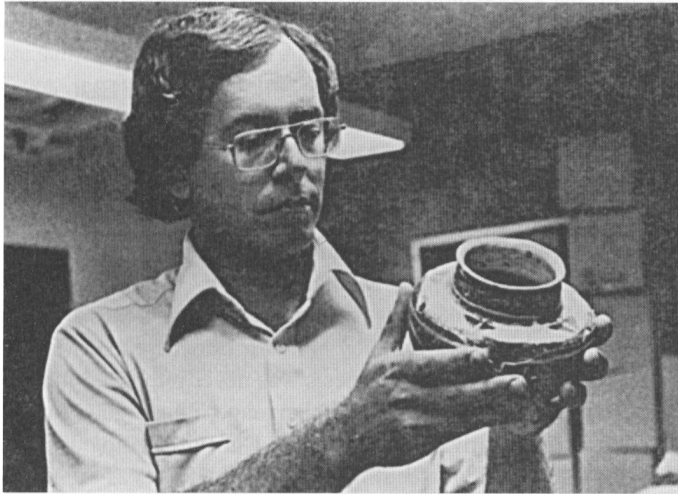


FRED PLOG

1944–1992



An important, stimulating and often provocative voice in southwestern archaeology and archaeological method and theory fell silent with the death of Fred Plog in Las Cruces, New Mexico, on June 18, 1992. He died just one month short of what would have been his 48th birthday. His life and career accomplishments took place with extraordinary speed, intensity, and impact. In a period of less than 25 years Fred Plog played a key role in helping to change the practice of American archaeology and the writing of prehistory in the Southwest. In his writing and teaching he was the quintessential “processual” archaeologist. His research emphasized goals and methods intended to highlight behavioral variability, and they had a marked and lasting impact on our perceptions of prehistoric cultures in the Southwest.

Fred Plog was born in Ft. Monmouth, New Jersey, on July 19, 1944. He was christened Frederick Thomas Plog III, but he used that full name sparingly early in his career, and never later, because he felt uneasy with the overly formal sound of it. He spent his career consciously rejecting the formality and pretensions of the academic world he inhabited. At a very young age, Fred moved with his family to Roswell, New Mexico, where he lived until he was 12. The next move was to El Paso, Texas, where Fred graduated from high school in 1962. His mother’s family had lived in New Mexico for two prior generations, and Fred maintained a passion for the environment and history of the Southwest throughout his life.

In his school years Fred had an interest in geology and paleontology, but he was particularly drawn to the competitive, intellectual challenge of debating (no surprise to those who recall his skills at argumentation and extemporaneous speech). Fred was a Texas state debate champion for two consecutive years and attended summer national debate camps at Northwestern University. In 1962 he entered Northwestern to pursue his B.A. and debating. It was a debate topic that led Fred to the study of eco-

American Antiquity, 60(4), 1995, pp. 677–684.

Copyright © by the Society for American Archaeology

nomics, the field in which he earned his degree and Phi Beta Kappa honors in 1966. It was as an economics major that Fred decided to take an elective course in economic anthropology with Paul Bohannon. From about that point on, Fred was committed to anthropology and the study of change, but he had not yet focused on archaeology. Offered a National Science Foundation (NSF) traineeship at the University of Chicago, Plog entered the Chicago program in anthropology in fall 1966.

The next three years in Plog's life and career moved at a dizzying speed, highlighted by remarkable personal and professional accomplishments. Fred married Gayle Gilham, and they became parents of twin boys. In graduate school, seminars with Robert McCormick Adams, Pedro Armillas, and Leslie Freeman steered Plog, with his burgeoning interest in culture change, toward archaeology. Plog later suggested that conversations with fellow graduate student John Fritz also had a major impact on him, as did the publications of Lewis Binford and his students.

While Plog at first contemplated an offer to do fieldwork in the Near East, when Paul Martin of the Field Museum offered him a summer position—one part handyman and one part grant writer (not an unusual assignment at Martin's famed Vernon, Arizona, field camp)—he was off to the Southwest in 1967 to begin what would be 15 years of intensive fieldwork in eastern and central Arizona. He would always consider Paul Martin a mentor, and they would later (1973) coauthor *The Archaeology of Arizona*. Among the others at Vernon in the summers of 1967 and 1968 were John Fritz, Mark Leone, Charles Redman, Tim Earle, Ezra Zubrow, and Michael Schiffer.

