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The Social Construction of Population Science: An Intellectual, Institutional, and Political History of Twentieth-Century Demography

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DEMOGRAPHY AS MATHEMATICS AND MODERNIZATION

Demographers have often lamented their field's reputation as one of "all methods and no theory."[1] Pushed by advances in computer technology and pulled by the appeal of being the "hardest," most scientistic of the social sciences, the field has grown ever more sophisticated in mathematical technique. At the same time, theory has languished, becoming increasingly narrow and divorced from the realities of a rapidly changing post-Cold War world (McNicoll 1992). Leading members of the field routinely bemoan this state of affairs, though proposals for remaking the discipline are rarely offered (Preston 1993; Keyfitz 1993).[2]

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[1] Many observers have noted, usually with regret, the relative lack of interest in theory in the field. Recent comments to this effect have been made by McNicoll (1980:441) and Schofield and Coleman (1986:1). Earlier observers also called attention to this aspect of the discipline. In a 1956 article, "Is Theory for Demographers?," Rupert Vance noted that, although "demography, on the whole, is doing very well these days . . . there is one area where demography is getting rather poverty-stricken and frayed at the edges." That area is theory: "It seems some time since we have made any investment of our own in basic theory" (Vance 1956:88). The exception, of course, is mathematical theories such as models of the stable population and life table. These have enjoyed ample investment of scholarly energies.

[2] Recent complaints about the state of the field have focused on its flagship journal, *Demography*. One prominent demographer has expressed his frustration thus: "The arrival of *Demography* is greeted by me with utter dread. . . . It's irelevant, unnecessarily technical, etc. It's a disease that PAA [Population Association of America] members can't seem to shake" (Vining 1995:2).

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In recent years anthropologists and historians have recognized the centrality of fertility decline in societal transformations and sought to contribute to the demographic knowledge on reproduction (see for example Tilly 1978; Schneider and Schneider 1984; Gillis, Tilly, and Levine 1992; Kertzer 1993; Greenhalgh 1995a). From the perspective of these other fields, the problem of no theory in demography breaks down into two more concrete puzzles: Why is the field still wedded to many of the assumptions of mid-century modernization theory and why are there no critical—that is, politically oriented—perspectives in the discipline?

Non-demographers dipping into the demographic literature for the first time are often struck by the pervasiveness of modernization theory, a perspective that was heavily criticized and abandoned by much of mainstream social science two decades ago (a seminal critique was Tipps 1973). A review of demographic theorizing on fertility since mid-century, when that became a central preoccupation of the field, shows a remarkable persistence of the ahistorical, Eurocentric, and apolitical presumptions of modernization theory (Greenhalgh 1995b).[3] The central *problematique* of virtually all demographic theories of fertility change—how "traditional" fertility regimes become "modern" ones—is clearly formulated in terms of modernization theory's evolutionary view of societal development. In embracing this modernist preoccupation, demographic theories take on a whole series of unstated assumptions. Some of these assumptions—that history moves in a unilinear, predetermined fashion and that History can be collapsed into traditional and modern phases but that the unique histories of individual societies play trivial roles in reproductive change—are ahistorical. Other assumptions—that fertility transition is caused by and in turn causes further Westernization and that reproductive Westernization is good for everyone—are Eurocentric. Embedded in this second set of assumptions is the problematic notion that Europe and its offshoots are superior to the rest of the world and the source of all significant change. Finally, demographic theories of fertility change are apolitical. For even as they legitimize a political project of reproductive Westernization—making the demographic Other more like us—they remain silent about the historically created relations of unequal power between first world and third that permit this project to go forward. Reflexivity about the politics of demographic praxis is notably lacking in the field.

A second and related puzzle is why demography has remained relatively untouched by conceptual developments, in particular, ones critical of conventional liberal scholarship, in neighboring disciplines. Neither the global politi-

[3] Virtually all demographic theories of fertility transition—from classic transition theory, which predominated from the mid-1940s to the mid-1970s, to its successors, cultural or diffusion theory, wealth flows theory, partial theories focusing on women and the family, and microeconomic theories—embed core assumptions of modernization theory. The only exception to this generalization is the handful of institutional approaches (esp. McNicoll 1980, 1994), which, unfortunately, have never been very influential in the field.

cal economies of the 1970s, nor the postmodernisms and postcolonialities of the 1980s and 1990s, nor the feminisms of any decade have had much perceptible impact on the field. Somehow insulated from these intellectual developments, demography seems to be isolated from the mainstream of the human sciences.

In the last few years partial answers to these two questions have emerged from some critical intellectual histories of the field. In a series of pathbreaking essays, Dennis Hodgson (1983, 1988, 1991), Paul Demeny (1988), and Simon Szreter (1993) have traced demography's conceptual and theoretical limitations to the field's close ties to United States (U.S.) foreign policy needs in the Cold War era and to the preoccupation of U.S. population policy makers and their demographic advisers with the promotion of family planning programs as virtually the only solution to the third-world population problem. The field's overly close connections to the family planning establishment led to a preoccupation with the practical aspects of programmatic factors while neglecting people's preferences and the socioeconomic context that shapes them (Demeny 1988), a narrowness of theoretical scope (Hodgson 1983), and a perverse persistence of demographic transition theory, an outdated framework that serves the needs of policy making better than those of scholarly inquiry (Szreter 1993). (These authors' arguments are elaborated more fully below.)

Although these accounts of the field's shortcomings bring into sharp focus the impact of political developments on the evolution of demographic thought, newer approaches to the sociology of science and the construction of academic disciplines allow us to substantially broaden the account of what went wrong and why. An outgrowth of work in the history and philosophy of science, the sociology of knowledge, and feminist theory (Harding 1986; Hawkesworth 1989; Longino 1990; Pickering 1992), the critique of science suggests that science is a social activity of particular groups and that scientific ideas and findings are heavily influenced by the values and interests of the scientists, the social structures of research organizations, and the historical circumstances in which science is created. Inspired by the work of Michel Foucault, the emerging field of disciplinarity focuses on the control of knowledge organization and production by academic disciplines and the social practices by which it is maintained (Shumway and Messer-Davidow 1991; Messer-Davidow, Shumway, and Sylvan 1993). Although knowledges are situated and partial (Haraway 1988), these perspectives suggest that scientists are generally unaware of these influences on their intellectual practices and products.

From these newer perspectives, the critical histories of demography have three limitations. First, they tend to essentialize demographic science, treating it as something with an inherent essence or nature, whether that nature be one of a policy science, as in Demeny's (1988) account, or of an oscillating science, pursuing policy and knowledge goals at different times, as in

Hodgson's (1983). Research in the philosophy of science shows that science has no inherent nature. As Gieryn puts it, "'Science' is no single thing: its boundaries are drawn and redrawn in flexibly, historically changing and sometimes ambiguous ways" (1983:781) Science is simply what specific people make it to be. Second, the existing accounts pay insufficient attention to the practices that demographers themselves have undertaken in constructing their discipline. The actor's point of view is important because it allows us to see the full range of disciplinary strategies deployed, the motivations behind their deployment, and the embeddedness of those motivations in specific historical circumstances.

Third, and finally, the existing accounts paint an uncomfortably unflattering picture of demographers and their motivations. In these histories, demographers are portrayed as blind to their racist and class-ist presumptions (Hodgson 1983), ignorant of fundamental methodological and theoretical problems plaguing their discipline (Szreter 1993), and intellectually unprincipled, putting service to U.S. policy makers above concern with scholarly integrity (Demeny 1988). Although comparisons with other fields are not made, the impression created is one of demographic exceptionalism, that is, because of the high priority assigned to the third-world population explosion in official Cold War analyses and strategies, demographers were, if not uniquely, then at least unusually susceptible to the politicization of their activities and ideas. Yet studying the way disciplines evolve suggests that the problems demographers faced and the solutions they devised were generic ones shared by academic disciplines in general and by the other social sciences in particular (Ross 1979, 1991; Fuller 1993). By stressing the general character of these problems and practices, we can show that demographers' unimpressive record in the area of fertility theory was a product not of individual or even collective failing but of difficult historical circumstances that left them few attractive behavioral alternatives. By bringing out the historical contingency of knowledge creation, a social practice perspective allows us to develop a broader and ultimately more sympathetic account of why demographers developed the theories they did and clung to them despite the intellectual contradictions sometimes involved.

In this essay I outline a social constructionist approach to knowledge production in twentieth-century demography. This approach starts with the proposition that nothing in the nature of its subject made it inevitable that demography would develop as a highly mathematical field weak on social theory.[4] Other demographies could have emerged; other scripts for population studies could have been staged. The trajectory of demography, I will show, was a

[4] Certainly, the desire to estimate levels and trends of fertility, mortality, and other properties of social aggregates gave the field a quantitative bias and encouraged the development of measurement and estimation techniques. But the subject matter neither precluded the creation of sophisticated theories of population change nor constrained demography to grow up as a quasi-independent discipline isolated from the social, historical, and humanistic sciences.

historical product forged by particular groups of social actors operating in historically specific political and economic contexts. In elaborating this view I focus primarily on the practices of American demographers, the largest and most influential contingent of population specialists in the world. I concentrate on the group of demographers studying fertility. Although interest in fertility has recently declined (Teachman *et al.* 1993:526), that group has comprised the largest segment of the field throughout the post-World War II period.[5]

DEMOGRAPHY'S DILEMMAS AND PROPHYLACTIC PRACTICES: THE ARGUMENT

Although all the social sciences have grappled with their dual identity as social and policy sciences, pursuers of knowledge for its own sake, and knowledge for various applications, demography has had to struggle especially hard to manage the tensions arising from this duality because of the historical circumstances surrounding its birth. When the American university was consolidated in the late nineteenth and early twentieth centuries, five fields found homes as social sciences: economics, psychology, anthropology, sociology, and political science (Ross 1979). Demography, a late developer, did not emerge as a discipline until the 1920s and 1930s (Vance 1959). Lacking a home in the university, students of population in the early twentieth century lacked status, security, and access to regular funding. Thus, from the beginning, population specialists had a particularly strong professional need to construct their field as a science in order to acquire the social status, intellectual authority, and material resources that the more institutionalized social sciences enjoyed.

