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HUBERT MORSE BLALOCK, JR.
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A Biographical Memoir by
HERBERT L. COSTNER

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Biographical Memoir

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August 23, 1926–February 8, 1991

BY HERBERT L. COSTNER

IN HIS EXCEPTIONALLY productive life, Hubert Blalock played a major role in shaping the field of sociology during the latter half of the twentieth century. His vision of social science inspired his students and colleagues as much as his teaching and writing instructed them. Although his life took some surprising turns in his youth, his career as a sociologist was surprising only to those who underestimated his commitment and creativity.

Hubert Morse Blalock, Jr., was born in Baltimore, Maryland, on August 23, 1926. His mother, born Dorothy Welsh, was the daughter of a prosperous hat manufacturer in Baltimore. She met her future husband at Johns Hopkins University where both were working toward a master's degree in history. Hubert Blalock, Sr., was raised by his mother, a widowed schoolteacher in North Carolina. Following completion of his master's degree in history and a degree in law, the elder Blalock accepted employment in the legal department of the casualty division of the Aetna Casualty and Surety Company of Hartford, Connecticut. He remained with Aetna for his entire career and retired as a senior officer of the company.

It was in West Hartford that Hubert Blalock, Jr., had his

early schooling. Young Tad Blalock, whose childhood nickname lasted a lifetime, was a bright and active boy for whom the public school program in the elementary grades was not very challenging. As Tad was about to enter the seventh grade, his parents decided that a private school might be better able to channel his energies in constructive ways. They selected the well-respected Loomis School, which was relatively close to home and hence did not require Tad to become a boarding student.

Young Blalock blossomed at his new school, especially in mathematics. After the Loomis faculty noted how he raced through the established mathematics curriculum, they developed more advanced courses especially for him. When he graduated from the Loomis School in June 1944, World War II was under way. Tad knew that he would enter military service shortly after he turned eighteen, but he had time for one semester at Dartmouth before entering the U.S. Navy in December 1944.

Nothing in his background had prepared eighteen-year-old Tad Blalock for his two years in the Navy. Tad himself later wrote:

I was a total misfit in the Navy, from the very first day when our Chief Petty Officer delivered a speech ending with the sentence, "Remember, youse guys, in the Navy you don't think!" (Blalock, 1988, p. 107)

Tad's mathematical aptitude landed him in radar training school in Chicago immediately after his induction. Although he could readily master the textbook principles, he found the hands-on applications tedious and uninteresting. He requested a transfer to sea duty and soon found himself assigned as a radio operator on a Landing Ship Tank (LST) serving in and around Shanghai.

In the Navy Blalock first encountered the full variety of American youth. He was more puzzled than pleased by his

new compatriots, and he didn't fit into the common routine of drinking, carousing, and hackneyed obscenities. When their LST visited Chinese port cities, Tad was appalled to find that some of his shipmates "delighted in their nightly fisticuffs (and worse) with the so-called 'gooks'" (Blalock, 1988, p. 108). For Tad Blalock the Navy provided both an eye-opening and a heart-rending experience. It awakened in him a deep sympathy for those who were poor and subservient and a vague commitment to make their lives better.

In 1946, after completing his Navy service, Tad Blalock returned to Dartmouth, where he majored in mathematics. He was elected to Phi Beta Kappa in 1948, awarded the Thayer Mathematics Prize in 1949, and in the same year was accorded a bachelor of arts degree in mathematics, *summa cum laude*. But as a Dartmouth undergraduate he had also discovered new interests. His concern for the poor and subservient, initially kindled by his Navy experience, was reinforced by taking the "Great Issues" course required of Dartmouth seniors. He had also found an off-campus way of expanding his insights into the world of the underprivileged. He had become involved in the workshops of the American Friends Service Committee. During the summer following completion of his bachelor's degree at Dartmouth, Tad worked in a Quaker work camp in a black area. He later reported that he "had always had a concern about the treatment of blacks in America—perhaps a Myrdallian white guilt complex" (Blalock, 1988, p. 109). The Quaker summer camp provided his first experience of daily contact with black people.

In the fall of 1949 Tad started work on a master's degree in mathematics at Brown University. There, he

discovered the meaning of "pure" mathematics, as well as the impact of

absolutely horrible teaching. At about that time I began to realize that I did not want to spend my lifetime being quite so pure, and that there was something of an escape from reality in all of this. (Blalock, 1988, p. 109)

Tad remained at Brown for his master's degree, but in 1950 he shifted from mathematics to sociology "almost sight unseen." He had previously had only two sociology courses.

