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Who Counts? The Politics of Census-Taking in Contemporary America.

Margo J. Ander son and Stephen E. Fienber g. New York: Russell Sage Foundation, 1999. ISBN 0-87154-256-0. x+ 319 pp. $34.95. This book is intended as a narrative of the events that surrounded the 1990 census, informed on technical details of coverage evaluation, and placed in the context of United States census history. The idea to write it came to the authors after they jointly taught a course about the 1990 census and then served on a Committee on National Statistics (CNSTAT) panel on planning for Census 2000. Their perspectives (as social historian with quantitative interests and as statistician with special interest in history, respectively) are neatly complementary.

Unfortunately, Who Counts? is really two books that do not succeed as one. The first book provides a wonderful historical account of census-taking in the United States from 1790 to the mid-1980s, detailing changes that have taken place and the reasons for such change. The second book plunges into the controversy over adjustment that has so occupied the Bureau in recent times and that has gained so much attention from the Congress, the Courts, the statistical community, and the media. Written in a more dispassionate style, the latter material could serve as useful recent history, but the authors have a different agenda. Anderson and Fienberg would have the reader believe that there have been many successful innovations at the Bureau, that adjustment using dual-system estimation is operationally feasible, and that the census should be adjusted. The first point is nicely argued; the second is already well understood, but no new evidence emerges in favor of the final point. Thus adjustment remains no less controversial than before. (I have elsewhere argued against adjustment of the type the authors advocate; this is noted on page 218 of the book, for example.)

After the Prologue sets forth the authors’ broad view of census undercount and adjustment issues, events are recounted in chronological order. There are two interludes along the way: Chapter 4 is a primer on dual-system estimation; Chapter 8 gives an historical account of race and ethnicity in connection with the census.

Chapter 2 takes the census from constitutional times through the discovery of the undercount problem and into the 1960s. The 1970 and 1980 censuses are discussed in Chapter 3. Chapter 5 recalls how a New York adjustment suit led to the 1990 procedural ground rules (which may be visited in the Appendix). Technical aspects of the 1990 census are discussed in Chapter 6, up to the July 1991 decision by the Secretary of Commerce to not adjust. Chapter 7 covers the New York District Court case that challenged the Secretary’s decision and it follows the legal trail through the Supreme Court ruling of March 1996. Chapter 9 relates preparations for the 2000 census, whereas Chapter 10 reviews the position of the authors as first set down in the Prologue.

The historical stage is set in Chapter 2. Anyone with an interest in the census can learn a lot from this chapter, because it reviews prior census controversies and reforms, and discusses the evolution of the Bureau. It explains how the undercount was discovered, using selective-service records prior to World War II, and points to the politicization of the issue in the confluence of increased federal funding, “one person, one vote” apportionment rulings, and the civil rights movement of the 1960s. Chapter 8 provides a fascinating account of the development of race and ethnicity questions from 1790 to the 1997 Directive 15 revisions for the classification of federal data, as issued by the Office of Management and Budget. Racial and ethnic classifications are suspect on many grounds, but they also are used for legitimate purposes. This dilemma is heightened in Census 2000 when race and ethnicity questions admit multiple answers.

The period of time surrounding the 1970 and 1980 censuses is important and perhaps deserves a book-length treatment of its own. This was a time of increasing realization by political entities, racial groups, scholars, and the media of the tangible effects of differential undercount. Chapter 3 highlights some of the technical, political, and legal developments that resulted. Thus the first National Academy of Sciences panel was created in 1969 to advise the Bureau on undercount issues. Since then there have been many such panels; two are active currently. An account of the Bureau’s 1980 Conference on Census Undercount provides us with an especially interesting glimpse of adjustment views held by an array of observers at the time of that census. On the political front, stakes were seen to be high and a large number of lawsuits challenged Bureau procedures in the 1980 census. In the most notable of these cases, Cuomo v. Baldrige, the census results were allowed to stand. This ruling came in 1987 when planning for 1990 was well under way.

Chapters 5, 6, and 7 discuss the 1990 census from its planning stage through implementation to evaluation. This is a tame description: the focus is on the more controversial aspects of the census and on the various stages of the lawsuit filed in 1988 by New York City and others to force adjustment. The story of the extended legal battle forms a core theme of the book.

Preparation for possible census adjustment through a postenumeration survey (PES) was being pursued at the Bureau when the Under Secretary of Commerce for Economic Affairs announced in late 1987 that the department would not adjust the 1990 census. For some reason, the book takes up this announcement under the heading “Cancellation of the Postenumeration Survey,” despite the fact that the PES was not cancelled (as is mentioned on p. 89). At the time, the Bureau had two candidates for a PES: an evaluation survey of 150,000 households in case of no adjustment and another of 500,000 households in case of adjustment. Commerce had announced, in effect, that the first survey was to be carried out.