Demography, however, had another problem: a legacy of close association with politics and political movements. Since at least the time of Malthus, demography has been associated in the public mind with political controversies and unsavory projects aimed at the lower classes and minority groups. These associations were strong in early twentieth-century America, as activists promoting birth control, eugenics, and immigration restriction crowded into the field, all claiming the mantle of population specialist. To establish

[5] A review of the contents of the field's three leading academic journals (*Demography, Population and Development Review,* and the London-based *Population Studies*) reveals that fertility and closely related topics remain the most studied subjects within demography today. Between 1988 and 1992, the most recent five-year period covered in this article, 42.2 percent of all articles and research notes (of a total of 469) dealt primarily with these subjects. When the most recent two years are added (1993 and 1994), that figure rose to 44.4 percent (of 642 articles and notes). Of the 285 articles and notes on reproduction published between 1988 and 1994, 73.0 percent dealt with fertility, 11.6 percent with population growth, 10.5 percent with fertility control (contraception), and 4.9 percent with fertility policy or family planning programs. The proportion of articles on these topics ranged from 38.0 percent in *Demography* to about 49 percent in the other two journals. These are conservative estimates of the importance of fertility and contraceptive research in the field. If the many family planning journals were included, the figure would grow dramatically.

their subject as a legitimate field, students of demography have had to draw sharp boundaries between themselves and activists pursuing those and other agendas. In other words, demography has had to construct itself as a science and to disciplinize, professionalize, and institutionalize itself in ways that stressed its identity as an intellectual rather than applied endeavor.

Yet—and here is the problem—the major demand for the field's intellectual products, and hence the largest source of its funds, has historically come from governments and, to a lesser extent, foundations and international bodies, all with action agendas. Thus, to gain access to funds for its work, markets for its products, and even data to analyze (most demographic data have been produced by governments), demography has had to operate primarily as a policy-relevant field, tailoring its work, and its theories, to the needs of its clientele's agenda for action. American demography has thus had to live with two fundamental dilemmas. First, while operating largely as a policy-oriented field to ensure its legitimacy, it has had to practice science making with a vengeance, declaring itself an intellectual activity with no connection to policy and politics and developing its identity as a highly quantitative and mathematical field.

One aspect of this dilemma—the field's need to simultaneously embrace and deny the intimate association with policy and politics—emerges with painful clarity from the 864-page volume, *The Study of Population,* edited by Philip Hauser and Otis Dudley Duncan (1959a). A standard reference for generations of demography students, this volume is one of the few large-scale efforts ever mounted to reflect on and take stock of the field. The major aim of this rather ponderously written (read: academic, no, scientific) volume is to construct demography as a science, that is, to prove that demography possesses all the characteristics of a pure science:

> A sharp division of labor must be effected between research with its related scientific activities and "social engineering" behavior directed toward the formation or implementation of policy . . . The preponderant proportion of demographers . . . recognize that their function is that of pursuing and finding knowledge rather than that of preoccupation with policy formulation, program administration, and problem solution. These latter, it is recognized, are the tasks of the social engineer and not of the social scientist (Hauser and Duncan 1959b:19).

Why the editors had to insist so hard on this point—going so far as to castigate some of their contributors for defying their instructions and writing about applied issues (1959b:41)—becomes clear in the following passage, penned in a rare moment of candor. I quote this passage at length because it captures the nub of the matter so well and because it was written by two leading figures of the field, who speak with an authority not possible for someone outside the field:

> Since there is no recognition of demography as a discipline in the administrative framework of universities, demographers are sometimes slightly marginal with respect

> to their home disciplines . . . [A] large part of the demand for the services of the demographer as a professional person is of an extra-scientific character . . . Much of the research and publication generated by this demand can be said to have only incidental value, at best, as contributions of "science". . . . The professional environment of the demographer, therefore, is one that has certain unusually stimulating features but at the same time one that provides certain distractions from the pursuit of science . . . [O]n the whole the goal of building science constitutes a subordinate and less than autonomous motive (Hauser and Duncan 1959c:116–7).

In other words, demography both wants and needs to be an intellectual activity, remote from the problems of society; but it exists in an environment that constrains it to operate primarily as a policy-oriented field that is sometimes pushed into advocacy. This fundamental problem has plagued American demography, at least that segment working on fertility issues, throughout its seventy-year lifespan.

Demography's second dilemma is that, while declaring itself a social science, at times it has had to construct and defend theoretical frameworks that meet the standards of utility imposed by its applied supporters, even when they conflict with commonly accepted scholarly standards such as correspondence with the empirical record and intellectual currency. For reasons illuminated by students of disciplines and hinted at above, few demographers have written about these problems.[6] Most who have—including two of the authors of the intellectual histories discussed above, and the writer of this essay—are located on the margins of the discipline, having one or two feet in another field.

In dealing with these historically given dilemmas, demographers have employed a great variety of social and intellectual practices. In this essay I examine three classes of practices: boundary work, theory adaptation, and the construction of the social structures and disciplinary cultures of the field through institutionalization, professionalization, and socialization. American demographers have performed two main kinds of boundary work: demarcating demographic science from non-science and adjusting the boundaries with neighboring fields to bring selected methods and ideas into the field. A second set of practices I gloss as theoretical adaptation. Since a, if not the, major demand for demography's intellectual products has come from organizations with applied agendas, demographers have at times had to tailor their theories to the needs of these organizations. The third set of activities includes institutionalization, professionalization, and socialization. As used here, institutionalization refers to the creation of the formal social structures in which demographic training and research are conducted. Professionalization entails the creation of the trappings of the discipline: its journals, associations, and so forth. Socialization involves the training and, when necessary, disciplining of

[6] Some have hinted at tensions, however. See, for example, Preston 1987:8–10.

the next generation of demographers. Together these practices result in the formation of a distinct discipline of demography.[7]

For purposes of exposition, it is useful to divide the construction of American demography into three phases: the period of disciplinary creation of roughly 1930 to 1960, the golden decades of the 1960s and 1970s, and the years of crisis of roughly 1980 to 1992. The story of the mid-1990s, when developments in national politics first restored and then threatened the flow of funds into the field, is left for another time. We turn now to see how these practices unfolded over time in response to specific changes in the larger political economy. The account that follows makes no pretense of being complete[8]; my goal here is simply to chart the main outlines of the development of the demography of fertility, highlighting some key episodes and processes. The discussion of the early years and, to a certain extent of the 1960s and 1970s, draws heavily on the arguments of Hodgson, Szreter, and Demeny, recasting them slightly to emphasize the practices that demographers themselves undertook in constructing their discipline. As we move forward in time, the arguments come to be based more on my own research on and personal knowledge of the field.

If all knowledge is situated, it is important to clarify the social locations shaping its production. The author of this history is an anthropologist who worked in the Population Council's social science research division for a decade (1984 to mid-1994), and has served on the editorial committee of *Population and Development Review* (*PDR*) since 1987. My years at the Council may have led me to emphasize the applied side of the field more than demographers based in university population centers might. The *PDR* work no doubt promoted skepticism about the mathematical emphasis of academic demography and the utility of the regnant family planning approach to population policy. My particular concerns about these practices, however, stem more from my anthropological interests in the political embeddedness and social constructedness of knowledge than from any recognizable influences of the journal's editorial views.

[7] One difficulty with this sort of historical analysis is that I may interpret some actions as related to disciplinary concerns when the conscious motives of the actors were otherwise. Also, the motives for any specific action would certainly have been more complex than my focus on disciplinary issues suggests. While I cannot completely avoid these problems of post hoc interpretation and oversimplification, I try to minimize them by avoiding imputing specific motives to specific actors. Whatever concerns guided the behavior of those whose histories I will relate, the many expressions of concern about disciplinary matters that were articulated by demographers over the decades persuade me that the big story I tell is correct. Demographers' own accounts of their history would be a welcome contribution to our understanding of these issues. I thank Simon Szreter for his caveats about these matters.

[8] Missing, for example, are demography's changing boundary with economics, its troubled relationship with feminism, and the role of government research foundations such as the National Institute of Child Health and Human Development. These are important areas for future research.

THE CREATION OF THE FIELD, 1930 TO 1960

In the America of the early twentieth century, population studies was an arena of conflict and controversy. Through detailed historical research, Hodgson (1991) has shown that in the first few decades of this century, when demography was taking shape, the field was dominated by activists promoting a multiplicity of agendas, from birth control to eugenics to immigration restriction. Stimulated by demands for population statistics from government and industry, the number of population researchers increased in the 1920s and 1930s. This group transformed population research from an activity of a diverse set of people—biologists, sociologists, economists, and statisticians —into an incipient discipline. The early history of the discipline was one of active efforts by these researchers to construct demography as a science, thereby separating it from activism and advocacy, and to enlarge the market and funds for demographic work.

In this latter task the early demographers were greatly assisted by global political developments, in particular, America's emergence from World War II as the leader and creator of a new world order; and the outbreak soon after of the Cold War that pitted the Western world against Communism. Both developments fostered a strong demand from international planners and U.S. policy makers for demographic research. We examine three moments in this formative period: the creation of the Population Association of America (PAA), the first institutional embodiment of scientific demography in the United States; the construction of a theory of demographic transition tailored to the needs of postwar economic planners; and the reconstruction of that theory in response to the growing threat of Communist expansionism that loomed large in the early years of the Cold War.

The Founding of the Population Association of America, 1931

Of the four factions that came together to form the PAA in the early 1930s, only one faction, made up of men from government, industry, and academia, was involved in the more academic activities of compiling and analyzing population statistics (Hodgson 1991). It was clear to many of these researchers that they could claim legitimacy for their organization and emergent field only, as one of them put it, "[by] guarding against religious, moral, and political dogmatism in the area of population" (Lunde 1981:481). To do so, they engaged in active science making, a practice that had emerged full blown on the American social science scene in the 1920s (Ross 1991:390–470). Defining their own work as scientific, they gained control over the organization by creating two classes of members—a College of Fellows and all others—excluding the non-Fellows as contenders for office. Explicitly ex-

cluded from office was Margaret Sanger, the birth control advocate, who had obtained the funds to bring the group together (Lunde 1981).