Less than one year later, by March 1968, Plog had written a master's thesis, *Archaeological Surveys: A New Perspective*, based on survey work done by William Longacre and Mark Leone in the Upper Little Colorado area of Arizona. This influential thesis was never published but was widely circulated and frequently cited. In clear and direct (debate-style) language, Plog argued for the use of survey data in problem-oriented research and clarified the writing of an archaeological research design using hypothesis formulation. Flannery (1973) later singled out Plog's thesis as an "elegant" example of the best of "Hempelian archaeology."

Several weeks after completing his thesis and still a second-year student at Chicago, Plog presented a paper at the SAA meeting in Santa Fe in 1968. This work would shortly thereafter become his half of an influential article appearing in *American Antiquity* in 1970. Coauthored with John Fritz and entitled "The Nature of Archaeological Explanation," it was a clarion call for establishing the purpose and logic of archaeology. This paper played a prominent role in the "revolution" claimed by the new archaeologists. Schiffer recalls the response to Plog's SAA paper at the University of California-Los Angeles, where Binford and the vanguard of the New Archaeology had moved:

[T]he Binfords and several graduate students had returned from the SAA meetings singing the praises of Fred Plog. He had given a paper on the scientific method that had played well among the Binfordians. Here was a fervent champion of Binford-style processual archaeology, and at Chicago no less. Soon copies of Fred's M.A. thesis were circulating at UCLA, where they were avidly read by the Binfordians.

By spring 1969, after just three years in graduate school, Plog had written and defended his doctoral dissertation: a study of the pithouse-to-pueblo transition in the Upper Little Colorado drainage. Plog's focus in this work was on such systemic concepts as increase and decrease in "differentiation" and "integration," and the organization of population and work. His efforts to control for the life cycle of village occupations in population reconstruction and his interest in pueblo storage and redistribution patterns were substantive contributions still influential in the Southwest. The dissertation was published in 1974 as *The Study of Prehistoric Change*, and with its promotion by Academic Press, a force just emerging in archaeological publishing, it had quite an impact in the Southwest and beyond.

In all of his publications of this period Plog hammered home his belief that "if the archaeological record is anything it is a record of change" (Plog 1974:11, 1973) and that the goal of archaeology should be the explanation of change. "Archaeology offers the possibility of approaching the study of change in a different manner from other social sciences. . . we should seek to explain phenomena other social sciences have difficulty explaining, but in which social science is interested" (Plog 1974:11). If

archaeology had limited itself in the past, it was because of its “overwillingness to borrow the largely synchronic models of change that the ethnologist employs” (1974:11), and to not address issues of interest to other social scientists. These themes resonated in his writing for the next two decades.

In fall 1969, at the age of 25, Plog assumed his first teaching position at UCLA. Despite undertaking new teaching responsibilities, taking charge of the UCLA Archaeological Survey for one year, becoming book review editor for *American Antiquity*, and the birth of his third child, a daughter, his publications, field research, and cooperative ventures in southwestern archaeology only intensified. In 1971, Plog, James Hill, and Dwight Read directed the NSF-sponsored Chevelon Archaeological Research Project in the Chevelon drainage of central Arizona. This project ran for three years, and many future professional archaeologists received their initial training in survey and excavation as part of this study. In these same years, Plog played a central role in the organization, research direction, and early success of the innovative cooperative research venture known as the Southwestern Anthropological Research Group or SARG. Frustrated by the emphasis on description and typology at the Pecos and annual Southwest ceramic conferences, Plog and others organized a group of southwestern archaeologists who were interested in collectively testing hypotheses concerning the nature of settlement patterns in the prehistoric Southwest. George Gumerman, co-pioneer in the SARG venture and editor of the SARG publications, recalled at a memorial service for Plog held in Las Cruces in 1992 that

Fred was probably the most instrumental individual in founding SARG and getting it established. Without him and Jim Hill this landmark cooperative effort would not have come to fruition and without Fred it would have foundered. The crucial point is that it was a cooperative endeavor. He had more input than anybody else to those efforts.