One of the friends whom Tad encountered in the workshops of the American Friends Service Committee was Ann Bonar from West Virginia. Following her graduation from Oberlin College in 1950, Ann had come to Boston as a research assistant on a Harvard University endocrinology project at Massachusetts General Hospital. She spent her weekends as a volunteer at Peabody House, a famous old West End settlement house. There in the fall of 1950 she met Tad Blalock. He was a graduate student at Brown who came to Boston about every other weekend to participate in the Quaker workcamp at Peabody House.

Ann Bonar and Tad Blalock rapidly discovered their common values and interests. They first discussed marriage while walking around Walden Pond, and Tad gave Ann an engagement ring in the spring of 1951. They were married in August 1951 in Parkersburg, West Virginia, Ann's hometown. They spent their honeymoon camping and canoeing in the Adirondacks in New York. Tad's mother never quite understood his unusual tastes, and she maligned him for taking this fragile girl into the wilderness and making her sleep on the ground for two weeks.

The newlyweds were both intent on continuing their education, Tad in sociology and Ann in social work. Having searched intensively for a university with strong programs for both, they decided on the University of North Carolina. Professors Howard Odum, Rupert Vance, and Guy Johnson were the influential elders of the North Carolina Department of Sociology at that time, but a somewhat younger

group of faculty members also influenced Tad's academic development. His interest in the use of statistics in social research was fostered by Daniel Price, while Nicholas Demerath influenced his thinking about sociological theory. Guy Johnson was his principal mentor in the field of race relations.

Tad spent only three years at North Carolina, a relatively brief time for a sociologist to complete a Ph.D. By the time he left in 1954, he had pushed himself through a demanding reading program, completed a minor in mathematical statistics, and finished a dissertation. His dissertation raised some eyebrows in the sociology department, where the established practice was to undertake an empirical study for the dissertation. Contrary to the usual practice Tad's dissertation was an attempt to achieve a more systematic theoretical formulation in the field of race relations, drawing on the work of Robin Williams, E. Franklin Frazier, and others.

Although new Ph.D.s in sociology were not in high demand in 1954 Blalock was highly recommended by his mentors, and his first academic position was at the University of Michigan. The prevailing practice at that time was for new Ph.D.s to begin, not as assistant professors, but as instructors and to carry teaching loads that were considered, a decade later, inordinately burdensome. Twenty-eight-year-old Tad Blalock, instructor in sociology, was in charge of his department's statistics courses, both graduate and undergraduate. He also taught introductory sociology and the undergraduate course on research methods, and he served as an academic counselor for undergraduate majors and incoming graduate students.

Enthusiasm notwithstanding, classroom teaching did not come naturally to Instructor Blalock in his first years as a faculty member. One of the first things he had to learn about teaching was that everyone did not grasp abstract

mathematical concepts as readily as he did, and the panic and tears of some of his early students in statistics courses prompted him to devise teaching procedures that went beyond the usual classroom lecture. He worked to develop improved ways of communicating with the students in his classes. But, even more, he devoted additional teaching and consulting time to his students, offering extra sessions and special assistance to those who wanted to take advantage of them. Even in his first years of teaching, Tad showed evidence of the kind of concern and the extra time commitment that were to earn for him the high respect of several generations of students.

As demanding as his teaching duties were in those early years, Blalock rapidly started to accumulate a publication record. He had tremendous energy and drive. He loved what he was doing, and he frequently worked late into the evening and all through the weekend. During the first six years following completion of his Ph.D. (1954-60), he published eleven papers in scholarly journals, including papers in *The American Sociological Review*, *The Journal of the American Statistical Association*, and *Social Forces*. Occasionally, Tad and Ann Blalock published jointly, beginning in 1959 with a paper in *Philosophy of Science*.

Other joint products of Tad and Ann during their years at Michigan were two daughters: Susan Lynn (1956) and Kathleen Ann (1958).