In his history of American demography, Rupert Vance describes the scientizing project that motivated the PAA's founding and organization:

> In the popular mind the scientific study of population was still confused with the spread of propaganda for birth control. The organization of the association was delayed in the hope of avoiding entanglement in demographic controversy with the various natalists, pro-natalists, and depopulationists. Propagandists were not made welcome, and the original organization was carefully set up with only scientists on the executive board. Accordingly, very little popular interest in population problems finds reflection in the association, for it is definitely not a layman's organization . . . [T]his choice . . . definitely has improved the scientific status of demography in the United States . . . Most of the "crackpot" books on population are now written by non-members (1959:304–5).

That the scientism of the Association was a project of its founders can be seen in Vance's choice of words: Scientists are "careful," while non-scientists are "crackpots;" the Association is "definitely not a layman's organization"; and so forth. Such rhetoric aside, the organization in fact contained large numbers of reformers. Indeed, there was discussion of restricting membership to "scientists," until it was pointed out that "many of the organizers were not necessarily scientists" (Lunde 1981:481). Furthermore, as Hodgson points out, these self-styled scientists were hardly free of the political ideologies and projects from which they sought to dissociate themselves. Many of the association's founders were ideologically committed to biological Malthusianism, whose racial doctrines colored their academic work (Hodgson 1991:18–19).[9] Indeed, Hodgson argues that the formation of the PAA, along with the constitution of an independent discipline of "population science" which it signalled, was tied to the need to find a home for the racist and class-ist views of many population specialists concerned about the high fertility of the lower classes and immigrant ethnic groups. Such views were being increasingly rejected by the more established fields of biology, anthropology, sociology, and psychology during the 1910s and 1920s (Hodgson 1991:12). Thus, the insistence that demography was a science served both to legitimate the field as an emerging discipline and to protect the pursuit of ideologically motivated political agendas under the cloak of science. The eugenics agenda disappeared in the late 1930s, but other ideologies and agendas emerged to take its place, as we shall see shortly.

What distinguished scientists from non-scientists was not that the former engaged exclusively in the pursuit of knowledge. Rather, scientists did what was regarded as scientific work—analyzing statistical data—usually out of concern with a pragmatic or policy issue, but refrained from energetically

[9] Henry Pratt Fairchild, the New York University sociologist who served as the association's first president, was, as one historian put it, the "leading academic racist of the 1930s" (Reed 1978:204).

advocating any position on the issue. Those whom they labelled non-scientists were outright advocates doing propaganda, organizational, and other work in support of their causes. The policy motivation behind "scientific demography" is reflected in the "problems" definition of the organization's subject of interest. The PAA's purposes, according to the original charter, were "to organize, promote, and support research *with respect to problems connected with human population* in both its quantitative and qualitative aspects, and to disseminate the results of such research" (Lunde 1981:482, emphasis added). And when the Association was incorporated in New York State in 1937, its official goals became even more policy oriented. The incorporation charter called for establishing a new organization devoted not to understanding per se but to "*the improvement, advancement, and progress of the human race* by means of research with respect to problems connected with human population" (Hodgson 1991:25, n.7, emphasis added). This remains the PAA's official objective today. What is unusual here is not that demographic science reflected the values of the early demographers nor that it had applied as well as knowledge aspects—these are typical of all the social sciences. What is unusual in the scientizing project of the early demographers is the hierarchy they established placing knowledge goals in the service, ultimately, of activist ones. This construction of demographic science was to stay with the field and to have long-term consequences for demographic theory.

The Birth and Re-birth of Classic Transition Theory, 1929 and 1945

If the demands of New Deal programs for demographic input had helped American demography "attain maturity" (Vance 1959:293), the demographic requirements of post-World War II economic planners fostered its rapid growth. The experience of the interwar years had convinced Americans that isolationism was harmful to American interests and had to be replaced by an internationalism involving active engagement in—and manipulation of—the affairs of the world (McCaughey 1984:122–3). America's strategy for managing the transition to peace involved creating new transnational institutions, supporting decolonization, and promoting social and economic development in the new nations of Asia, Africa, and Latin America.

This fortuitous turn of events created a major market for demographic research on the population of the "underdeveloped world," providing an infusion of funds into the field.[10] The impact of global political changes on

[10] Szreter (1993) shows that the increased demand for demographic research stemmed also from the institutional and intellectual developments of the 1930s, in particular, the increased acceptability of economic and social planning as an activity of the federal government, rooted in New Deal and wartime programs, and new developments in economics fostering interest in the economic implications of demographic change. Princeton University's Office of Population Research, which was to emerge the leading center of demographic work, was established precisely to do research on international population problems.

demographers' fortunes can be seen in the differing receptions accorded demographic transition theory when it was introduced in 1929 and 1945. That theory placed all countries on a grand evolutionary scheme running from pre-transitional ("traditional") to transitional to post-transitional ("modern"). Although the accolades for inventing classical transition theory have long gone to Frank Notestein (1945), Kingsley Davis (1945), and their colleagues at Princeton, in fact the synthesis of the mid-1940s represented not the birth, but the re-birth of transition theory. The theory was first elaborated by the American demographer, Warren Thompson, and published in the *American Journal of Sociology* in 1929 (Thompson 1929). As Szreter (1993) has argued, Thompson's more academic work suffered a stillbirth because demographers and policy makers were preoccupied with domestic issues in the late 1920s and 1930s. It is only in the mid-1940s that the theory, now in its Princeton formulation, "took off" (in Rostow's famous phrase) in response to strong demand for such a global framework from a new cohort of national and international social and economic planners (Szreter 1993). It is significant that Notestein's seminal statement of transition theory was presented not to a scholarly audience but to a conference dealing with global food problems in the post-World War II era. I return to this point below.

Because it offered a general historical model that tied fertility decline to Western-style socioeconomic modernization and political liberalization, demographic transition theory must have had great appeal to post-World War II planners. The ingredients for demographic success were clear: "Urbanization, industrialization, rising levels of living, popular education, and popular participation in political life" (Notestein 1945:52). This formulation provided a recipe for promoting the development of Asia, Africa, and Latin America that confirmed both the superiority of the Western way of life—after all, it was this, the demographers argued, that had brought fertility rates down--and the wisdom of exporting Western practices to the less fortunate parts of the world.

Davis's work in particular exuded confidence in the demographic magic to be worked by Western-style modernization. His 1945 article spelled out the worries that many Americans probably felt about the rapid growth of the former colonial possessions and then allayed them with the comforting thought that cultural Westernization would bring their fertility rates down:

> As Western civilization spreads from its present centers to the rest of the world, carrying with it a wave of population growth, it becomes clear that the Europeans . . . have become its victims. The possibility that Asia's teeming millions will double or even triple within the next few decades, acquiring Western instrumentalities at the same time, appears as a Frankenstein appalling to many observers (1945:7).

Davis goes on to "dispel the gloom" by pointing out that "the Asiatic *races* [are not] going to cause the whole world to 'sink' to the level of present-day Oriental civilization" because it "will pass irretrievably as the Asiatic peoples become Westernized" (1945:8,7; emphasis in original). While disavowing the

racism of the 1930s eugenicists, transition theory embodied and legitimated a smug ethnocentrism, common at the time, that saw Western civilization as superior and eventually displacing all others.

The enthusiastic welcome enjoyed by the Princeton version of transition theory was due not simply to the existence of a new, enlarged market for demographic ideas, however. In a practice I have called theoretical adaptation, the Princeton demographers themselves took an active role in tailoring their ideas to fit the needs of their emerging policy-oriented audience. Notestein's 1945 article in particular was keyed to the practical requirements of his audience of food planners. Focusing on the future course of world population growth, the article set out in clear terms the broad stages of "demographic evolution"; zeroed in on the countries with a critical "high growth potential," especially those in Asia; and then elaborated alternative scenarios in which rapid population growth would be checked either by repeated catastrophes or by thoroughgoing modernization, political participation, and strong anti-natal policies (1945:52). Though not proposing any specific policy suggestions (those would follow soon; see below), Notestein made himself useful to the new breed of international planners by outlining plausible future scenarios on which economic planning could be based.

In molding their analytic framework to the needs of planners, these demographers performed a major service for the growing field of demography: They solved the market problem by solidifying what would turn out to be a principal market for their research—development planners. In doing so, however, they tied fertility theory to the political project of cultural, economic, and political Westernization of the third world. Certainly, the Eurocentric assumptions underlying this project—that Western lifeways were superior, legitimizing intervention in other societies to make them more like us—were shared by the demographers and by much of American society at the time. However, by facilitating the embodiment of these assumptions in the political projects of powerful global actors, the demographers created a framework over which the scholarly community, with its standards of intellectual objectivity and open discussion, had little control.

Reworking Transition Theory in the Cold War Context, 1945 to 1955

With the end of World War II, real-world population problems became matters of urgent national concern, and demographers were called on to help solve them. Based on their research on Western nations, demographers had considered population growth rates of over 1.5 percent a year quite high. In the late 1940s and early 1950s, however, they gradually became aware that much of the nonindustrialized world was growing much faster. This was a crisis of major proportion, one that responsible population specialists could not ignore.

Action to alleviate the population crisis became even more urgent in the

context of the emerging Cold War between the communist bloc and the so-called free world. Rapid population growth was seen as threatening the former colonies with severe resource shortages, economic catastrophe, and political instability, conditions that were believed to breed Communism. With one-third of the world's population, mostly in the underdeveloped areas of Asia, as yet uncommitted in the bi-polar contest (Hauser 1958b:14), excessive population growth became a potential threat to U.S. security:

> To the extent that underdeveloped nations are frustrated in their efforts to advance their living standards, they will . . . be more open to the blandishments of the Communist bloc. Furthermore, if the underdeveloped Communist nations demonstrate that they can achieve more rapid economic progress than the underdeveloped Western nations, the free way of life may well be doomed. Success or failure in this fateful contest may well hinge on the ability of the nations involved to decrease their rates of population growth (Hauser 1964:119).

Convinced of the critical need to become active in the policy arena, and, no doubt, perceiving an opportunity to expand the market for their ideas, demographers began to address their arguments to U.S. foreign policy makers, using Cold War language to make their case. Titles such as *Population and World Politics* (Hauser 1958a) and *Population Growth: Threat to Peace?* (Moran 1965) became commonplace.