Through the Chevelon Project, SARG, and many cultural resource management-based planning studies conducted for federal agencies, Plog attempted to dislodge southwestern archaeologists from their historical preoccupation with “big sites.” Large and visually impressive pueblos, he argued, were the exception and should not alone characterize prehistoric adaptations. “In most times and in most places,” Plog would often say, a much different kind of settlement was typical, characterized by the small 2- to 10-room homesteads dotting the landscape throughout the northern Southwest (Plog, Effland, and Green 1978). Years later he suggested that the pattern of big and small sites in the Southwest could best be described as reflecting social systems of “resiliency and stability” and archaeological patterns labeled as “strong” or “weak.” The writing of prehistory through archaeology tended to overemphasize periods of stable, maximizing systems that left “strong” patterns in the archaeological record. Plog worked hard to illuminate the less visible patterns that were the evidence for more long-term, resilient strategies of adaptation.

In 1972 Plog accepted an offer to move to the State University of New York at Binghamton, and two years later he assumed the chairmanship of that department. He continued his research in the Chevelon drainage and his involvement in SARG, but also invested a good deal of time helping to bring the practice of public archaeology in the Northeast into the modern era. His writing on the use of research design, survey methodology, and sampling theory in the area of cultural resource management in New York and the Southwest had an impact throughout the United States. Many of Plog’s graduate students of the 1970s and 1980s recall the influence he had on them in developing a progressive philosophy of cultural resource management in which planning and research could be means to the same end. More than a few of these students went on to positions of leadership in federal- and state-level archaeological planning and management.

In 1976 Plog moved back to the Southwest, accepting the position of associate professor at Arizona State University. He soon was promoted to professor and became in 1978 the chairman of the Anthropology Department. During these years Plog focused intensively on issues of southwestern prehistory. He labored long and hard on the issue of Hohokam chronology and offered an important critique of Emil Haury’s construction of that chronology (Plog 1978, 1980), stimulating others to revisit this issue as well. Plog invested himself most intensively and most explosively in these years on the

nature of regional social and political organization in the region he knew best: the Colorado Plateau. In several publications, Plog (1979, 1983, 1984) challenged the static culture area approach long dominant in the Southwest, replacing it with more dynamic concepts of shifting regional alliances and provinces. The topic for which he received the most notoriety concerned the structure of prehistoric political organization in the Southwest.

In 1977, inspired by a lecture delivered by his former teacher and mentor Robert McCormick Adams to his summer field school, Plog broadened his focus to include the larger pueblos to which the smaller sites were linked. In spring 1978 Plog and his colleagues at Arizona State University received a large grant from NSF to study organizational complexity in the region of the Chavez Pass Pueblo in central Arizona. Field schools were held at the site between 1978 and 1983.

In 1979, Plog and Linda Cordell published the controversial paper, "Escaping the Confines of Normative Thought: A Reevaluation of Puebloan Prehistory," in *American Antiquity*. While this paper continued Plog's commitment to describing variable strategies by which prehistoric people "coped" with ecological change (population/resource imbalance), it also set out his emerging position that the prehistoric Southwest was characterized "in some times and in some places" by wide-scale systems of redistributive exchange and patterns of social hierarchy which indicated the presence of "complex" societies. As Cordell and Plog (1979:424) themselves said in this paper, "Commenting on the evolution of complex societies from the perspective of the American Southwest is unprecedented at best."

Throughout the 1980s, Plog published his ideas concerning the origins and functioning of complex societies in the prehistoric Southwest. Along with his student Steadman Upham, he carried on a frequently vitriolic debate on this issue with University of Arizona researchers (especially J. Jefferson Reid) who, from the perspective of Grasshopper pueblo, disputed the idea that the patterns Plog observed at Chavez Pass and elsewhere necessarily equated with complex, hierarchical political organization. This debate remains a current one. However, enough time has passed since the issue was first contentiously raised in the late 1970s that the following reflections seem valid to us.

First, Plog played a key role in setting an agenda that is debated in southwestern literature to the present day. Second, despite the major redirection in his studies from small sites to large sites, Plog remained consistent with the goals he projected 10 to 20 years earlier: to expose variability in the prehistoric record, study and explain processes of long-term change, and move beyond the limitations of the language of ethnographic description. Many may challenge Plog's interpretation of concepts such as "provinces" and "alliances," but the fact is that few any longer attempt to write cultural syntheses from the perspective of one site or one valley.

