The Sociological Methodologist

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From the Chair

by Thomas A. DiPrete
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The methodology section has planned a full set of activities during the 2006 annual meeting of the ASA in Montreal. A central part of our mission is to foster the development and dissemination of new methodological approaches that will advance research on key substantive questions. We are sponsoring three sessions in Montreal that will contribute to this goal. First, Andrew Gelman, professor of statistics and political science at Columbia and a leading scholar in the development of Bayesian statistical methods, will give this year’s O.D. Duncan Honorary Lecture. His topic will be “Bayesian Inference and Multilevel Hierarchical Models,” and I expect that his lecture will at least touch on some of the themes he develops at length in the new book. Second, Jim Moody has organized an invited session on New Methodologies for Network Analysis, which will include presentations from Martina Morris, Carter Butts, and Katherine Faust as well as from Jim. Third, Francois Nielsen has organized an invited session on “Approaches to Evolutionary/Genetic Analysis in Sociology.” This session will feature a panel discussion with François, Guang Guo, Hans-Peter Kohler, and Rosemary Hopcroft as participants. All three of these sessions will take place on Sunday, August 13th in Montreal during the annual ASA meeting. We will also have a business meeting of the session at 8:30am on that day.

A second important news item concerns the awarding of the Lazarsfeld award. In January, I appointed an awards committee consisting of Ken Land, Paul Allison and Rob Mare for the purpose of selecting winners of the Lazarsfeld award. Because this award was not given last year, we received permission from the ASA to make an award for 2005 as well as 2006. I’m very pleased that the committee chose Bill Mason as the 2005 winner and Chris Winship as the 2006 winner of this important award. I have scheduled a reception for 6:30pm – 8:15pm on Sunday, August 13th and at this time will present these two awards to Bill and Chris. The reception will also be a time when we can interact with the invited speakers for our three sessions of that day, and also enjoy the catered food provided by the Palais de congrès de Montréal. Please check the ASA program schedule for the locations of the business meeting, our two invited sessions, the
Duncan lecture by Andrew Gelman, and the methodology section reception. I look forward to seeing a large attendance by section members at our events in Montreal.

**Report on the Annual Conference of the Methodology Section**

by David Weakliem  
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The 11th annual conference of the ASA Methodology Section was held at the University of Connecticut on April 14, 2006. Eleven papers were presented covering a range of methodological and substantive topics. Like previous methodology section conferences, this one featured cutting-edge work on a range of topics and spirited but friendly discussion.

Jeremy Freese asked why sociology did not have policies mandating that authors make data and program code publicly available. He argued that this practice would have important benefits, and that the costs would be minimal. His paper sparked a lively discussion, and several members of the audience suggested that the Methodology section should take a stand on the issue. Freese provides a more extended discussion in another article in this newsletter.

Hannah Brueckner, Ann Morning, and Alondra Nelson described the results of a list experiment designed to measure public acceptance of "biologist" explanations of racial inequality. They noted that over the last few decades advances in genetic research have received a great deal of attention, and that this development might have lead to a revival of popular support for biological explanations of racial differences. However, there is a strong social desirability bias against expressing such views. Moreover, it has been suggested that the extent of the bias will not be uniform, but will differ depending on factors such as education. Hence, Brueckner, Morning, and Nelson used a list experiment to gauge the level of support for biological explanations of racial differences. They also attempted to estimate the strength of social desirability bias by comparing their estimates with responses to direct questions asked in the General Social Survey. Their results suggest that about a quarter to a third of non-black Americans believe that genetic differences are partly responsible for black-white differences in income. They found some evidence of differences in social desirability bias, but they did not fall into a simple pattern.

Guillermina Jasso and Samuel Kotz presented work on "A New Continuous Distribution and Two New Families of Distributions Based on the Exponential." Research on status has made use of the exponential distribution. A natural generalization is to consider the possibility that status depends on the distribution of two qualities, each of which has an exponential distribution. If the qualities are negatively correlated, the result is a previously unknown distribution that Jasso and Kotz call the "ring(2)-exponential." They also consider two generalizations, which they call the "mirror-exponential" and "ring-exponential." The mirror-exponential arises from a substantive application--the distribution of status when it depends on multiple negatively correlated qualities--while the ring-exponential results from a generalization of some mathematical features of the ring(2)-exponential. Jasso and Kotz suggest that these two distributions may prove useful in modeling the distribution of wages and status and discuss their implications for inequality as measured by the Gini coefficient.