While the flurry of journal publications from 1956 to 1960 was sufficient in itself to suggest an unusually active young scholar, another publication effort was under way. In 1960 the first edition of *Social Statistics* was published. Tad later indicated that, at the time, he was unaware of the disdain that some of his senior colleagues had for textbook writing, especially in statistics rather than sociology. After completing his manuscript, he was surprised to learn that it

would not be very beneficial in his tenure decision. Perhaps it is fortunate that he didn't know; otherwise he might not have written this outstanding and influential textbook. In writing this volume, Blalock drew on his own training in mathematics and statistics, but he wrote for social scientists interested in applying statistical techniques rather than for mathematicians interested in the formal theory of statistics. It was also evident that Blalock drew on his experience as a teacher of statistics, and his book was designed to clarify the fundamentals applied in social science research for students lacking an extensive mathematical background. The book was authoritative without being esoteric, and it was student oriented without being oversimplified. Adoptions for classroom use were soon sufficiently numerous to make the book a commercial as well as a pedagogical success.

In the fall of 1961 Blalock accepted an offer to become an associate professor at Yale. His stay there was brief (three years), but it was during this period that he produced a series of publications on statistical procedures relevant to causal inferences. His book titled *Causal Inferences in Nonexperimental Research*, published in 1964, included an examination of prior philosophical discussions of cause and effect, but its primary focus was the exploration of strategies for making reasonable inferences about causal processes from a combination of a priori assumptions and statistical outcomes. He also published a number of papers on the same general topic. Between 1961 and 1964 inclusive, he published twelve papers in scholarly journals, primarily *The American Journal of Sociology* and *The American Sociological Review*. His papers on causal inferences built on the foundation laid by Sewell Wright in the development of path analysis four decades earlier. He also built on structural equation models developed by econometricians since the 1930s. Blalock's papers were widely read and were among the most

influential papers in sociology during the decade. His name was thereafter closely associated with causal models in the thinking of sociologists, and his reputation as a sociologist and statistical methodologist spread throughout the United States and abroad.

Along with his growing reputation as a sociologist, Tad Blalock's family was also growing at Yale. His son, James Welsh, was born in 1963, joining his sisters Susan and Kathleen.

Responding to an offer of a full professorship, Blalock moved in 1964 to the University of North Carolina, where he remained until 1971. His years as a faculty member at North Carolina were highly productive. At North Carolina he produced three books and coedited a fourth with his wife, Ann. Two of these books were especially influential. *Toward a Theory of Minority Group Relations*, published in 1967, was a continuation of the work undertaken in his Ph.D. dissertation. Citations to this work continue after twenty-five years. In 1969 he published *Theory Construction: From Verbal to Mathematical Formulations*, in which he described a mode of theory construction intended to help bridge the gap between traditional sociological theory and empirical research. This short book is appropriately seen as an extension of his earlier work on causal inferences.

The papers produced during Tad Blalock's period as a North Carolina faculty member were even more influential than his books of that period. While at North Carolina, he published twenty-one papers on a variety of substantive and methodological topics. His most influential papers of this period were concentrated in two areas. First, he presented a set of papers on methodological problems entailed in testing theories of status inconsistency. The theme in these papers was the intractable nature of certain formulations of the theory because the set of equations associated with those

formulations was underidentified. The importance of these papers lay, not simply in their relevance for status inconsistency theory, as then formulated, but in making the more general point that verbal formulations of theoretical ideas frequently make it difficult to recognize logical flaws, harking back to one of the points in *Theory Construction: From Verbal to Mathematical Formulations*.

The second set of influential papers published during Tad's period as a faculty member at North Carolina pertained to conceptualization and measurement in social research. In these papers the pervasive feature is representation of the relationship between concepts and their empirical indicators in the form of a causal model. This representation allowed him to explore measurement error and its implications for multiple regression, path analysis, and structural equation models. This was to be one of the continuing themes in his work for the remainder of his life.

Tad's publications brought him increasing recognition, and this was reflected in his invitation to serve on editorial boards or as an associate editor for several journals. He had earlier (1962-64) served as an associate editor of *The American Sociological Review*, and in the late 1960s he was invited to serve in a similar role for *The American Journal of Sociology*, *Social Problems*, and *Sociological Methodology*. He was elected to serve on the Council of the American Statistical Association in 1970 and on the Council of the American Sociological Association in 1971.