In 1982, shortly after his fourth child was born, a daughter, Plog moved to New Mexico State University. He became chairman of that department as well and, for a time, director of its cultural resource management office. For many of these years, Plog was involved in a several complicated CRM projects, including the multi-state All-American Pipeline Project. This was contract archaeology on a geographic scale never before attempted, which required thinking in analytical terms never before tried in regional archaeology. It was a challenge Plog could not resist. The logistics and technical issues of this project clearly took its toll. Still, throughout these years he was thinking about southwestern prehistory in concepts and language that, once again, were ahead of their time. In one of his last papers, titled simply "Studying Complexity," Plog (1989) introduced complexity theory to the study of archaeologically defined social systems long before this school of thought became popular and known to most archaeologists. His search for a language and models to describe temporal and spatial variability in the archaeological record, understandable to a wider audience of social scientists, thus continued until his death in 1992.

Fred Plog was an extraordinary teacher at the graduate and undergraduate levels. His classes were informal ("What I would like to talk about today. . ." was the standard beginning to every lecture), yet exceedingly well organized and always provocative. He offered undergraduate and graduate students the opportunity to work in his labs and with his data and field projects as a matter of course. He was, above all, a confident teacher who encouraged his own students and close colleagues to challenge not

only everyone else's interpretations of southwestern prehistory, but also the alternatives he himself was developing. Despite a reputation for being dogmatic, Plog displayed through research, writing, and teaching an intellectual curiosity, flexibility, and evolution that are striking. One additional and significant measure of his skill as a teacher is found in his coauthorship of a series of introductory anthropology textbooks with Clifford Jolly and Daniel Bates. The physical anthropology and archaeology text coauthored with Jolly became what publishers call a "market leader." Reprinted in four editions, this text reached introductory students across the United States in numbers well above 100,000.

It is an understatement to say that Fred Plog was attracted to and seemed to thrive in controversy. He attempted to break the mold of culture-historical thinking in the Southwest. He made enemies in some overly personal debates and in his initially well-intentioned, but later overzealous, efforts to review cultural resource management studies in the areas in which he worked. He could be tough as a chairman and administrator, yet his determination and skill helped to build several graduate programs that remain influential in the field today. Reflection on his career as archaeologist and teacher can leave no doubt as to the immense impact he had on the profession and southwestern archaeology in a short, but tumultuous time. His many students recall a teacher who inspired them in many different areas of anthropology. His colleagues remember him with a respect of extraordinary proportions and with a large debt of gratitude for the countless ideas he freely shared in many cooperative research ventures and books and articles. At a memorial service for Fred Plog held in Las Cruces, Linda Cordell offered this reflection, a most appropriate conclusion:

Fred proposed theoretical concepts and dimensions for study that were new in southwestern archaeological studies. Some of his ideas were prescient and accurate. Others seem to require refinement and others may be wide of the mark. No matter whether his interpretations are accepted or not, southwestern archaeologists cannot look at their data in the way they did before. His perspective continues as a voice in our thoughts.

Fred Plog is survived by his parents, Fred and Phyllis Plog of El Paso, Texas; Gayle Plog; his children, Steve, Tom, Amy, and Katherine Plog; two grandchildren, and his sister, Anne, and brother, Steve. The Society for American Archaeology established a memorial fund in the name of Fred Plog to support student research in archaeology. Contributions may be sent to Fred Plog Memorial Fund at the SAA headquarters in Washington D.C.