Not all of the papers in the conference focused on quantitative methods. Gordon Chang suggested that the "politics of representation," which focuses on the competition over the meaning of ambiguous events, objects, and situations, could combine the strengths of several qualitative approaches, including ones usually seen as antithetical. In this approach, different actors propose "scripts" for the interpretation of events: their success on the accessibility and coherence of the scripts as well as on their ability to distribute it widely and quickly. Once accepted, a script institutionalizes conventions of knowledge and action that guide subsequent actions. Chang discussed examples of the application of this approach, including joint work with Hugh Mehan on the Bush administration's response to the events of September 11, 2001.

Other papers included two on income inequality (Tom Volscho and John Angle), and one on the
effects of divorce on children (Allen Li). Andy Fullerton provided a typology of models for dependent variables with ordered categories, while Tyler McCormick discussed estimation in exponential random graph models for social networks. Casey Borch discussed the use of extreme bounds analysis to overcome common problems in quantitative research, while David Weakliem discussed two efforts to recover lost or neglected data—the Data-PASS project involving the Library of Congress and a group of data archives (described in more detail at http://www.icpsr.umich.edu/DATAPASS/) and the possibility of a question-level database of comparative survey results. The program can be found at: http://sociology.uconn.edu/Methodology_conference.html, and several of the presenters have papers that they can share on request.

If you have work that you might like to present or are interested in hearing about new developments in sociological methodology, please consider attending the 2007 meeting. Jim Moody of Duke University has tentatively agreed to host it—watch this newsletter and e-mail messages to section members for more details.

**Replication Policies for Sociology Journals**

by Jeremy Freese  
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At the ASA Methodology Conference this April, I presented a paper arguing that ASA sociology journals should adopt policies that encourage researchers to anticipate interest in verifying and extending their results. I argue that researchers should be expected to provide explicit information about the availability of materials pertinent to verifying results and should be encouraged, when possible, to deposit materials at the time of publication in an independent online archive (such as the ICPSR Publications-Related Archive). A draft of my paper is available on my website (http://www.jeremyfreese.com).

Elsewhere in the social sciences, many have expressed concern that the increasing scale and sophistication of quantitative social science has resulted in greater difficulty of verifying results. Results may depend ever more on analytic decisions that the space constraints of journals leave undocumented. In economics, systematic attempts to replicate work have yielded alarming enough rates of author unhelpfulness and ultimate failures that American Economic Association journals now have a very strict policy that is being actively enforced (see: http://www.aeaweb.org/aer/data_availability_policy.html). In political science, Gary King has provided arguments that have convinced numerous journals to adopt explicit policies. One does not have to canvass many quantitative sociologists to hear anecdotes about problems exactly verifying published results in our discipline’s journals. Moreover, conversations with fellow sociologists suggest surprisingly wide variation in understanding of even what obligations we have to those who want to verify our published results.

At present, sociology treats replication as an ethical and individualistic matter to be handled after publication. Economics, by contrast, has a social policy that seeks to make anticipatory attention to replication a mundane part of the publication process. Depositing materials in an independent archive at the time of publication, when possible, is extremely valuable because it decouples the content of articles from the future of their authors. Otherwise, verifiability depends on the researcher staying engaged with the discipline and maintaining organized personal archives of past work.

In my paper, I argue that an improved replication policy for quantitative sociology would have many benefits. These include increased confidence in findings, improved quality of individual analytic practice, and increased opportunity for other sociologists to learn from research that is considered sufficiently exemplary as to command space in top journals. If we think of research articles as contributions not just for their substantive findings but for what they teach about how to conduct good research, then, all else being equal, papers that provide maximum opportunities for interested others to follow the details of the analytic work contribute more to the discipline than papers that do not. To my knowledge, no
methodologist would dispute that good data analytic practice requires a complete record of the procedures leading from a pristine data set to the numbers in a published article; given that these materials are already presumed to exist and online archives freely accept them, there seems little cost to a researcher in making these materials available online, while the discipline as a whole stands to benefit.

Of course, in many situations, publicly depositing data or code may either be impossible or seem professionally inadvisable. When materials cannot be deposited, however, the readers of an article (reviewers and editors included) can at least be explicitly told if, when, and how the pertinent materials will be available to other researchers. Also, for reasons I argue in my paper, even when data cannot be made available, there are advantages to depositing just the code, so not being able to share fully materials sufficient for replication should not justify sharing nothing at all.