The solution that Notestein and others devised was direct government intervention to lower the birth rate.[11] Although their previous research on Western nations, summarized in classic transition theory, suggested that fertility would fall only in response to economic development, they came to believe that in the nonindustrialized countries, high fertility itself was impeding economic development. Despite the absence of evidence that giving traditional agrarian populations access to improved contraceptive methods would by itself lower fertility, demographers became convinced that the situation was so dangerous that direct intercession was needed to forestall catastrophe. Reversing their earlier theoretical stance, they began advocating intervention in the form of national family planning programs as the only practical way to reduce birth rates (Hodgson 1983:10–20).

Szreter (1993) has traced this transformation in the writings of Frank Notestein, the most prominent member of the influential Princeton group. In 1945 Notestein saw fertility decline as a long-term process requiring full-scale modernization. By 1949 he had become a full-fledged family planning advocate, urging that fertility control programs be established immediately, even though projects for social and economic development had not yet been initiated. What changed his mind, Szreter argues, was the fall of China to the Communists in 1949. This major upheaval in America's international rela-

[11] Notestein and his colleagues were not the first to come up with the family planning solution to the problem of high growth rates in the third world. India was developing such a strategy at about the same time. Notestein himself published a brief article on Indian population policy in the early 1950s (Notestein 1951).

tions, a development with which Notestein was personally familiar,[12] fundamentally altered the map of the postwar world, creating deep fears that Communism would continue to spread. The need to gain client states for the West created a strong demand in Washington for a liberal, democratic model of family planning of the sort Notestein and his colleagues came to advocate.

This intellectual turnaround was achieved by a series of mental maneuvers that might have raised scholarly hackles in a less politically mobilized time. During the late 1940s and early 1950s demographers made a case for their preferred policy by ignoring the results of previous research, criticizing their own mid-1940s version of transition theory, and inventing a new theoretical justification for intervention—the idea that peasants were rational beings who simply lacked the contraceptive means to plan their families—that left out the whole context in which reproductive decisions were made (Hodgson 1983:22–23).

The growing concern with applying demographic knowledge to fertility reduction had profound effects on demographic thought about fertility, the subject that had come to dominate the field's agenda. Hodgson (1983) has identified four such changes. First was a narrowing of focus from a high level of theoretical abstraction to an interest in the more practical matters that an engineer of social change needed. Second was a partial loss of historical perspective, as concern shifted from the past and present to the future, whose course many practitioners were trying to shape. A third shift was a shift from the macro to microlevel of study, in which the structural features of society were replaced by the utilitarian considerations of individuals as the prime determinants of fertility change. Fourth, demographers changed their view of society from an integrated and cohesive system to an atomistic collection of individuals. In adapting its theory to the policy needs of the post-War era, then, the policy-oriented branch of American demography, a sizable segment of the field, largely lost its interest in broad theory, history, social structure, and macro-level forces for demographic change. As documented elsewhere (Greenhalgh 1995b), these theoretical shifts were to prove relatively permanent; as of the mid-1990s, none of the earlier features of fertility theory had been recovered.

The practice of tailoring theory to policy needs was a normal response to the demographers' professional needs for a market for their ideas and funds for their work and to the historical circumstance of a real-world crisis in their area of expertise. The arguably unfortunate result, however, is that this practice left the field with a theory and set of ideas that were better suited to the

[12] Notestein was in China on a Rockefeller Foundation-sponsored mission during late 1948 and early 1949, when the Communists won some of the key battles in the Chinese civil war. Using this and other evidence, Szreter (1993) shows that the Princeton demographers were personally familiar with these developments in international relations, underscoring the point about their importance in the evolution of demographic thought at the time.

needs of planners and policy makers than of scholars. As Szreter (1993) argues, transition theory provided policy makers both with a convenient projection tool and an ostensibly scientific justification for activism aimed at lowering fertility through the promotion of state-sponsored family planning programs. For scholars, however, transition theory was to prove highly problematic. It not only failed as an empirical generalization but provided few testable propositions and neglected crucial structural and historical forces for change.

Nevertheless, in the ensuing decades, the theory of demographic transition, together with its implicit assumptions, was to survive repeated empirical and theoretical challenges. Szreter (1993) and Demeny (1988) have argued that its long lifespan was due to the intellectual protection that modernization theory afforded and, when that cover was lost in the late 1960s and early 1970s, to the rise of a powerful government-backed family planning "industry" for which that theory provided a very useful tool. While supporting these views, in the following section I argue that the long life of transition theory, as well as the lack of alternative or critical perspectives more generally, is also rooted in the practices of disciplinarization. Once embodied in the social structures and world views of the field, these aspects of demographic theorizing became strongly resistant to change.

The active embrace of an interventionist agenda, with its subtle threats to intellectual integrity, entailed some prophylactic science making to protect the field's scientific image and credibility. The intimate connection between the two projects is clear from fact that the same individuals often engaged in both—and at the same point in historical time. Thus, the same Philip Hauser who worried in *Population and World Politics* about the specter of Communism and need for demographic contributions to the struggle against it (1958b:19) insisted, in *The Study of Population,* that the proper role of the demographer was to pursue scientific knowledge and not to solve population problems (Hauser and Duncan 1959b:19; see the quotations above). Yet Hauser and his colleagues in the 1950s managed the contradictions between science and policy work with great skill, for in the next two decades demography was to enjoy unprecedented official support while becoming firmly ensconced in the university, with all the status, prestige, and intellectual credibility that a university base implies.

THE GOLDEN YEARS, 1960 TO 1980

During the 1950s, birth control remained a taboo subject, frustrating demographers' efforts to implement their family planning strategy (Piotrow 1973:3–52). With foundation support, however, they were able to begin building centers of demographic training and research and to solidify the intellectual rationale for intervention. In the early 1960s the tide began to turn, as advocates of international population control grew increasingly successful in pro-

moting their cause behind the scenes (Donaldson 1990:31–42). In 1967 the U.S. Congress earmarked funds for population control abroad, leading to a huge influx of funds into the field (Donaldson 1990:42–52). These decades were a golden age for the discipline. Looking back from the resource-poor 1980s, John Kantner, PAA President in 1982, wrote with evident sense of loss: "Heady times those, and something in it for everyone—the activist, the scholar, the foundation officer, the globe-circling consultant, the wait-listed government official" (1982:430).

Substantively, the mid-century history of the field was one of active embrace of the family planning agenda by many members of the discipline. Operationally, it was one of rapid institutionalization, professionalization, and socialization of a new generation. A crucial task in these decades was to manage the conflict between policy work and dependence on activist donors, on the one hand, and the standards of scientific research, on the other. To this task, demographers brought the classic practices of science making and boundary demarking, both to include policy issues as science and to exclude critical perspectives as non-science. I examine four episodes: the establishment of the family planning agenda and its scientization; the field's firm but partial institutionalization in the academy; the founding of *Demography* and *Population and Development Review,* the field's scientistic and anti-scientistic journals, respectively; and the silencing of the critical voice of the radical student journal, *Concerned Demography.*

Scientizing the Family Planning Agenda

> Research directions in demography are more sensitive to the demand for demographic products [by external agencies] . . . than those in other social sciences. This is not to say that the development of the discipline has no internal logic, but only that these forces operate in a more sporadic and disjointed fashion . . . [This] sensitivity . . . partly reflects the fact that demography is a small discipline lacking security in academic bureaucracies and always in need of a *raison d'etre* (Preston 1993:595).

These lines, penned by Samuel Preston in 1993, capture well the situation of the field in the 1960s and 1970s, when Cold War alarm about overpopulation brought large amounts of money flowing into the field, leading to rapid institutionalization of the discipline and an important place for family planning on the research agenda. In the Cold War context, the field of demography mushroomed. In 1950 American demography was a small field that supported only three graduate programs. This changed dramatically after the Ford Foundation began making grants to establish population studies centers in American universities. In one decade, between 1951 and 1961, seven new programs were funded; in another six years, between 1961 and 1967, nine more were added (Hodgson 1988). In creating these programs Ford's basic agenda was not science per se but action, specifically, action to solve the problem of rapid

population growth in the third world.[13] Much of the money was in the form of soft contracts for family planning development and evaluation research. Thus, a good number of graduate students in the 1960s and 1970s—who are among the leaders of the field today—cut their professional teeth on applied family planning research. In a number of the centers, demographic training included a heavy dose of family planning development and assessment.[14] Reports from students suggest that the population studies programs that they went through had a "hidden curriculum" of turning students into ideological converts for the family planning mission (Caldwell and Caldwell 1986:140). For many in the field, young initiates and seasoned practitioners alike, the line between demography as a quest for knowledge and demography as a means of perfecting family planning programs was very blurred. Not all demographers adopted the family planning agenda, however. Throughout the postwar years a significant portion of the field neither engaged in applied family planning work nor accepted the view that family planning programs were a major stimulus to fertility decline.

After relying on foundation funding for a decade and a half, from the late 1960s the field began to get increasing sums from the U.S. government, in particular its Agency for International Development (AID). The agency's Population Office had one overriding concern: to promote family planning programs throughout the third world and, later, to improve their efficiency through "operations research." Soon AID was supplying a large fraction of total funds available for population research. Paul Demeny argues that AID fostered an "industrial mode of research" which put a high premium on research products that could be quantified, standardized, replicated, and packaged for use in countries around the world (1988:464). Through the power of the purse, the industry "assigned to social science research on population issues the role of handmaiden in family planning programs" (1988:466).

Although this explosion of public, government, and foundation interest in demographic problems was tremendously stimulating for the field, it posed subtle and not-so-subtle threats to the intellectual soundness of the discipline. It did so in three ways: by narrowing the scope of research, by replacing scientific with utilitarian standards of evaluation, and by restricting the development of

[13] In funding the population program at the University of Michigan, for example, the Ford Foundation stated its goals this way: "The institutional base of population study in the United States is too small to meet the growing need for qualified personnel and technical assistance on population projects, especially in the less developed areas. . . . The need for trained demographers has been greatly intensified by the growing interest in population problems in the less developed areas and especially by the development of national policies favoring population control" (in Caldwell and Caldwell 1986:59).

[14] This was particularly true of the Population Studies Center at the University of Michigan. The brand of demography practiced at the University of California, Berkeley was far removed from the family planning world view of, say, Michigan and Princeton (Geoffrey McNicoll, personal communication).

critical perspectives necessary for the healthy development of any field. First, the dominance of the family planning agenda tended to remove whole classes of analytic issues and fertility determinants from the research agenda. Narrowly focused on the practical aspects of supply factors (those relating to family planning programs), such research tended to neglect the whole range of demand factors (those reflecting people's preferences) (Demeny 1988) and to preclude more basic research aimed at understanding the larger context within which both sets of forces operated (Caldwell and Caldwell 1986:154).