JEFFREY L. HANTMAN AND MICHAEL B. SCHIFFER

Bibliography of Fred Plog

- 1967 *Beyond the Frontier: Social Processes and Cultural Change*, (coeditor with P. Bohannon), Natural History Press, New York.
- Civilized Men and Natives (with P. Bohannon). In *Beyond the Frontier*, edited by P. Bohannon and Fred Plog, pp. 121–134, Natural History Press, New York.
- 1968 *Archaeological Surveys: A New Perspective*. Unpublished Master's thesis, Department of Anthropology, University of Chicago, Chicago.
- 1969 *An Approach to The Study of Prehistoric Change*. Ph.D. dissertation, Department of Anthropology, University of Chicago, University Microfilms, Ann Arbor.
- 1970 The Nature of Archaeological Explanation (with J. Fritz). *American Antiquity* 36:405–412.
- Review of *An Introduction to Prehistoric Archaeology*, by F. Hole and R. Heizer, *American Anthropologist* 72:1169–1170.
- 1971 Explaining Variability in the Distribution of Sites (with J. Hill). In *The Distribution of Prehistoric Population Aggregates*, edited by G. Gumerman, pp. 7–44, Anthropological Papers No. 1. Prescott College, Prescott, Arizona.
- Some Operational Considerations. In *The Distribution of Prehistoric Population Aggregates*, edited by G. Gumerman, pp. 45–54. Anthropological Papers No. 1. Prescott College, Prescott, Arizona.
- Chevelon Archaeological Research Project. In *UCLA Archaeological Survey Annual Report* No. 13, pp. 1–24.
- 1972 Explaining Variability in Prehistoric Southwestern Water Control Systems (with C. Garrett). In *Contemporary Archaeology*, edited by M. Leone, pp. 280–288, Southern Illinois University Press, Carbondale.
- The Southwestern Anthropological Research Group: Revisions of the Research Design, 1972. (with J. Hill) In *Proceedings of the Southwestern Anthropological Research Group*, pp. 7–20. Prescott College Press, Prescott, Arizona.
- Review of *Frontier Folkways*, by J. G. Leyburn, *American Journal of Sociology* 78:734–735.

- 1973 Diachronic Anthropology. In *Research and Theory in Current Archaeology*, edited by C. Redman, pp. 181–198. Wiley Interscience, New York.
- Laws, Systems of Law, and the Explanation of Observed Variation. In *The Explanation of Culture Change*, edited by C. Renfrew, pp. 649–661. Duckworth, London.
- The Archaeology of Arizona* (with P. S. Martin). Natural History Press, New York.
- Review of *Explanation in Archaeology*, by P. J. Watson, S. LeBlanc, and C. Redman. *Science* 179:59.
- 1974 *The Study of Prehistoric Change*. Academic Press, New York.
- Settlement Patterns and Social History. In *Frontiers of Anthropology*, edited by M. Leaf, pp. 68–91. Van Nostrand, New York.
- Theory and Method in Settlement Studies. *Reviews in Anthropology* 1:451–457.
- SARG: A Cooperative Approach Towards Understanding the Locations of Human Settlements (with W. Longacre, J. Hill, D. Green). *World Archaeology* 6:107–116.
- Chumash Baptism: An Ecological Perspective (with Gary Coombs). In *California Indian Political and Economic Organization*, edited by T. King and L. Bean, pp. 137–154. Ballena Press, Ramona, California.
- 1975 Demographic Studies in Southwestern Prehistory. In *Population Studies in Archaeology and Biological Anthropology*, edited by A. Swedlund, pp. 94–103. Memoir No. 30. Society for American Archaeology, Washington, D.C.
- Systems Theory in Archaeological Research. *Annual Review of Anthropology* 4:207–224.