In response to the presentation of my paper at the conference, some members of the audience suggested that the ASA Methodology Section should take a position of leadership with regard to this issue, and that the Section should advocate the adoption of a policy to ASA Council. Perhaps presumptuously, but in a constructive-minded spirit, I added some candidate text for such a policy to my paper. My goal in writing this text was to compose a draft policy that seemed like it would improve collective practice while remaining sufficiently minimalist as to avoid larger issues regarding sharing that seem like they might overwhelm any initiative and result in inaction. The text of my proposed policy is:

Authors of accepted articles of empirical quantitative research are expected to use online archives to deposit maximum possible information pertinent to the verification of presented results at the time of publication. Ideally, data, code, and other materials would be provided that would allow others to duplicate the analysis procedures that lead from original data to presented results without the need for any additional consultation with the authors about what was done. We recognize this ideal is often not possible or may conflict with accepted proprietary prerogatives of authors. In whatever ways information sufficient for duplicating results will not be provided, authors are expected to be explicit in the manuscripts they submit for review about whether and how this information can be obtained by other researchers. We ask authors to deposit what materials they can at the time of publication, even if that information is not sufficient for verifying results (e.g., depositing the code for analyses even if the data are not distributed).

I urge members of the Section to consider the advisability of an improved replication policy and whether text something like the above seems like a good start. If so, I am personally willing to organize or participate in whatever other way in action toward achieving this goal. We should recognize that the actions of economics and political science suggest that a larger movement toward more social replication policies is afoot, and the question is whether and how quantitative sociology will choose to take part. If other disciplines work to use online resources to increase the transparency and verifiability of their enterprise, and we do not, we have no one to blame but ourselves if our work is regarded with more wariness.

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Socioeconomic Genograms: a Methodological Development

by Jeremiah Spence
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Drawing heavily upon the theoretical and methodological developments made over the last 20 years by such renowned social scientists as Daniel Bertaux, Pierre Bourdieu, Paul Thompson, Jorge González and Joseph Straubhaar, I will propose in this essay a methodological innovation in the study of intergenerational mobility processes that can be utilized within the broad theoretical frameworks of social stratification and social capital. Socioeconomic genograms provide a novel data structure for organizing family information for the study of mobility and transmission. While this essay does not present a finalized methodological product, I hope this essay will serve as a catalyst to initiate a discussion on the topic.

The socioeconomic genogram technique provides a path for collecting, organizing and analyzing information about three generations of a family from a single informant. The technique can provide specific insight into the comparative rates of transmission of class prestige and possibly cultural and/or social capital over several generations across a spectrum of families. This technique has been tested over a two year period among researchers at the University of Texas at Austin in the International Communications Section of the Department of Radio, Television & Film. The initial tests involved interviews with 120 primary informants or index persons, and result in a total population of +/- 1100 in the resulting data system.

Background on the genogram tool

The socioeconomic genogram is a development and expansion of the use of a pre-existing tool: the genogram. Genograms have been in use in one form or another since the early 1980s; however, the genogram was formalized as a tool for family therapy and family medicine in the early 1990s. The genogram was defined as it ‘displays family information graphically in a way that provides a quick gestalt of complex family patterns; as such they are a rich source of hypotheses about how a clinical problem may be connected to the evolution of both the problem and the family’s context over time.’ (McGoldrick, Gerson et al. 1999)

McGoldrick stresses that the appeal of the genogram to professionals is the ‘tangible and graphic representations of complex family patterns’. This graphic nature of the tool has been well received in the health fields. McGoldrick’s genogram has been developed further and applied to a multitude of different situations. Initially, McGoldrick’s range of applications varied from a multigenerational mapping of the family emotional systems, to systemic hypothesizing for strategic interventions, to developing “projective” hypotheses about the workings of the unconscious from genogram interviews, to simply depicting the basic demographic information about a family.

While the vast majority of the many variations and adaptations of the genogram as developed by McGoldrick are primarily utilized to provide a visual tool to facilitate the analysis of family patterns, the method is founded upon a systemic perspective that provides for the analysis to be performed on multiple contextual levels. The systemic foundation of the genogram technique is the key to utilizing the method in other fields.

There is a secondary development in the use of the genogram that also provides a base for this work, which lies in the work of Bertaux, Thompson & González (Bertaux; Gonzalez 1991; Gonzalez 1995; Bertaux and Bertaux 1997; Bertaux and Thompson 1997). Without going into excessive detail, their work focuses on the importance of utilizing life histories and family histories in the study of the family. Both Bertaux and González use a derivation of the genogram, but only as a qualitative tool. Neither researchers explore the quantitative possibilities in the technique.

