limitation of marital fertility to the late 1870s. The pursuit of the unitary theory will be intellectually rewarding, and doubtless that pursuit will itself result in further demographic change.

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## Note

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