Heavy reliance on external funding also posed threats to the field's intellectual integrity by imposing utilitarian standards of evaluation on some of the work done. In accepting foundation and government money to do applied research, demographers had to accept the standards of the donors, criteria that were not always consistent with the highest standards of scholarship. In a rare acknowledgment of this problem in the demographic literature, Kantner has written: "Few of us made more than mild protest as the profession was borne to prominence on a Malthusian tide of alarm. . . In this war against rapid population growth, truth often fell before expediency. The problem was presented in over-simplified terms, as were the solutions" (1982:430).

Students, who were not yet adequately socialized into the discipline's norms, were particularly critical of the dominance of family planning research on the demographic agenda and the poor scientific quality of some of the work that was produced. The more daring among them wrote criticisms such as this:

> Demographers are being used as administrators and public relations men for governmental family planning programs around the world. The pages of *Demography* and other population journals have been filled with glowing reports of family planning. To the layman, these reports have the ring of scholarly objectivity and truth. To many professionals, they have become the ultimate in slipshod methodology, half-baked interpretations and outright lies . . . When the educated public finally catches onto [sic] the chicanery, the integrity of the profession of demography will fall to a new low (CD Editors 1969c:3).

As they were soon to learn, however, critical approaches were particularly unwelcome in the field they had joined. Because it was not an established social science discipline, with automatic claims on university resources, demography had to rely for much of its support during the 1950s, 1960s, and 1970s on non-academic donors, who had agendas for applied science. These donors did not welcome criticism of the larger power structures of which they were a part. Nor did they charge that family planning was an individualistic approach to the population problem that diverted attention from the larger social structures encouraging high fertility. Although such claims were occasionally made during the late 1960s and early 1970s, they rarely appeared in mainstream demographic journals.[15] Many found their way into the alterna-

[15] A review of articles published in *Demography* and *Population Studies* between 1969 and 1975 turned up only three items loosely reflecting critical currents of the day. Only one (Hall

tive journal, *Concerned Demography,* from which the above quotation is drawn. This journal, however, had a short lifespan and disappeared from the scene by the mid-1970s.

Demographers supporting the family planning agenda responded to these potential conflicts between the scientific standards of open discussion of all issues and the practices of some in their branch of the field by quietly suppressing the student rebellion (this story is told below) and by redrawing the boundaries of demographic science to incorporate family planning as a legitimate topic of scientific inquiry. One of the central figures in this project, Donald Bogue, used his position as first editor of *Demography,* the PAA's official journal, to stretch the boundaries of demographic science to include applied family planning research, in which he himself was heavily involved. Describing his ambitions for the journal three decades later, he said: "The then-budding (mid-1960s) field of family planning research, which was turning out materials of scientific merit, should be co-opted as a sub-field of demography" (1993:520). Bogue's presidential address to the Association (Bogue 1964) was part of the same scientizing project. By situating programmatic research within the bounds of science, Bogue and others of like mind sought to limit criticism of its role in the field and to confer status on those who pursued such research. Bogue went too far in pushing the family planning agenda when in 1968 he put out a special issue of *Demography* that engaged in family planning advocacy. By violating the sacred boundary between policy research and outright advocacy, he provoked a hostile reaction from the field (for details, see Guest 1994a). However, his larger scientizing project had a lasting impact. Judging from the content of *Demography,* to say nothing of the many family planning journals in the field, Bogue and others were very successful over the next three decades in countering criticisms such as those elaborated above and in making applied family planning issues legitimate, even important, research topics in the field.

Partial Institutionalization in the Academy

Demographers found an organizational solution to their basic problem—of trying to be and to appear scientific while relying heavily on applied agencies—that served everyone's interests well: partial institutionalization in the university. While remaining a sub-field of established social sciences, in particular sociology,[16] demographic research and training were located in

1973), on U.S. population policy in Latin America, was critical of business as usual. The other two, on relations between population size, military power, and antinatal policy (Hendershot 1973), and Marxian and Malthusian theories of links between development and poverty (Daly 1971), were more distanced, academic treatments of issues that loomed large in policy debates of the day.

[16] Some attempts were made to establish demography as a separate department. Caldwell and Caldwell (1986:146) report that this initiative, which was popular in some quarters in the early 1970s, had lost momentum by the mid-1980s.

organizationally separate population studies centers with their own funding, students, research equipment, seminar series, libraries, and so forth.

Such an arrangement, which placed demographers inside the university but in part outside its controls, was mutually beneficial to the donors and the demographers (and to the universities as well). It gave the donors an organizational funnel through which to give large sums to third world family planning programs while avoiding charges of U.S. imperialism that certainly would have been lodged at government-to-government programs. As Peter Donaldson explains,

> Giving funds to American [universities and nonprofit groups] for them to spend overseas allowed the United States [Government] to publicly deny that it had a population policy for poor countries, and allowed those in developing countries receiving aid to deny that they were being supported by a foreign government. (1990:70)

Foundations, whose support was used to establish the centers, saw some of the same as well as other advantages in the arrangement (Caldwell and Caldwell 1986: especially 59–61).

The demographers enjoyed the professional status of university professor, the relative security of institutional bases within the university (the center and home department), and, for some, the luxury of doing basically applied research and training work in the name of scholarship. Because they were institutionally independent, the population studies centers also allowed demographers to fully preserve their professional autonomy—that is, they enabled demographers to avoid scrutiny from colleagues in neighboring fields who might question the scholarly relevance of the applied family planning work or, in later years, the assumptions of transition theory. Finally, the center setup allowed demographers engaged in family planning work to live a dual life, and a rather glamorous and exciting one at that. While serving as university professors, they were also part of the "population establishment"—the interconnected network of foundations and government organizations that funded numerous trips for conferences, workshops, consultations, site visits, and so forth, all in the name of promoting demographic science (Bachrach and Bergman 1973; Donaldson 1990:65–74). In the 1960s and 1970s, when the field was flush, its university-based practitioners enjoyed the best of both worlds.

Although the demographers' relative isolation from the other social sciences served a number of professional goals, it also contributed to the perpetuation of earlier theories of reproductive change and to a lack of questioning of basic assumptions. The creation of separate population studies centers reduced opportunities for contact with scholars and scholarly developments in other branches of sociology, as well as related social sciences. Heavy involvement in family planning work, which involved considerable travel, tended to remove demographers from the academic world and its concerns with staying abreast of new developments in social theory. The training programs created

in these centers emphasized learning demographic techniques and discouraged students from obtaining a broad grounding in social theory in areas outside the demographic field.

If demographers within academia had few opportunities to broaden their theoretical horizons, their many colleagues employed outside the university had fewer still. By definition, their work involved applied research—whether statistical analyses, survey research, or policy analysis—none of which demanded or particularly benefited from state-of-the-art theory. Indeed, they had little use for social theory of any sort.

Thus, partially segregated from mainstream social science by institutional set-up, many, if not most, demographers probably missed the critiques of modernization theory that swept through development studies in the late 1960s and 1970s. Any latent interest in such critiques might perhaps have been stifled by their close contacts with the family planning world, which held certain truths, in particular, its assessment of the seriousness of the global population problem and the correctness of the family planning solution to it, to be beyond question. The same sorts of factors may help explain why demographers failed to attend to theoretical developments in other areas—such as political economy, social constructionism, feminism, and cultural studies—even though some, which arose in neighboring social sciences in the 1970s and 1980s, had demographic applications (on the demographic implications of such perspectives, see Hammel 1990; Greenhalgh 1990; Carter 1995; Fricke 1995, among others). Institutionally divorced from challenges to their central theory and cut off from new theories emerging in other fields, demographers continued to rely on transition theory and, even more so, its underlying assumptions, to order the demographic facts that poured in during these decades.

Two other aspects of the field's institutionalization contributing to the slow pace of theoretical change were (and still are) its small size and the concentration of research and training in a small number of centers. These features of the discipline, supported by government and foundation funding patterns, are reflected in publication patterns. In *Demography,* the prime outlet for conventional quantitative work, the top twenty institutions produced roughly 50 percent of the articles published between 1964 and 1992, while the top ten centers contributed about one-third (Teachman *et al.* 1993:527; unfortunately, similar statistics for other journals are not available). These institutional features of the field are the surface manifestations of a disciplinary social structure in which tight personal networks bind members of the field together. Because expressions of loyalty, friendship, and communal spirit are crucial to continued membership in the club, demographers are loath to develop searching critiques of each others' work, even when they might be warranted (Guest 1994a:86–89). This small-scale communal social structure of the field, enabled by its size and institutional concentration, has undoubtedly had a con-

servative effect on demographic theory, perpetuating older, established views and discouraging the emergence of competing schools of thought.

Professionalization: The Founding of Demography (1964) and its Antithesis, Population and Development Review (1975)

As demography became ever more applied, demographers sought to re-assert the field's identity as a science, in particular, a highly technical and quantitative one. A key episode in science making was the founding in 1964 of *Demography,* the PAA's official journal. Donald Bogue, who, as we have seen, was the first editor, had the following ambitions for the new periodical:

> The journal should help PAA strengthen its "image" as a scientific organization and outgrow its "population problems" orientation. The journal was named *Demography* (rather than "Population Problems" or some similar title) in order to give it the desired air of correctness. Royal blue and rather austere, formal type were chosen for the cover for the same reason (1993:520).

Although, as we saw earlier, Bogue actively welcomed family planning research during his five years as editor, over the long run the journal has emphasized technical sophistication. Even some of the field's most eminent mathematicians have been moved to wonder whether the journal did not go "too far in the direction of methodology and empiricism" (Keyfitz 1993:533).

Developing demography as a mathematical field served a number of professional goals. First, it helped secure demography's base within the university by increasing the field's status: among the social sciences, the greater the proximity to the natural sciences, the higher the prestige (Ross 1991; on demography's high status within sociology, see Guest 1994a). It may also have protected the demographers' intellectual turf by discouraging social scientists who lacked the relevant technical training from taking an interest in population matters. And last, it bolstered demography's claim that it had something distinctive and scientific to offer to policy makers—tools for estimating demographic rates from limited data, projecting future trends in population growth, and quantifying the impact of high fertility on future rates of economic growth.