The major differentiation between this work and that of previous researchers is, first, a transition away from the visual nature of the genogram tool and a subsequent focus on the underlying data structure of the resulting information system. Secondly, there is a significant shift, or rather a proposed shift, into the realm of quantitative analysis. While the socioeconomic genogram
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The technique can continue to be utilized for visual analysis, it is the proposal of this researcher that the technique can also be utilized to explore comparative trends across families in a specifically quantitative fashion. The key research question that must be considered is: If the data is properly collected and coded in the data system, are there statistical tools or methodologies that can provide insight into the dynamics of the family systems that are represented in the sample that has been collected?

**The socioeconomic genogram: data collection**

The socioeconomic genogram is built upon the same base structure as the genogram used in the health fields. The technique includes select data fields from the basic genogram such as age or year of birth (McGoldrick and Gerson 1985), but collects a significant number of additional variables beyond those collected in other studies. The socioeconomic genogram as applied in the University of Texas at Austin test collected the following data:

- first name
- year of birth
- place of birth
- level of education (measured in years – i.e. high school grad = 12 years)
- ethnicity/race
- religion
- what generation immigrant to the US is the individual (i.e. person born outside the U.S. and dies in the U.S. is a first generation immigrant)
- primary occupation
- three primary places of residence
- primary language
- secondary language
- primary media in youth
- primary media in adulthood

The instrument utilized in the data collection portion of the technique is in a tabular format in which the columns represent the aforementioned fields and the rows represent members of whom the interviewer will collect the data. The socioeconomic genogram has been successfully applied in 120 interviews. The interview typically takes place with a single informant who is also the index person (IP) on the genogram and requires 30 – 45 minutes to complete. The interviewer will collect all of the information about the following family members in relation to the IP:

- index person (primary individual or informant)
- spouse of index person
- mother of index person
- mother’s mother (maternal grandmother of IP)
- mother’s father (maternal grandfather of IP)
- father of index person
- father’s mother (paternal grandmother of IP)
- father’s father (paternal grandfather of IP)
- sibling(s) of index person
- spouse(s) of sibling(s)
- sibling(s) of father
- spouse(s) of sibling(s) of father
- sibling(s) of mother
- spouse(s) of sibling(s) of mother
- with several additional lines to be used as needed for step-families, second or third spouses, adopted children, or whatever other out of the ordinary dynamic may present itself

The collected data then forms a matrix which provides a three generation snap-shot of a family, including spouses.

**The socioeconomic genogram: coding**

In order to attempt to attain the maximum level of compatibility and extendibility of the research data, I made a decision to attempt to harmonize the coding of the data to international norms and well-tested scales whenever possible. One of the major alignments that I sought is with the International Stratification and Mobility File (ISMF) maintained by the Free University of Amsterdam and University of California – Los Angeles (Ganzeboom and Treiman 2005).
In addition to the standard ISMF codes and other codes necessary to represent the collected data, I integrated the following into the coding system:

- Education Recode based on the USA66e Standard (USA66e) (Center 1966)

Once all of the codes were implemented across the entire dataset, a secondary level of coding was initiated implementing: the International Socio-economic Index of Occupational Status (ISEI) and Treiman’s Standard International Occupational Prestige Scale (SIOPS or TREI). These two indexes provide numeric interpretation of the “prestige” or relative value of each occupation in society as calculated by the research teams. Additionally, the USA66e educational scores provide numeric scores for expressing the weighted value of the levels of education. Finally, a modified Hollingshead index of prestige, which combines education and occupation indicators, is generated.

The socioeconomic genogram: reflections on analysis

Initial analyses were performed on the aggregate of the data and provided thought-provoking insights into the relationship between linguistic capital or language use in correlation to relative class status and immigrant status among Hispanics in the data system, which I hope to examine more thoroughly in future work (Rojas, Straubhaar et al. 2005). Additionally, another analysis was performed by developing a modified Hollingshead scale, creating a line graph showing the relative increase or decrease of social prestige over three generations of a family. These line graphs were then compared across the entire sample which was at the time of that analysis approximately 60 families, which showed specific differences in the trends in relative change in class status or social prestige over time between Hispanic and non-Hispanic families. Initial interpretations of this analysis would indicate that over the first and second generation there is a lag among Hispanic families, in relation to non-Hispanic families, but by the third generation the lag is insignificant between the two groups. There is an exception to this trend, which is that in some Hispanic families second generation immigrants would marry first generation immigrants and have the apparent effect of decelerating the relative increase in class status or social prestige among those families. These results are not conclusive. However, given the improvements in coding and the expansion of the sample of the last year, I hope to re-create the experiment and I look forward to reporting the results (Spence and Straubhaar 2005; Spence 2006).