- 1976 *Physical Anthropology and Archaeology* (with C. Jolly). Alfred A. Knopf, New York.
- Cultural Anthropology* (with D. Bates). Alfred A. Knopf, New York.
- Anthropology: Decisions, Adaptations, and Evolution* (with C. Jolly and D. Bates). Alfred A. Knopf, New York.
- Chevelon Archaeological Research Project* (coeditor with J. Hill and D. Read). Archaeological Survey Monograph II. Department of Anthropology, University of California, Los Angeles.
- Ceramic Analysis. In *Chevelon Archaeological Research Project*, edited by F. Plog, J. Hill, and D. Read, pp. 58–78. Archaeological Survey Monograph II. Department of Anthropology, University of California, Los Angeles.
- Future Research Plans (with J. Hill and D. Read). In *Chevelon Archaeological Research Project*, edited by F. Plog, J. Hill, and D. Read, pp. 146–164. Archaeological Survey Monograph II. Department of Anthropology, University of California, Los Angeles.
- Review of *Issues in Social Ecology*, by R. Moos and R. Insel, *American Anthropologist* 78:650.
- 1977 Modelling Economic Exchange. In *Exchange Systems in Prehistory*, edited by T. Earle and J. Ericson, pp. 127–140. Academic Press, New York.
- Explaining Change. In *Explanation of Prehistoric Change*, edited by J. Hill, pp. 17–57. University of New Mexico Press, Albuquerque.
- Systems Theory and Simulation: The Case of Hawaiian Warfare and Redistribution. In *Explanation of Prehistoric Change*, edited by J. Hill, pp. 259–270. University of New Mexico Press, Albuquerque.
- The SUNY Binghamton I-88 Archaeological Research Design (with M. Weide and M. Stewart). In *Conservation Archaeology*, edited by M. Schiffer and G. Gumerman, pp. 107–120. Academic Press, New York.
- Archaeology and the Individual. In *The Individual in Archaeology*, edited by J. Hill and J. Gunn, pp. 13–22. Academic Press, New York.
- The Research Potential of Multiple-Use Studies (with J. S. Wood). In *Archeology and National Forest Land Management Planning*, Archeological Report Number 16. USDA Forest Service, Southwestern Region, Albuquerque.
- 1978 The Keresan Bridge: An Ecological and Archaeological Account. In *Social Archaeology: Beyond Subsistence and Dating*, edited by C. L. Redman, M. J. Berman, E. V. Curtin, W. T. Langhorne, N. M. Versaggi, and J. C. Wanser, pp. 349–372. Academic Press, New York.
- Cultural Resource Management and the “New Archaeology.” In *Social Archaeology: Beyond Subsistence and Dating*, edited by C. L. Redman, M. J. Berman, E. V. Curtin, W. T. Langhorne, N. M. Versaggi, and J. C. Wanser, pp. 421–429. Academic Press, New York.
- The Little Colorado Planning Unit: An Analytical Approach to Cultural Resource Management* (editor). Anthropological Research Papers No. 13. Department of Anthropology, Arizona State University, Tempe.
- The Little Colorado Planning Unit: A Summary (with J. S. Wood and J. Hantman) In *The Little Colorado Planning Unit*, edited by F. Plog, pp. 1–35. Anthropological Research Papers No. 13. Department of Anthropology, Arizona State University, Tempe.
- Decision Making in Modern Surveys (with S. Plog and W. Wait). In *Advances in Archaeological Method and Theory*, vol. 1, edited by M. Schiffer, pp. 383–421. Academic Press, New York.
- An Analysis of Variability in Site Locations in the Chevelon Drainage, Arizona. In *Investigations of the Southwestern Anthropological Research Group: The Proceedings of the 1976 Conference*, edited by R. Euler and G.