While serving a number of professional objectives, however, the emphasis on technical sophistication had deleterious effects on theory. With disciplinary kudos rewarding mathematical talent, theory construction became a lower-status activity, discouraging its pursuit by ambitious members of the field. The quantitative cast of the field also limited the types of theories that could be constructed. As a field strongly oriented toward generating numbers under the notion that "if you can't measure it, it isn't important,"[17] demography resists theoretical constructs that are inherently difficult to operationalize,

[17] The quantitative character of the field is captured in its definition as "the scientific study of human populations, primarily with respect to their size, their structure, and their development, from a quantitative point of view" (Henry 1976:xii). The concern for quantitative precision is reflected in demographic textbooks, which give overwhelming priority to "the methods and materials of demography," the title of a leading text (Shryock and Siegel 1976).

measure, and analyze as variables. Such concepts as reproduction as a social construction or gender as a political relationship—both central to the anthropological and historical understanding of fertility—simply do not lend themselves well to being treated in this manner. While it promotes demography's scientific status, theoretically this insistence on quantifiability may be one of demography's greatest weaknesses, for it greatly constrains the demographic imagination.

If academic demography was intent on science making, a very different agenda motivated the founding of the second population journal based in the United States, *Population and Development Review,* in 1975. Based in the Population Council's social science research division, *PDR* was almost anti-scientific and anti-demographic, at least as these qualities had been defined by *Demography* and much of the field. Eschewing highly technical material, its founder, Paul Demeny, sought to publish, and thereby promote, broad research in many disciplines on the complex interrelations between social, economic, and demographic change, including the demand factors that had been largely excluded from family planning research, as well as a wide range of policy options that had slipped off the demographic agenda when the family planning solution gained ascendancy (*PDR* 1975; also Demeny 1975). While it succeeded in its first goal of expanding the agenda of population research beyond the fairly narrow confines of scientistic demography, *PDR* was less successful in achieving its second objective of challenging the family planning consensus. If anything, that consensus grew stronger as time went by (Donaldson 1990:53–74).

Although the creation of separate journals and the existence of a separate association (the PAA) contributed to demography's growth as a quasi-independent discipline, the process of disciplinarization had the untoward effect of reinforcing the field's isolationist tendencies by encouraging demographers to talk to and write for each other, rather than colleagues in other branches of social science. Developing demographic discourses may have been beneficial to advancing techniques of data analysis, but it impaired the development of demographic concepts and theories, which were already showing their age. Through the refereeing process, among other ways, demography developed its own standards of professional evaluation. Not surprisingly, journal referees—generally other demographers—expected the papers they judged to show familiarity with the demographic literature but not with related work in other social sciences. Even *PDR,* which sought to escape the constraints of disciplinarity, as it had been defined by the field, had difficulty avoiding the limitations imposed by the available pool of referees.

The process of disciplinarization and the resulting restriction of interdisciplinary discourse are common to all fields of knowledge. In demography, however, the effects may have been uncommonly detrimental. Because the field had a rather thin conceptual and theoretical repertoire to start with, when its disciplinary boundaries began to harden, closing off intercourse with

neighboring fields, demography was left with a relatively impoverished body of ideas to call its own.

The Radical Interlude: The Rise and Speedy Demise of Concerned Demography, 1969 to 1974

Although most aspects of demography's institutionalization discouraged the development of critical perspectives, the field blossomed during the Vietnam era, when opposition to the war spawned the formation of dissident caucuses in many professional associations. It may surprise readers today to learn that demography also had a radical phase, or at least one in which critical voices insisted on being heard. To understand why few, if any, such voices can be heard today, it is instructive to review the brief history of this critical movement and its journal, *Concerned Demography.*

The group that called itself Concerned Demographers was founded in 1969 at the PAA's annual meeting. Spearheaded by graduate students at the Universities of Wisconsin, Michigan, and Cornell, this loose fellowship of citizen-demographers was concerned about the political implications of demographic research, the unexamined assumptions underlying the field's research and training activities, and the threats to scholarly integrity posed by heavy dependence on government and foundation funding. In expressing these concerns, the students were reflecting political currents at these universities, where it was politically correct to be "radical" (Guest 1994b). The group sponsored sessions at the annual PAA meetings and attempted to alter certain practices of that association. Its main activity, however, was the publication of the journal, *Concerned Demography.* Based at Wisconsin, the journal was informally edited and published by rotating groups of graduate students at different universities and research centers. The journal published a wide variety of materials, from evaluations of the family planning establishment and its practices; to critical scholarship on such issues as human ecology, feminism, and Marxism; to reviews of books by establishment figures; to short items reporting on organizational matters, in particular, the need for money to support the effort.

For all the intellectual excitement generated, the journal and the movement that produced it had difficulty sustaining themselves. By the fall of 1971 what was once a "movement" or at least an "active caucus" within the PAA was already showing an organizational weakness that led to long delays in publication of the journal (Reynolds 1971:3). By the winter of 1974, the journal had incurred a debt of several hundred dollars; after thirteen issues, it ceased publication. With the demise of the journal, the group that supported it apparently ceased its activities.

Although a shortage of funds was the immediate cause of the journal's demise, the funding problem was but one symptom of the lack of support that these young demographers found for their ideas from many established mem-

bers of the profession. While some faculty members were sympathetic to the view that structural forces shaped reproductive outcomes (Guest 1994b), there was open hostility to the student project from many quarters of the establishment. This hostility is hardly surprising: The students, after all, were saying the unsayable. Not yet properly socialized, they were questioning the basic assumptions and social practices of the field, threatening in the process to expose the delicate balancing acts their professors had evolved to deal with the contradictions between demography's scholarly and applied agendas. Here is a sample of what they were writing:

> In its relationship with society, the PAA has been an active advocate of the established order while denying its role just as actively (CD Editors 1970a:1–2).
>
> The family planners have generally failed to distinguish between the values and facts in their arguments, a crucial responsibility for the scholar (CD Editors 1969a:3).
>
> Pressure is still strong in many population centers to restrain criticism of family planning, for fear that government and foundation research contracts will be jeopardized (CD Editors 1969c:3).
>
> While [President Nixon's 1969 population] message desperately needs discussion in the profession, demographers will probably devote almost all their energies to formulating research proposals for the money made available as part of the message (CD Editors 1969c:1).
>
> The willingness of scientists to maintain silence [about the exclusion of left-thinking scholars from National Institutes of Health and National Science Foundation advisory panels] . . . suggests the extent of the subservience of academia to the political goals of the government (CD Editors 1969d:6).

The field reacted as any field facing such threats would: It disciplined the disciples. Establishment members of the profession deployed a variety of social practices quietly but firmly to bring the students in line. They drew a clear boundary around the limits of acceptable, scientific, discourse, and placed most of the contents of *Concerned Demography* outside that boundary. They published counter-criticisms and defended the status quo in the journal itself. They withheld financial and institutional support. More positively, they co-opted the students into the establishment with offers of faculty positions and all the benefits of membership in the disciplinary club. In short, they both forced and enticed the young people to give up their youthful idealism when they graduated and became faculty members themselves.

The tactics deployed were many and colorful. The professors pinned the "non-scientific" label on the students with epithets such as "spoiled" and "jerks" (CD Editors 1969b:2). One professor wrote to the journal's editors that the first issue was "trash," "the worse piece of antiintellectual propaganda I have ever had the misfortune to read" (CD Editors 1970b:10). The professors had a rather easy time dismissing the journal as unworthy of professional respect because much of it was written not in academese but with youthful candor, wit, and sometimes excess. The occasional hyperbolic claim and

incautious choice of words made it easy for critics to dismiss the project as a whole.

The professors also denied institutional and organizational resources to their youthful critics. Otis Dudley Duncan, PAA president in 1969, suggested that "the dissidents could always get out if they did not like the organization" (CD Editors 1969b:2). The University of Michigan's Center for Population Studies refused to let Michigan students use the center's facilities to prepare the Michigan issue of *Concerned Demography,* a move the students found "marvelously" revealing (CD Editors 1970d:40). In the end, the professors' efforts at socialization were very successful. Facing a hostile environment and lacking financial and institutional support, the students had no way to carry on. After receiving their degrees, they were absorbed into the establishment, and *Concerned Demography* died an early death.

The story of *Concerned Demography* is important because the journal represented a collective and publicly visible challenge to the demographic mainstream by scholars promoting radically different perspectives. Yet this lively tale should not be allowed to obscure the fact that the marginalization of unconventional views has been a continuous process, arising from a myriad smaller struggles waged in less visible arenas (deliberations on funding of proposals, editorial decisions on publication of articles in mainstream journals, and so forth) by individual scholars advancing less radical views.[18] The result of these many skirmishes, from which mainstream views have generally emerged victorious, has been that, unlike other disciplines, where critical traditions live on in Marxist, feminist, postmodernist, and other alternative periodicals, demography allowed no tradition of critical thought to develop. As a result, liberal, modernization theoretic approaches have remained predominant throughout the post-World War II period. Although some senior members of the field undoubtedly regretted the loss of intellectual vigor that critical perspectives provided, both their own ideology and intellectual predilections, which were liberal, as well as their field's heavy reliance on government and foundation funding, made it difficult for them to create the political space for dissident voices to be heard. Their victories were won at considerable loss to the field, however, for without critical voices an overly strong consensus can evolve and serious problems of thought and practice go unchallenged. Strong consensus on important issues of substance and method is a defining characteristic of the field today (compare Guest 1994a:85–86).

DEMOGRAPHY IN CRISIS, 1980 TO 1992

During the mid-1970s, the sense of crisis that had created a strong demand for demographers' services in the past began to wane. In the third world, income levels were rising and birth rates falling, putting to rest both popular and governmental fears about a "population bomb." The new politics of Vietnam

[18] I thank Simon Szreter for his thoughts on these struggles.

and the women's movement at home and the New International Economic Order in the third world dominated the Bucharest World Population Conference in 1974, eroding confidence in the approach based on technical assistance in family planning (Finkle and Crane 1975). One result of these developments was a sharp decline in foundation support for the field (Caldwell and Caldwell 1986:129–35). Another threat came from Ronald Reagan's new, politically conservative administration. Its views, which drew on the work of the conservative economist, Julian Simon, challenged one of the most fundamental assumptions of the field: that population growth greatly hinders economic development and thus is a serious problem requiring policy attention. Reagan's "Mexico City policy," formally articulated at the World Population Conference in that city in 1984, declared that the relation between population growth and development was "not necessarily a negative one" (Finkle and Crane 1985:11). This revisionist view of the impact of population on the economy gained some support from an influential—and controversial—National Academy of Sciences report, which found the impact to be modest and contingent on national conditions (National Research Council 1986).