Although Tad had a highly congenial set of departmental colleagues at the University of North Carolina, he felt that the university was not in step with the spirit of the times. Influenced by the civil rights movement and the antiwar movement, there was a spirit of moral change in the country at the end of the 1960s. Tad had long been an advocate for civil rights, and he was pleased to see that American

universities were in the vanguard of change. On the other hand, the University of North Carolina seemed to him to be unduly influenced by a faculty and administration that were intent on preserving discredited traditions. Among other things, Tad believed the university was failing to recruit black students with genuine vigor. In an unrelated matter pertaining to a young faculty member, when the most conservative elements in the university took actions that Tad considered unwarranted and unfair, it was the proverbial straw that broke the camel's back. Tad decided to seek a suitable position at another university.

After careful consideration of several options, Tad accepted an offer to join the University of Washington faculty in the fall of 1971. There he continued to play a vital role in the training of graduate students, and he was the recipient of numerous honors.

Tad's many publications and other achievements during his Washington years can probably best be summarized by considering them in two sets: those prior to 1980 and those that came in 1980 or later. In the earlier of these periods (1971-79), Tad was the author or coauthor of three books and the editor or coeditor of three additional volumes. In these books he further developed his work on familiar topics, notably quantitative research methodology and race relations. The book of this period that was most influential was probably an edited volume published in 1971 with the title *Causal Models in the Social Sciences*. In this collection Tad brought together papers by several authors, including some papers published for the first time. This collection served as a major resource for the further development and application of causal models in social science research.

In 1973 Tad received the Stouffer Award, presented by the American Sociological Association in recognition of his outstanding contributions to sociological research and re-

search methodology. He was made a fellow of the American Statistical Association in 1974 and a fellow of the American Academy of Arts and Sciences in 1975. He was elected to the National Academy of Sciences in 1976 and served as president of the American Sociological Association in 1978-79. Such exalted recognition must have made an impression on Tad, but the only change in his behavior evident to colleagues and students was an increase in his energy. It was almost as if he were intent on convincing everyone around him that he was not unduly impressed by his own success and that he wasn't going to rest on his laurels.

As president of the American Sociological Association, Tad was persistent in his attempts to improve the discipline. In his presidential report to the membership (*Footnotes*, August 1979), he urged the association to give continuing attention to several important matters, three of which represented well his own long-term personal and professional commitments: improving the training of sociologists, upgrading the quality of undergraduate teaching in sociology, and enhancing the standing of sociological research as a basis for social action and public policy decisions.

Undergraduate teaching and the improved training of sociologists were matters of persistent concern to Tad. He was a superb exemplar of a committed teacher, and he was an active participant in the programs of the association devoted to improving undergraduate education. Scores of graduate students—many from disciplines other than sociology—considered Tad's courses one of the highlights of their graduate training. Tad was always emphasizing for his colleagues the need to upgrade graduate training and to upgrade skills in postdoctoral training programs. He subsequently published papers on quality training for sociology graduate students.

Tad's interest in enhancing the standing of sociological

research as a basis for social action and public policy decisions was central to his own conception of sociology. He was committed to developing the kind of sociology that would be useful in application while also meeting the most exacting standards of methodological rigor and theoretical sophistication. To Tad's chagrin, many of his fellow sociologists saw these objectives as mutually incompatible. They commonly expected an applied sociologist to have limited interest in theory development and little commitment to improving research methodology. Furthermore, many expected a sociological theorist to be disdainful of applications and indifferent to empirical studies. And a widely held stereotype portrayed the empirical researcher in sociology as contemptuous of theory and lacking in concern for applied or policy concerns. But for Tad these three elements—general theory, sound empirical research, and policy relevance—constituted an integrated whole toward which the discipline should always strive. His interest in improving research methodology and his concern for the development of sound theory were primarily means to make the field more relevant to action and policy problems. The social conscience that Tad developed as a very young man and that was nurtured by the workshops of the American Friends Service Committee and his explorations in the field of race relations was still with him as president of the American Sociological Association.

Eight of the ten papers Tad published between 1971 and 1979 inclusive were devoted to issues pertaining to social science conceptualization and measurement. One of these was the published version of his 1979 presidential address to the American Sociological Association. His title was "Measurement and Conceptualization Problems: The Major Obstacle to Integrating Theory and Research." It was evident that Tad believed that conceptualization and measurement

problems were serious impediments to the continuing development of sociology, and he was not optimistic about the prospects for much progress in resolving such problems in his lifetime. The pessimistic tone and the high level of abstraction of his presidential address did not make it a crowd pleaser. But pleasing the crowd and oversimplifying complex issues had never been high in Tad's priorities, and he considered it important to highlight for his sociological colleagues some difficult problems that needed resolution.