- Gumerman, pp. 53–72. Museum of Northern Arizona, Flagstaff.
- Inferences Using the SARG Data Bank (with R. Effland and D. Green). In *Investigations of the Southwestern Anthropological Research Group: Proceedings of the 1976 Conference*, edited by R. Euler and G. Gumerman, pp. 139–148. Museum of Northern Arizona, Flagstaff.
- SARG: Future Research Directions (with R. Effland, J. Dean, and S. Gaines). In *Investigations of the Southwestern Anthropological Research Group: The Proceedings of the 1976 Conference*, edited by R. Euler and G. Gumerman, pp. 179–186. Museum of Northern Arizona, Flagstaff.
- Small Sites in the Chevelon Drainage (with S. Powell). In *Limited Activity and Occupation Sites*, edited by A. Ward, pp. 17–23. Center for Anthropological Studies, Albuquerque.
- Sampling Strategies on the White Mountain Planning Unit: Apache-Sitgreaves National Forest. In *Sampling in Cultural Resource Management*. Cultural Resources Report No. 20, USDA Forest Service, Southwestern Region, Albuquerque.
- Review of *The Hohokam, Desert Farmers and Craftsmen: Snaketown, 1964-65*, by E. Haury, *American Antiquity* 43:536–538.
- Review of *Population, Contact, and Climate in the New Mexico Pueblos*, by E. Zubrow, *American Anthropologist* 80:145.
- 1979 Prehistory: Western Anasazi. In *Southwest*, edited by A. Ortiz, pp. 108–130. Handbook of North American Indians, vol. 9, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Escaping the Confines of Normative Thought: A Reevaluation of Puebloan Prehistory (with L. Cordell). *American Antiquity* 44:405–429.
- Alternative Models of Prehistoric Change. In *Transformations: Mathematical Approaches to Culture Change*, edited by C. Renfrew and K. Cooke, pp. 221–236. Academic Press, New York.
- Physical Anthropology and Archaeology, Second Edition* (with C. Jolly). Alfred A. Knopf, New York.
- 1980 *Current Issues in Hohokam Prehistory: Proceedings of a Symposium* (coeditor with D. Doyel). Anthropological Research Paper No. 23. Department of Anthropology, Arizona State University, Tempe.
- Explaining Culture Change in the Hohokam Preclassic. In *Current Issues in Hohokam Prehistory*, edited by D. Doyel and F. Plog, pp. 4–20. Anthropological Research Paper No. 23. Department of Anthropology, Arizona State University, Tempe.
- Generations in Clay: Pueblo Pottery of the American Southwest* (with A. Dittert). Northland Press, Flagstaff, Arizona.
- The Ethics of Archaeology and the Ethics of Contracting. *Contract Abstracts and CRM Archaeology* 1:10–15.
- Cultural Anthropology, Second Edition* (with D. Bates), Alfred A. Knopf, New York.
- Anthropology: Decisions, Adaptation, and Evolution, Second Edition* (with C. Jolly and D. Bates), Alfred A. Knopf, New York.
- 1981 Theory from the Bottom? (with L. Cordell). *American Antiquity* 46:198–199.
- Cultural Resources Overview: Little Colorado Area, Arizona*. USDA Forest Service, Southwestern Region, Albuquerque.
- Managing Archaeology: A Background Document for Cultural Resource Management on the Apache-Sitgreaves National Forest, Arizona*. Cultural Resource Management Report No. 1. USDA Forest Service, Albuquerque.
- SARG: The Computer in a Cooperative Effort. In *Data Bank Applications in Archaeology*, edited by S. Gaines, pp. 46–56. University of Arizona Press, Tucson.
- 1982 Is a Little Bit of Philosophy (Science) a Dangerous Thing? In *Theory and Explanation in Archaeology*, edited by C. Renfrew, M. Rowlands, and B. Seagraves, pp. 25–34. Academic Press, New York.
- A Perspective on Mogollon-Mesoamerican Interaction (with S. Upham and P. Weigand). In *Mogollon Archaeology: Proceedings of the 1980 Mogollon Conference*, edited by P. A. Beckett, pp. 227–238. Acoma Press, Ramona, California.
- The San Juan Tomorrow: Planning for the Conservation of Cultural Resources in the San Juan Basin* (coeditor with W. Wait). National Park Service, Southwest Region, Santa Fe.
- The Original Energy Crisis. *Early Man* 4(1):26–27.
- Turquoise: Gemstone of Imperialism. *Early Man* 4(2):26–27.
- Can the Centuries Long Experience of the Hohokam Be Ignored? *Early Man* 4(4):24–25.
- The Integration of Archaeometry into Archaeological Research. In *Future Directions in Archaeometry*, edited by J. Olin, pp. 75–79. Smithsonian Institution, Washington, D.C.
- Physical Anthropology and Archaeology, Third Edition* (with C. Jolly). Alfred A. Knopf, New York.
- 1983 Political and Economic Alliances on the Colorado Plateaus, A.D. 600–1450. In *Advances in World Archaeology*, vol. 2, pp. 289–330, edited by F. Wendorf and A. Close. Academic Press, New York.
- The Analysis of Prehistoric Political Organization (with S. Upham). In *The Development of Political Organization*, edited by E. Tooker and