With demographic and political developments threatening to shrink the market for their intellectual goods and the resources that came with it, a tangible malaise crept over the field. In his 1982 address to the PAA, President John Kantner recounted the reversals the field had suffered recently: public apathy about population issues, attacks on the intellectual foundations of population control, threats to the generation of knowledge, and, most worrying, the loss of money, which had been available in unlimited supply (1982:430). Even in the applied family planning branch of the field, Peter Donaldson notes, the weakening of official U.S. support for international population assistance had taken its toll: "The field lacks a sense of direction and a set of agreed-upon goals. The momentum seems to have gone out of the international family planning movement" (1990:132).

The most tractable of these problems was what many saw as an attack on the intellectual foundations of population control. Demographers reacted to this threat in a predictable way: They sought to secure their market and funds by shoring up the intellectual underpinnings of their work, both applied and theoretical. Some demographers, especially those involved in policy research, turned to the consequences of rapid population growth, hoping to find in them new rationales to support continued government efforts to lower birth rates around the world.[19]

Others turned away from explicit efforts to affect policy to the task of finding an alternative to transition theory, which had been criticized so often and for so many good reasons as to be a disciplinary embarrassment. Theoret-

[19] These researchers looked to such issues as maternal and child health, resource distribution within families, the status of women, and environmental impact for evidence of deleterious impacts of rapid population growth.

ical interest focused on "culture," the one "variable" that empirical research had shown to be related to fertility decline (see Kertzer 1995 for an overview of this research). This search for more cultural theory involved a redrawing of boundaries to include some anthropological work and a look into demography's past for earlier uses of the culture concept. Both activities are explored below.

Although the approaches devised in the 1980s and 1990s—wealth flows, diffusion, and microeconomic theories as well as partial theories focusing on women and the family—represent advances over classical transition theory, these efforts must be judged less than completely successful. While offering fresh insights into neglected aspects of the demand for children—family relationships, the status of women, the values of children, and the institutional environment of fertility decision making—these new perspectives shared some of the fundamental problems of transition theory. Specifically, they excluded crucial historical and political forces for change and perpetuated the ahistorical, apolitical, and Eurocentric assumptions of mid-century modernization theory. (Institutional approaches largely escape these harsh judgments.)[20]

I argue here that in the 1980s and 1990s demographers were presented with an historic opportunity to develop fertility theory relatively free from the demands and constraints of policy-oriented paymasters. During the 1960s and 1970s, transition theory had served as a crucial justification for U.S.-led efforts to reduce fertility through the promotion of family planning programs (Szreter 1993). During those years political constraints, in particular, the urgency of winning the Cold War, discouraged sustained criticism of that theory. In the late 1970s, fertility declines in many parts of the world, coupled with the cooling and eventual ending of the Cold War, somewhat eased those political constraints, giving demographers the political space to engage in a more open, intellectually motivated search for a better theoretical approach. Yet, I will argue, they were unable to make creative use of this opportunity because they were limited by the past their predecessors had made. Having sold the usefulness of demography to American society on two convictions—that demographic traditionalism and modernity are real phenomena and that American intervention aimed at modernizing or Westernizing third-world fertility regimes is legitimate and good—and having created a whole disciplinary complex of institutions to turn these beliefs into action, demographers themselves had become their biggest supporters. Put another way, the field's own

[20] Institutional approaches such as those of McNicoll (1980, 1994) emphasize the role of historically inherited institutional endowments—community structures, family systems, sex roles, and the like—in shaping patterns of reproduction. In contrast to the universalizing thrust of most demographies, McNicoll's institutional work recognizes historical contingency and societal specificity and embraces narrative modes of explanation that can accommodate forces such as gender and power that are difficult to incorporate into conventional empirical models of demographic behavior.

interests now lay in perpetuating and re-marketing the tenets on which its contribution to American goals had originally been established.

The Partial Embrace of Anthropology

The search for better theories of fertility has involved the redrawing of disciplinary boundaries to embrace parts of anthropology.[21] However, the role of anthropology in demographic research has been carefully circumscribed. The demographic consumption of anthropology has involved an appetite for anthropological methods and ethnographic findings but not anthropological concepts and theories. Indeed, John Caldwell, the demographer at the forefront of the move to wed anthropology to demography, has defined the anthropological contribution as methodological, explicitly excluding efforts to formulate anthropological theories of population dynamics (1988:458–9). His discussion of the proper role of anthropological work in demographic research, published in *Current Anthropology,* a leading journal in the field, sends the strong message that anthropologists should stay out of the area of theory and confine themselves to the provision of demographically relevant ethnographic information.[22]

> Unfortunately [in the borderlands between anthropology and demography] . . . theoretical structures have grown unduly rapidly given the weakness of the evidence upon which they are based. Far too large a proportion of analysts with demographic interests have devoted themselves to such pursuits (Caldwell, Caldwell, and Caldwell 1987:34).

In his ethnography of intellectual life, *Academic Tribes and Territories,* Tony Becher describes the relations between disciplines as geopolitical (1989:36–38). That term seems apt in this case. Using Becher's metaphor, one might say that demographers have constructed the role of anthropology so as to annex new intellectual territory (qualitative methods, ethnographic data) while mounting a strong defense against loss of intellectual turf (fertility theory). Anthropology's encroachment on demography's theoretical territory may not only lead to loss of intellectual possessions but may also provoke open hostilities if anthropological ideas conflict with demography's or prove embarrassing if anthropologists discover what demographers prefer not to publicize, namely, that the field is longer on methods than on theory. Although such motivations guide boundary work in all disciplines, the unfortu-

[21] In the mid-1980s the Liège-based International Union for the Scientific Study of Population (IUSSP) established a Committee on Anthropological Demography. Its forerunner, the Working Group on Micro-Approaches to Demographic Research, was formed in 1982 to promote the use of anthropological and other intensive field research methods in demographic research. For most of its existence, a demographer has headed the IUSSP group. Funds for anthropological demography became available in the late 1980s and early 1990s, when the New York-based Mellon Foundation began to alter its population program to actively promote field research and area studies in training and research on third-world fertility.

[22] Another message, picked up by some young demographers, is that demographers should stay out of anthropological theory. I thank Margaret Greene for this insight.

nate result is that the potential for enlivening theoretical discourse that could be achieved by throwing open the disciplinary borders remains unfulfilled.

The long-term effect of demography's courting of anthropology may be quite different from that intended, however. For while demographers were quite successful during the 1980s in using the allocation of disciplinary rewards (in particular, invitations to conferences, posts on important committees, and funds for research) to channel anthropology's contribution into unthreatening areas, there are signs in the mid-1990s that demography's theoretical defenses are being breached (Fricke forthcoming; Kertzer 1993; Bledsoe *et al.* 1994; Schneider and Schneider 1996; contributions in Greenhalgh 1995a). I return to the subject of anthropology and its unexpectedly subversive influences on the newest generation of demographers in the conclusion.

Fertility Theory in the 1980s and Early 1990s: Reinventing Eurocentric Diffusionism

While theoretical work on the fertility transition continued to be done during the 1960s and 1970s, creating sophisticated theory was not a priority of the field. Despite its empirical and conceptual problems, conventional transition theory, especially in its modified form, provided a serviceable tool for policy makers and program managers concerned with getting contraceptives to third-world couples. As third-world fertility began to fall and the need for the theoretical rationale for intervention provided by transition theory weakened, demographers turned in the 1980s to the task of rebuilding fertility theory. This task was to prove difficult not only because many fine minds had been devoted largely to policy and program problems for so long. Theory construction also turned out to be difficult because the theoretical work from the 1950s onward succeeded mainly in undermining existing (that is, transition) theory; it produced many negative findings but little of a more positive sort on which to build.

Lacking a compelling policy rationale for adopting a given theoretical perspective, demographers might have turned to social theory in neighboring disciplines for inspiration. In fact, a few demographers did reach out to neighboring disciplines to "annex" some of their ideas. Geoffrey McNicoll's (e.g., 1980, 1994) application for institutional economics is a case in point. McNicoll and a few others, however, were the exceptions—and for good institutional reasons. As we have seen, the way the field was institutionalized not only discouraged, it actually created material barriers to interacting with scholars in other disciplines, even, in some cases, scholars in the demographers' home disciplines. Moreover, patterns of training had emphasized analytic techniques, giving students little incentive to branch out to learn broad social or political theory on their own. With little contact with scholars in other fields and minimal grounding in general social theory, demographers

followed a common disciplinary practice: They looked back into their own history for theoretical inspiration. As a result, the new approaches of the 1980s turned out to be less novel perspectives than reinventions of earlier perspectives.

This process and its effects can be seen in the construction of the diffusion or cultural approach by demographers associated with Princeton's European Fertility Project (Knodel and van de Walle 1979; Watkins 1986, 1987, 1991; also Cleland and Wilson 1987). This approach merits special attention because it is one of only two or three being actively developed and elaborated today (the others being microeconomic and evolutionary perspectives) and because it is becoming increasingly popular, informing the work of growing numbers of scholars. The result of demography's insulation from other fields was that, when the European Project found the social and economic variables stressed by classic transition theory wanting and when cultural variables appeared to hold promise, demographers looked back to earlier literature in demography to see how culture had informed demographic thinking in the past (see Kertzer 1995 for details). Since the field had been preoccupied by policy and program concerns during most of demography's recent past, it was not surprising that what the project's scholars found was a notion of culture applied to the issue of how fertility control spreads. However, that notion, diffusion, was embedded in the theory of modernization developed at midcentury. Thus, instead of moving beyond modernization theory when they moved beyond social and economic hypotheses, demographers succeeded in building important parts of it back into their theory of culture.