By 1980 Tad had accumulated an impressive record of achievements. He was a sociologist with an international reputation; he had been elected to membership in the nation's most prestigious scientific organization; and he had just completed a term as president of the national organization for members of his discipline. But at fifty-four he was far too energetic and vigorous to be satisfied simply being an elder statesman. He continued working.

In 1982 he was selected to present the Annual Faculty Lecture at the University of Washington. In 1983-84 he served as vice-chair of the University of Washington Faculty Senate, and in 1984-85 he served as the chair of that body. This office brought with it a host of committee and administrative responsibilities, including *ex officio* membership on the Board of Regents. He immersed himself in these activities, and his penetrating questions did not always endear him to the university administration. But his straightforward style, his questioning attitude, his strong commitment to fairness, and his fervent defense of scholarly values gave him an enthusiastic following among the faculty.

Even as he was heavily engaged in the activities of the University of Washington Faculty Senate, his commitment to teaching did not falter and his scholarly productivity did not decline. In the early 1980s he authored three books, edited a volume of selected papers from the 1979 meeting

of the American Sociological Association, and coedited a collection of works on teaching sociology. He was also the author or coauthor of eight papers in the first half of the decade.

Few people knew in 1984—and no one who didn't know would have guessed—that Tad had a serious health problem. During a routine hernia operation, he was found to be suffering from a rare form of abdominal cancer. He was told that there was no cure. He was also told that the cancer was relatively slow growing and that the major treatment would be periodic surgery.

Tad undoubtedly understood all that the specialists told him about his condition. He probably believed them. But it was almost as if his cancer and the threat it posed to his life never seemed real enough to him to be worthy of discussion. Even with family members he declined to discuss his disease and his altered life expectancy. It was not a topic he broached with colleagues; he could always find more interesting and more productive things to talk about.

Even so, beginning about 1987, an examination of Tad's work suggests that he had made a subtle change in his scholarly agenda, in recognition of his deteriorating health. After that date, his papers appeared primarily in edited collections, as if he were fulfilling commitments to a few colleagues to prepare a paper for their special volumes. The two major works that he completed in the few years remaining before his death reach for a new level of generality. A longtime student of race relations, Tad had, of course, also been a student of social conflict and the exercise of power as exemplified in race relations. In *Power and Conflict Processes: Toward a General Theory*, Tad no longer focuses specifically on race relations; rather, he examines power and conflict more abstractly, considering the relevant processes in all contexts, including, but not limited to, the

context of race relations. Similarly, in *Understanding Social Inequality: Modelling Allocation Processes*, Tad goes beyond the specific features of inequality entailed in the stratification of racial groupings to explore general processes that create and sustain social inequality. These two books are a fitting capstone for Tad's long series of publications. They embody his persistent conviction that sociology must develop systematic and general theoretical formulations with clear links to the empirical world. They illustrate his belief that common explanations for social phenomena are overly simplistic and hence lack the capacity to advance understanding. They address pressing public policy problems in ways that are intended to provide guidelines for potential social change. And his argument is presented in the form of carefully formulated causal models, a form that became prominent in sociology largely through his work.

Even as he continued to work, medical treatments periodically interrupted Tad's schedule. The treatments were risky and painful, and each required weeks of recovery. Between treatments, abdominal blockages created pain, increasingly severe dietary restrictions, and continuing weight loss. Long before his retirement in 1989, Tad's deteriorating health was evident to all who saw him.

In the spring of 1989 Tad retired from active faculty status to become professor emeritus. During that spring the Department of Sociology at the University of Washington sponsored a lecture series in Tad's honor. Eight distinguished scholars whose work was related in some way to Tad's were brought to Seattle to present public lectures on their current work and recent findings. As the 1988-89 academic year drew to a close, the Department of Sociology celebrated Tad's career with a retirement dinner, complete with reminiscing speakers and testimonial toasts. Tad was on such a

heavily restricted diet that he could not enjoy the feast, but he evidently enjoyed the event.