- M. Fried, pp. 199–213. American Ethnological Society, Washington, D.C.
- High Altitude Utilization in Arizona. In *High Altitude Adaptations in the Southwest*, edited by J. Winter, pp. 41–52. Cultural Resources Management Report No. 2, USDA Forest Service, Southwestern Region, Albuquerque.
- Problem Orientation and Allocation Strategies for Prehistoric Cultural Resources on the New Mexico National Forests* (coeditor with D. Green). Cultural Resources Management Report No. 3. USDA Forest Service, Southwestern Region, Albuquerque.
- Trial Model Building, Introduction and Background. In *Theory and Model Building: Refining Strategies for Locating Prehistoric Heritage Resources*, edited by D. Green and L. Cordell, pp. 59–62. Cultural Resources Document No. 3, USDA Forest Service, Albuquerque.
- 1984 Exchange, Tribes, and Alliances: The Northern Southwest. *American Archaeology* 4:217–223.
- Cibola White Wares: A Regional Perspective (with J. Hantman, K. Lightfoot, S. Upham, S. Plog, and B. Donaldson). In *Regional Analysis of Prehistoric Ceramic Variation: The Cibola Whitewares*, edited by A. Sullivan and J. Hantman, pp. 18–27. Anthropological Research Papers No. 31. Department of Anthropology, Arizona State University, Tempe.
- Recent Research in Mogollon Archaeology* (coeditor with S. Upham, D. Batcho, and B. Kaufman). The University Museum Occasional Papers No. 10. New Mexico State University, Las Cruces.
- Intensification Along the North Side of the Mogollon Rim (with K. Lightfoot). In *Prehistoric Agricultural Strategies in the Southwest*, edited by S. Fish and P. Fish, pp. 179–195. Anthropological Research Papers No. 33. Department of Anthropology, Arizona State University, Tempe.
- The Ethics of Excavation: Site Selection. In *Ethics and Values in Archaeology*, edited by E. Green, pp. 89–97. Free Press, New York.
- The McKinley Mine and the Predictive Model, Limited Survey Approach. *American Archaeology* 4:89–95.
- 1985 Human Behavior, Demography, and Paleoenvironment on the Colorado Plateaus (with J. Dean, R. Euler, G. Gumerman, R. Hevly, and T. Karlstrom). *American Antiquity* 50:537–554.
- Status and Death at Grasshopper: The Homogenization of Reality. In *Status, Structure, and Stratification: Current Archaeological Reconstructions*, edited by M. Thompson, M. T. Garcia, and F. J. Kense, pp. 161–166. Archaeology Association of the University of Calgary, Calgary.
- Southwestern Prehistory: Developing Non-gradualist Perspectives. *Reviews in Anthropology* 12:24–32.
- Hohokam Interaction: Comments on Papers (with S. Upham). In *Proceedings of the Hohokam Conference*, edited by E. Dittert and D. Dove. The Arizona Archaeologist. Arizona Archaeological Society, Phoenix.
- 1986 The Interpretation of Prehistoric Political Complexity in Central and Northern Southwest: Toward a Mending of the Models (with S. Upham). *Journal of Field Archaeology* 13:223–238.
- Physical Anthropology and Archaeology, Fourth Edition* (with C. Jolly). Alfred A. Knopf, New York.
- 1989 The Sinagua and Their Relations. In *Dynamics of Southwest Prehistory*, edited by L. Cordell and G. Gumerman, pp. 263–291. Smithsonian Institution Press, Washington D.C.
- Anasazi Adaptive Strategies: The Model, Predictions, and Results (with G. Gumerman, R. Euler, J. Dean, R. Hevly, and T. Karlstrom). In *The Anasazi in A Changing Environment*, edited by G. Gumerman, pp. 230–276. Cambridge University Press, Cambridge.
- Studying Complexity. In *The Sociopolitical Structure of Prehistoric Southwestern Societies*, edited by S. Upham, K. Lightfoot, and R. Jewett, pp. 103–128. Westview Press, Boulder, Colorado.
- Computer Applications for the All American Pipeline Project (with D. Carlson). *Antiquity* 63:258–267.
- 1990 *Cultural Anthropology, Third Edition* (with D. Bates). Alfred A. Knopf, New York.
- 1991 *Human Adaptive Diversity* (with D. Bates). McGraw Hill, New York.
- 1994 A Perspective on Systems Modeling in Southwest Archaeology (with S. Upham, R. Reynolds, and J. Tainter). In *Understanding Complexity in the Prehistoric Southwest*, edited by G. Gumerman and M. Gell-Mann, pp. 265–286. Proceedings Volume XVI, Santa Fe Institute Studies in the Sciences of Complexity. Addison Wesley, Reading, Massachusetts.
- Strong and Weak Patterning in Southwestern Prehistory: The Formation of Puebloan Archaeology (with J. Tainter). In *Themes in Southwest Prehistory*, edited by G. Gumerman, pp. 165–182. School of American Research Press, Santa Fe.