One of the benefits of the technique in analysis phase is the ability to compare trends and patterns across multiple families, thus allowing the researcher to review multiple cases simultaneously instead of being restricted to examining one case at a time. Further, guidance sought from the professors at the University of Texas at Austin has indicated that a regression applied to each family as a unit might provide interesting results in a classic social stratification sense, because the data matrix formed by the socioeconomic genogram tool provides a wealth of information for over three generations of a family including spouses, as compared to the majority of social stratification studies that focus almost exclusively on the father-son dynamic.

Here, I avoid an extended discussion on the sampling and sampling bias that is, of course, crucial to have; however, there are two things that should be taken into consideration in relation to sampling in the socioeconomic genogram method: first, the ability of the method to function should be irrespective of the sample or from a different perspective, one might say the choice made in sampling will be directly related to what topic or sub-population the researcher chooses to focus upon; secondly one of the fascinating, and unexpected, revelations that occurred during the initial tests is despite a clear bias made in choosing the index person (IP) to be interviewed, be it a white male age 35 or a recent Hispanic immigrant age 25, the researcher has no control over who the IP
reports in their interview. For a brief example, I may choose to interview a recent Hispanic immigrant, but his grandparents were actually first generation immigrants to Mexico from Lithuania. The resulting socioeconomic genogram would be significantly different than the one that I was seeking in choosing a recent Hispanic immigrant. This phenomenon, in effect, counteracts part of the bias that has been introduced in the selection of the IP by the researcher.

Finally, there is a literature that provides a background into methods utilized in the analysis of stratification studies; however, it remains to be seen whether those methods will be appropriate for this project. I look forward to being a part of an ongoing discussing on this topic and I would be most grateful for any suggestions, guidance or feedback in relation to this work.

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Bibliography


Changes in the 2006 GSS

from Tom Smith
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Panel Component

The GSS will be switching from a repeated cross-section design to a combined repeating cross-section and panel component design. The 2006 GSS will be the base year for the first panel. A sub-sample of 2006 GSS cases (most likely about 2000) will be selected for reinterview in 2008 and again in 2010 as part of the GSSs in those years. The 2008 GSS will consist of a new cross-section of about 2000 plus the 2006 reinterviews. The 2010 GSS will consist of another new cross-section of about 2000, the second reinterview wave of the 2006 panel cases and the first reinterview wave of the 2008 panel cases. The 2010 GSS will be the first one to fully implement the new, combined design. In 2012 and later GSSs, there will likewise be a fresh cross-section, wave two panel cases from the immediately preceding GSS and wave three panel cases from the next earlier GSS.

Book Announcement

from Paul W. Vogt
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Quantitative Research Methods for Professionals is the title of my new book, just published by Allyn & Bacon. It emphasizes explaining fairly advanced concepts (logistic regression, factor analysis, multilevel modeling, SEM, meta-analysis, etc.) in clear, non-technical language.

Award Announcement

Congratulations to Jennie E. Brand who recently won the Kathryn DuPre Lumpkin Award for the Best Dissertation in Sociology at the University of Wisconsin—Madison 2003-04 for “Enduring Effects of Job Displacement on Career Outcomes” which compared a range of methodological approaches, including matching and difference-in-differences estimation. Jennie Brand and Yu Xie are presently working on a project on “Composite Causal Effects for Time-Varying Treatments and Time-Varying Outcomes”—applying the potential outcome framework to longitudinal studies.

Notes from the Editor

This issue of the Sociological Methodologist includes two essays: A discussion of socioeconomic Genograms by Jeremiah Spence, and a proposal by Jeremy Freese for a Replication Policy in sociology. Comments may be sent to them directly or, if of general interest, may be sent to me for publication in the next issue. We also have a report from David Weakliem on the Spring Conference of the Methodology Section; and, from Tom DiPrete, a description of section activities at the upcoming ASA meetings in Montreal.

Unless there’s objection, I will change the newsletter publication schedule to conform to current practice: Winter (January) and summer (June). Submission deadlines will fall after the end-of-semester crunch (tentatively, the last week of December and May). You can email me with your reactions (L.raffalovich@albany.edu), and/or we can discuss this at the section business meeting in Montreal.

The section web page is now at SUNY-Albany (http://www.albany.edu/asam). Please visit and give us feedback. As always, I welcome section news, news about section members, brief essays on methodological developments, and suggestions for format, content, and process.