The primary source of diffusion theory in recent demographic writings on fertility is Everett M. Rogers's work on the diffusion of innovations.[23] Rogers's *Diffusion of Innovations,* published in 1962 (the 1983 book cited in demographic articles is the third edition), presented a theory of the adoption of innovations by diffusion that was grounded in evolutionary and Eurocentric assumptions. Like modernization theory generally, diffusion theory saw the adoption of (modern) innovations as a phased process with a probability of success conditioned by cultural norms. Constructing the familiar continuum from traditional to modern, Rogers postulated that social systems with modern norms (which were "more innovative, more progressive, more developed, or more economically rational" [1962:60]) facilitated the adoption of new ideas, while their polar opposites, societies with traditional norms, resisted innovation and change (1962:57–75). In that July, Rogers was invited to New York by Bernard Berelson, the president of the Population Council, who urged him to turn his attention to the diffusion of innovations in family

[23] This is clear from the citations included in these articles. Virtually every one cites Rogers's work as a major source. Another important, if rarely cited, influence was the classic study of the spread of contraception on Taiwan (Freedman and Takeshita 1969).

planning programs, as their performance at that time was quite dismal. This resulted in the volume, *Communication Strategies for Family Planning,* published eleven years later, in 1973. In this book Rogers, by now a convert to the mission of "defusing the population bomb" through family planning programs (1973:4), extended and modified his original "classic diffusion theory" of 1962 to the special case of communication in family planning.[24] This recent history of incorporating the culture concept into the demographic literature helps to explain why more theoretical work on culture in the 1980s and early 1990s takes such narrow views of culture and demographic change. Culture is seen as communication about contraception, while fertility decline is portrayed as a sociotechnical process spreading contraceptive technology.[25]

The history of the diffusion concept in twentieth-century demography goes back much further than the work of Everett Rogers, however. Rogers was a latecomer to fertility research. His writings were important, though, because they formalized the use of the diffusion concept (that is, made it attractively scientific) and narrowed the scope of what was diffusing from Western lifeways or broad norms about family life to the technological means of fertility reduction. Long before Rogers turned his attention to family planning, the diffusion concept had occupied an important, if little noticed, place in leading theories of the field such as those of classical transition (Davis 1945:5 and elsewhere) and of wealth flows (Caldwell 1982:289; see also Kreager 1993).[26] Diffusion theory's long lifespan rests in part on its ability to provide an ostensibly scientific concept that reflects many demographers' abiding belief that fertility decline and its means, as well as the cultural notions about the family that give rise to it, are Western innovations that "diffused" to backward third-world peoples. The underlying assumption is that the West is the source of all demographic change. The durability of demographic diffusionism is also supported by the larger body of Eurocentric diffusionist thought in history, geography, and many other fields. This interpretation shares those assumptions about the historical priority or superiority of the West and the central role of Europe (and the non-role of non-Europe) in promoting cultural change (Blaut 1993). The extended life of the concept of demographic diffusion is also due in part to its usefulness to policy and program personnel. For policy makers and program managers, the notion of demographic diffusion has legitimatized efforts to induce fertility decline in the high-fertility societies of the third world by dispersing Western contracep-

[24] The modifications were extremely minor and involved no change in basic assumptions (Rogers 1973:102–4).

[25] Other theoretical limitations of the approach are outlined by Kreager (1993).

[26] The notion that fertility decline is related to the spread or diffusion of contraceptive technology through interpersonal communication also informs Thompson's early version of transition theory, although he does not use the term (1929:969).

tive technologies to the people through the establishment of state-run family planning programs. And finally, because now, due to the successful scientizing work of the 1960s, family planning research is a bona fide part of academic demography. The diffusion approach thus finds a ready-made and enthusiastic group of users, who now have a certified theory, developed by some of the leading figures in the field, to guide their inquiries.

In adopting the diffusion concept and making it the centerpiece of their theory, demographic diffusionists of the 1980s and early 1990s took on—and, in the process gave fresh life to—a whole set of evolutionary and Eurocentric assumptions of which they seem only dimly aware, if at all. These assumptions are none other than those of modernization theory and, before that, nineteenth-century evolutionary theory. The central presumptions are that Western culture and social forms are superior (more "rational," "progressive," and so forth) and that demographic change is equivalent to Westernization. In my experience in the field, these beliefs are so deeply subjective that they cannot be retrieved for questioning. As argued at length elsewhere (Greenhalgh 1995b), the assumptions underlying diffusion theory are both ahistorical and apolitical. The term diffusion, for example, is silent about the historically specific political and economic conditions that permit the mass transfer of Western contraceptives to the third world for use in fertility control projects. Through its silence about the structures that support diffusion and its implicit assumption that the place of origin is superior to the place of destination, the notion of diffusion in fact supports a political project, that of justifying efforts to spread modern contraceptives to benighted "traditional" people. Unintentional though it may be, demographic research serves the political goal of "making them more like us."

These recent efforts to build new theory show how closely intertwined the practical and theoretical work on fertility have become. In the 1940s, demographers, lacking other substantial markets for their wares, reworked their theories to meet the needs of policy makers. In the 1980s and early 1990s, when the demand for a theoretical justification for policy was weaker, giving demographers some political space to build better social science theory, demographers succeeded in creating a perspective that was firmly rooted in applied family planning research and that served the goals of that type of applied work extremely well. The discouraging conclusion one might draw is that, through decades of skewing their research activities, institutional arrangements, training programs, and scientizing practices to the needs of a policy-oriented market, demographers may have become institutionally incapable of producing broad social theories of fertility, especially historically and politically informed ones, that are not tied to the instrumental projects to reduce fertility that the field has helped to promote and legitimize since the middle of the century.

CONCLUSION: OTHER DEMOGRAPHIES THAT MIGHT BE BUILT

How might anthropologists, historians, and others wishing to build broader political and historical perspectives on human reproduction react to these facts of demographic life? First, they should recognize that their knowledges, too, are situated. Acknowledging the limitations of their own disciplines would give them a healthy humility in advancing their views. Second, they should recognize the constraints that the history described in small part above will impose on theorizing by demographers in the future. Demography is unlikely to actively embrace critical perspectives—and not only because doing so might threaten outside funds and jeopardize its ability to effectively promote a policy agenda. Equally, if not more importantly, for reasons of self-selection[27] and institutional influence, most established demographers cherish the liberal ideas on which their theories are based. Like other scholars in the mainstream of twentieth-century social science (Ross 1991), demographers believe in the positivist methodology their field employs and are proud—rightly, of course—of the mathematical sophistication the field has achieved. They also value the disciplinary independence their predecessors were able to achieve. In other words, most demographers take pride in the very structures and practices that anthropologists and historians might view as constricting the theoretical imagination. Those interested in developing anthropological and historical approaches to reproduction would do well to recognize these points of disciplinary difference and to construct their boundaries with demography accordingly. Instead of trying to invade the field and remake it in their image, anthropologists and historians might do better to domesticate demographic issues, that is, to construct other demographies that are more suitable to the anthropological and historical enterprises.

But what of demography? If the field has been humanly constructed, it follows that, given propitious conditions and prodigious effort, it can also be partially deconstructed and reconstructed. In the mid-1990s, conditions seem ripe for some disciplinary self-reflection. In today's globalizing cultural economy, the old divide between the first and third worlds is rapidly breaking down, placing third-world populations in first-world sites and giving voice to groups that previously had none. Indeed, hints of change are in the air. Impatient with older categories and perspectives that map poorly onto real people's lives, members of the youngest generation of demographers, many with third-world backgrounds or field experiences, are increasingly aware of

[27] On the self-selection of those entering the field, Avery Guest notes: "Most demographers, especially male, are super straight. . . . Due to their relatively conventional personalities, demographers tend not to be troublemakers. . . They [largely accept] conventional issues, including research topics and approaches. . . It is my observation, in contrast, that many academic sociology departments are filled with 'deviant' personalities, often attracted to the study of society by a preoccupation with their alienation from it" (Guest 1994a:87).

the problematic politics of demographic praxis. Often with foundation support, this new generation has lived with the demographic Other and found him and her not so much backward and in need of Westernization, as worthy of respect and greater self-representation in the discourses of global demographic science. In sessions at the PAA's annual meetings, electronic networks, and other fora, these younger demographers are asking penetrating questions and, like their forebears in the Concerned Demography movement, working hard to make their concerns heard. Ironically, the field's own partial embrace of anthropology may have sown the seeds for a broad challenge to the status quo to spring up from within. While change is in the air, however, its extent should not be exaggerated.[28] Lacking critical distance, conceptual tools, and political support, these younger scholars have yet to make themselves widely heard, let alone fashion a coherent critique of their field.

Students of population in other fields could support demographers, young and old, who are concerned about the lack of theoretical vitality by working with them to bring fresh perspectives to bear on population work. Feminist scholarship, cultural studies, and the more humanistic branches of social science offer a wealth of intellectual tools from which old theories and methods might be critiqued and new ones crafted. Some promising perspectives include feminist critiques of science (*e.g.*, Haraway 1989; Harding 1993; Oudshoorn 1994), feminist analyses of reproductive politics (Petchesky 1984; Martin 1987; Dixon-Mueller 1993; Ginsburg and Rapp 1995), post-Orientalist, Afrocentric, and postcolonial dissections of Eurocentric thought (Said 1978; Amin 1989; Prakash 1990), geographers' critiques of diffusionist theory (Blaut 1993), inquiries into the rhetoric of social science (McCloskey 1994), and Foucauldian genealogies of population (Foucault 1978; Horn 1994).

While remaking demographic theory, methodology, and institutions, demographers should hold onto the traditional strengths of the field in social analysis, quantification, and policy orientation. For, despite my deep concerns about the politics of contemporary demographic theory and praxis, I believe that demography as an arena of inquiry has unique and important contributions to make to the social science of the twenty-first century. From the vantage point of the more humanistic branches of social science, where postmodern perspectives have flourished, the social appears to have gone out of fashion, quantification is suspect, and policy research is grossly inadequate to the needs of a tumultuous post-Cold War world. It should be clear that the

[28] Recent doctorates in demography who have anthropological inclinations have had difficulty getting published and finding jobs. Participants in recent PAA sessions on feminist demography and the subject-object relationship in population research have expressed frustration that the institutions of the field strongly discourage the development of critical perspectives.

aim of the unmaking and remaking of demography that I hope to foster is to fashion a new and better demography, to create the self-reflexive science of population that the more fluid, populous, and politically complex world of the twenty-first century will badly need.

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