The resulting controversy led to congressional hearings and then to the New York lawsuit that challenged the Commerce ruling. The suit reached par- tial summary judgment in the settlement of 1989. The settlement stipulated: there would be a PES of not fewer than 150,000 households; standards for adjustment were to be developed and published; experts were to advise the Secretary of Commerce on adjustment; the Secretary’s decision on adjustment would come by mid-July of 1991. The authors discuss the events that led to the final guidelines for the adjustment decision at some length. They dwell on the diminished role of statisticians in this process, referring to the discontinuance of funding of a CNSTAT panel on page 105, for example, and asserting that “The preliminary guidelines . . . were not well received by the statistical community . . .” on page 107.

Details on census figures and the production and evaluation of dual-system estimates for adjustment are in Chapter 6. By June of 1991 the Special Secretarial Advisory Panel reported a split vote, four to four, over adjustment and the Census Bureau Undercount Steering Committee voted seven to two for adjustment. The Secretary’s decision on July 15 to not adjust thus went against the recommendation of the Bureau. The decision is not well regarded by the authors. We learn that the mayor of New York City called it “nothing less than statistical grand larceny,” that it “brought forth critical remarks from many of those who had been closest to the issue on Capitol Hill,” and that “[t]he response quickly circulated about which statisticians from the Census Bureau had actually written the attack on their bureau colleagues at the behest of the Commerce Department.” Chapter 7 goes on to recount the 1992 New York District Court trial that featured testimony from such statistical luminaries as Bailar, Efron, Fienberg, Hollis, Tukey and Wolter for the plaintiffs, Fay, Freedman, Meier and Wachter for the defense. The book provides a capsule version of this prominent statistical debate, though much of the flavor of the proceedings is lost in translation (the full transcript may be found at stat.ucla.edu/census). Despite the intricacy of much of the argument at court, the 1993 ruling was non-technical in nature: the Secretary’s decision to not adjust had not been “arbitrary and capricious” and so would stand under the Administrative Practices Act. This ruling was ultimately upheld by the Supreme Court in 1996.

Of course, there is life after the 1990 census. Chapters 9 and 10 bring out some developments of the past decade that are tied to Census 2000. In contrast to 1990, with its census and adjusted counts, the Bureau’s original plan for 2000 was to produce a one-number census that would utilize sampling for nonresponse followup and again for a PES adjustment phase. Support of sam- pling for census purposes was voiced by an American Statistical Association panel and others, whereas the majority of a House Committee on Government Reform and Oversight recommended against it, for example. Sampling, as good or bad science, had become the focal point of the political side of the debate. The Bureau’s Census 2000 plan was presented to Congress in 1997 and legislators soon had something to say. One outcome was the formation of a Census Monitoring Board that reports to the Congress (access its charge, membership, and activities at cnb.gov). Major lawsuits led to a change in the Bureau’s design: In early 1999, the Supreme Court ruled that sampling could not be used for congressional apportionment, but did not preclude sampling in the census for uses other than apportionment. Thus Census 2000 proceeded along two tracks: a traditional headcount for apportionment purposes and a PES to set the stage for possible adjustment of census counts for other uses.
In a concluding section entitled “Some Advice for 2000,” the authors recommend a one-number census. They favor legislation to restore authority to technical matters to the Bureau and they suggest review of apportionment methodology and the size of the House.

Who Counts? has value as a source book with regard to the sequence of controversial events of the past 15 years or so, in spite of its emotionally charged prose. This period teaches an exceptionally clear lesson: Partisan politics can hang heavy over the Bureau’s business. We need not like this. Subordination of technical expertise to political circumstance is richly deserving of documentation and of our disapproval, but we must also come to terms with the argument that the problem is inherently, and unavoidably, political. As Peter Skerry put it, “Science is simply not the source of transcendent answers to the profoundly political dilemmas faced by the census” (see Skerry 2000, p. 171).

What is to be made of the technical side of the controversy? Statisticians who are casual observers of census matters will be hard pressed to understand what the fuss is about. Evidence that does not fit well with the pro-adjustment position espoused in the book is misstated or ignored, or worse. Two examples follow.

This passage is found on page 222:

The public discourse on the 1990 census and adjustment has conflated sample-size problems with a more general condemnation of sampling in the context of census taking and has led to the creation of the myth that sampling, by itself, is a suspect enterprise. Wattenberg and Friedman’s February 1996 testimony, quoted in the previous chapter, for example, depicts a census officialdom that has lost control of its methodology...”

The cited quote mentions statistical adjustment, coding error, complexity of modeling and statistical error, but not sampling. The authors take advantage of the confusion of adjustment with sampling that exists in the minds of some people by suggesting that speaking out against the specifics of adjustment is the same as lending aid and comfort to the enemies of sampling.