Tad's brief period as professor emeritus was a period of continuing physical decline despite his tenacious will to live and a determination to continue his work. While recovering from his final surgery, he read proofs for his last book. He was notified by telephone that he was the 1991 recipient of the American Sociological Association's Lazarsfeld Award four days before he died on February 8, 1991. The Persian Gulf War was under way, and Tad spent his final days analyzing recent developments in the Middle East in light of the general principles he had discussed in *Power and Conflict Processes: Toward a General Theory*.

To the end of his life, Tad remained a person of great inner strength, sustained by the remarkably warm and close relationship that he and Ann maintained for nearly forty years. To many he was an inspiring figure of great personal warmth. In the words of the Lazarsfeld Award citation, ". . . To colleagues, friends, and scores of former students, he was known simply—and very affectionately—as 'Tad,' and his image as an internationally renowned sociologist is inextricably mixed with his image as a kind and generous human being who has enriched the lives of many" (*Footnotes*, April 1991).

I AM INDEBTED TO Ann Blalock for providing much information about Tad's life that would otherwise have been inaccessible to me. Her assistance has greatly enriched this memoir and eased the task of writing it. Tad's own partial biographical sketch, titled "Socialization to Sociology by Culture Shock," was a helpful resource more often than one might infer from the explicit citations to it.

REFERENCES

- Blalock, H. M. Socialization to Sociology by Culture Shock. In *Sociological Lives*, ed. M. W. Riley, pp. 107-17. Beverly Hills: Sage Publications. 1988.
- Report of the President: Blalock Stresses Long-Term Issues. *Footnotes* 7(August 1979):1, 10, 14. (Published by the American Sociological Association, Washington, D.C.)
- Lazarsfeld Award Made to Hubert M. Blalock. *Footnotes* 19(April 1991):1.

SELECTED BIBLIOGRAPHY

1957

Per cent non-white and discrimination in the south. *Am. Sociol. Rev.* 22:677-82.

1960

Social Statistics. New York: McGraw-Hill.

A power analysis of racial discrimination. *Soc. Forces* 39:53-59.

1961

Evaluating the relative importance of variables. *Am. Sociol. Rev.* 26:866-74.

1962

Four-variable causal models and partial correlations. *Am. J. Sociol.* 68:182-94.

1963

Making causal inferences for unmeasured variables from correlations among indicators. *Am. J. Sociol.* 69:53-62.

1964

Causal Inferences in Nonexperimental Research. Chapel Hill: University of North Carolina Press.

1965

Theory building and the concept of interaction. *Am. Sociol. Rev.* 39:375-80.

1966

The identification problem and theory building: the case of status inconsistency. *Am. Sociol. Rev.* 31:52-61.

1967

Toward a Theory of Minority Group Relations. New York: John Wiley & Sons.

1969

Theory Construction: From Verbal to Mathematical Formulations. Englewood Cliffs, N.J.: Prentice-Hall.

1970

Estimating measurement error using multiple indicators and several points in time. *Am. Sociol. Rev.* 35:101-11.

1971

Editor. *Causal Models in the Social Sciences*. Chicago: Aldine-Atherton (Rev. ed., 1985).

Aggregation and measurement error. *Soc. Forces* 50:151-65.

1974

Editor. *Social Science Measurement: Theories and Strategies*. Chicago: Aldine-Atherton.

1979

Black-White Relations in the 1980's: Toward a Long Term Policy. New York: Praeger.

With P. H. Wilken. *Intergroup Processes: A Micro-Macro Perspective*. Glencoe, Ill.: Free Press.

Measurement and conceptualization problems: the major obstacle to integrating theory and research. *Am. Sociol. Rev.* 44:881-94.

1982

Race and Ethnic Relations. New York: Prentice-Hall.

Conceptualization and Measurement in the Social Sciences. Beverly Hills: Sage.

1986

Multiple causation, indirect measurement and generalizability in the social sciences. *Synthese* 68:13-36.

1987

A power analysis of conflict processes. In *Advances in Group Processes*, vol. IV, ed. E. J. Lawler and B. Markovsky, pp. 1-40. Greenwich, Conn.: JAI Press.

1989

Power and Conflict Processes: Toward a General Theory. Beverly Hills: Sage.

The real and unrealized contributions of quantitative sociology. *Am. Sociol. Rev.* 54:447-60.

1991

Understanding Social Inequality: Modelling Allocation Processes. Beverly Hills: Sage.