The Prologue has a list of “myths” to be exposed. Among them are Myth 2 (“The decennial census has been conducted as an ‘actual enumeration’ by counting the national population in every census in the history of this country”) and Myth 7 (“Sampling or statistical estimation is not scientific. According to William Safire, ‘Sampling is no science.’ “). Here then is Myth 10:

The proposal to adjust the census in 1990 was rightly rejected by the secretary of commerce because the methodology was fundamentally flawed and fraught with error: “A computer programming error... overstated the undercount by a million people and probably would have given a congressional seat to Arizona that belonged to Pennsylvania. Experts believe that processing error accounts for 80 percent of the estimated undercount.”

Programming and processing errors in adjusting the 1990 census counts were discovered by the Bureau after the Secretary’s decision, and such errors were of sufficient size to alter the apportionment of Congress. The Secretary was judged to be within his rights when he rejected adjustment, and he was supported in this by six experts, at the least. So why have the authors not stated a noncompound and more defensible Myth 10? For instance, something along the lines of

The proposal to adjust the census in 1990 was rejected by the secretary of commerce because the methodology was fundamentally flawed and fraught with error.

One reason is that existence of error in the 1990 adjustment process can be called a myth. A second reason is the opportunity to denigrate the work of Breiman. Outrightly the Bureau, Breiman did the most thorough and tough effort of data quality in the census-PES process. His results are not quite as comforting as those produced by the Bureau and he has been attacked roundly in the literature because of this (see Breiman 1994). His work is acknowledged on page 293 to “form the evidentiary base of part of Myth 1.0.” The authors have cavalierly dismissed serious work that interferes with their thesis.

In all, the insistant support of adjustment through dual-system estimation does not allow the authors to adequately address even the simplest of counterarguments. They remind us that capture-recapture is an old procedure, widely accepted among statisticians and widely used. However, problems with successful implementation of the method are also well known. They note that innovation has a long and distinguished history at the Bureau, yet not all innovations have survived. The authors make much of the fact that various alternatives to dual-system estimation have been considered and discarded by the Bureau and its advisory panels. If dual-system estimation in its present form is the best adjustment method available, very much an arguable point, where is the hard evidence that it does the better part of what is expected of it? Such evidence is not to be found in the book.

Finally, what begins so well as a balanced account of census history turns out to be a sharply worded opinion piece centered on recent events. This is not unintended, but the dissimilarity of the two writing styles is a bit jarring. Aside from history, is there value here for statisticians? Those who are knowledgeable about the census will not change positions on adjustment based on arguments to be found in the book, whereas those who seek to form more reasoned opinions about adjustment will have to weigh rhetoric, not data.

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Counting on the Census? Race, Group Identity, and the Evasion of Politics.

Peter Skerry. Washington, DC: Brookings Institution Press, 2000. ISBN 0-8157-7964-X. viii + 261 pp. $25.95 (P)

Two books on census-taking are reviewed in this issue. One, Who Counts? The Politics of Census-Taking in Contemporary America, is authored by historian Margo Anderson and statistician Stephen Fienberg. The other, by political scientist Peter Skerry, reflects more of a political than a statistical perspective. For readers who want to understand the statistical issues that underlie the decennial census undercount controversies, I recommend Anderson and Fienberg’s comprehensive treatise. Although Skerry comments on the statistical and political arguments in the undercount debate, he focuses more on the racial and ethnic categories used in collecting decennial census data, on the politics surrounding census-taking, and on the measurement of race and ethnicity.

With regard to politics and the census, one of Skerry’s main messages is “that the census is inherently-and properly—political in nature” (p. 9). He also characterizes the Census Bureau itself as political rather than apolitical as it is commonly portrayed. Skerry confuses the political implications of census numbers with the motivations and the competence of the Census Bureau staff and management. There are several questions that should be answered to assess the validity of Skerry’s characterization:

1. Does the work of the Census Bureau, particularly in taking the decennial census, have political implications? Skerry notes that census results have great political importance. He points out that census-taking has been a fundamental task of government since the beginning of history. In the United States, a decennial census was called for by the federal Constitution of 1787 to apportion the seats of the House of Representatives among the states “according to their respective numbers.” The political importance of the results of the decennial census is reflected in the numerous heated disputes in Congress over census numbers and their implications over the past two centuries (Anderson 1988; Anderson and Fienberg 2000). Indeed after the 1920 census, Congress let the 1910 apportionment stand until 1932 because of the implications that the 1920 count would have for House apportionment. Additionally, the disputes over whether to and how to correct for the undercount in the 1990 census and in 2000 census provide ample evidence of the continuing importance of census counts in determining political representation in this country. It is undisputed that there are political ramifications of census numbers.

2. Is the work of the professional staff of the Census Bureau motivated by allegiance to one or another political group? Skerry’s position is that the management and professional staff of the Census Bureau are at best politically inept and at worst biased toward the Democrats. He tells critical stories that reflect poorly on the political competence of the Bureau leadership. To put this in context, it should be noted that the Census Bureau does not have