

away from the communal settlements only after the Mogo River rose and reduced the danger of Hamar raiding.

The effect of large-scale political events on intergroup relations is clearly shown in the paper by Todd. At the time of the Emperor Menelik, the Dime, a wealthy agricultural tribe in the highlands of southern Ethiopia, were subjugated by Amhara invaders, who sold weapons to the Bodi in the arid lowlands and encouraged them to provide the Amhara with the products of big-game hunting. With the help of the police and government officials, the few Amhara remaining in Dimam after the Italian-Ethiopian war and the abolition of slavery continued to deny the Dime access to firearms, while continuing to provide the Bodi with weapons. Thus the Dime could not effectively resist Bodi cattle thefts and raiding. During the 1968–1971 war, the Bodi stole an estimated 3000 Dime cattle, 700 to 1000 Dime were killed, and many people left Dimam altogether. Bodi attacks on Dime ceased in 1971, in part as a result of the intervention of the central government, but also because the Mursi attacked and the Bodi had to turn their attention to defending their southern boundary.

Some useful generalizations about East African pastoralists emerge from this volume. It is clear that, despite their reputation, East African herders are not highly militaristic societies, probably because the demands of intensive livestock husbandry in East African pastoral systems do not allow men to be full-time warriors. Intergroup hostilities are common and seem to take two distinct forms (although they may represent extremes of a continuum)—raiding, which is relatively common, and warfare, which is rare. Sometimes the primary aim of raiding is to acquire cattle, sometimes to kill people, including women and children as well as young men. (When we expressed horror at the intentional killing of women and children, our Karimojong friends explained: "Women give birth to enemies; children grow up into enemies who will kill us.") Raids—small-scale, surprise attacks—are often carried out without the knowledge or approval of the elders, and although individual raiders may gain prestige, cattle, or both, the group may suffer from the social disruption of retaliatory raids. In contrast, warfare involves large numbers of men moving in organized formations, and the major tactic is numbers, not surprise. Decisions about warfare are made by the elders and by ritual specialists.

The final important point that is made

several times in this volume is that territorial conquest does not appear to be the objective of fighting. "Territorial conquest, in fact, is characteristic of sedentary people. For nomads, or semi-nomads, gaining free access to a place is more important than occupying it" (Tornay, p. 150). This conclusion fits well with current evolutionary and ecological theory, that animals only defend territories that can be defended economically, where the benefits of defense outweigh the costs. An individual, or a group, is unlikely to be territorial if resources are sparse, dispersed, and unpredictable (R. Dyson-Hudson and E. A. Smith, *Am. Anthropol.* 80, 21 [1978]).

Many of the essays in this volume illustrate the unsatisfactory state of "explanation" in anthropology. The failure to distinguish between proximate and ultimate causes is exemplified by Fukui's "explanation" of Bodi raiding. There is also a very general tendency among social anthropologists to reify social institutions so that culture rather than the experiences of the people is considered as causal. This misplaced causality is exemplified by Turton's "explanation" of boundary changes between the Mursi, Bodi, and Hamar. The Mursi and Hamar, who are separated by a wide expanse of uninhabited bush and the Mogo River, which acts as a barrier during the rains, have continuous and unregulated hostilities. In contrast, the Mursi and the Bodi, who have no physical features acting as a boundary between them, have periods of regulated hostility alternating with periods of socially regulated peace. Because there have been no shifts in territorial boundaries between the Mursi and Hamar but the boundary between the Mursi and the Bodi has shifted northward, Turton hypothesizes that rules cause territorial shifts: that "the more rule governed hostilities between two local groups are, the more likely it is that these hostilities will be part of a long term process of change in group boundaries, both territorial and conceptual" (p. 201). He fails to explore the more obvious explanation that the lack of a physical boundary makes it difficult to defend a boundary militarily and therefore people respond by setting up rules to regulate social interactions. And he fails to take into account Todd's study, which suggests that the Dime, the Bodi's northern neighbors, have been so weakened by Amhara oppression that it is easier for the Bodi to move northward under Mursi pressure than to defend their southern boundary.

A failure clearly to conceptualize

cause and effect is very general in anthropological accounts. Perhaps the most valuable contribution of this symposium is that it does present enough information about a relatively circumscribed area to enable the reader to compare the explanatory modes of the authors and to develop alternative hypotheses.

RADA DYSON-HUDSON

*Department of Anthropology,
Cornell University,
Ithaca, New York 14853*

A Maya Site

Excavations at Altun Ha, Belize, 1964–1970. Vol. 1. DAVID M. PENDERGAST. Architectural drawings by H. Stanley Loten. Royal Ontario Museum, Toronto, 1979. xii, 226 pp., illus., + loose map and figures. Boxed, \$30. Royal Ontario Museum Publications in Archaeology.

Belize has traditionally been viewed as something of a cultural backwater during the thousand-year history of lowland Maya civilization. The Classic-period site of Altun Ha is quite literally situated in a swampy backwater near the coast north of Belize City. It is about as far as one can get from the enormous Maya centers of El Peten, Guatemala, such as Tikal, and still be in the southern lowlands of the Yucatan peninsula. Research carried out at Altun Ha by David Pendergast, the author of this volume, has revealed that the imperatives of geography have been misunderstood by Mayanists. The modest public buildings of this center housed, in tombs and cached offerings, an extraordinary wealth of carved jade and other exotic materials that rival those found in the most magnificent centers of the interior jungles. Why the Maya of this desolate location were so rich and why they chose to invest their wealth and power in movable goods rather than in massive public architecture are questions that must be answered gradually in the course of this monograph series. This initial volume sets the stage by presenting overviews of the ecology and settlement organization at Altun Ha and reporting the monumental architecture of Group A, one of two groups forming the center of the community, in detail.

The settlement at Altun Ha is in itself a source of some surprises. Although the community evidently never housed more than about 2000 residents, it is spatially quite compact when compared to some major Maya communities, such as Tikal.



Aerial view of the center of Altun Ha (1969), with Group A in the foreground. [From *Excavations at Altun Ha, Belize, 1964-1970*, vol. 1]

The author suggests that Altun Ha, though not a proper city, was clearly an urban community that enjoyed the advantages and coped with the problems engendered by residential congestion. The difficulties encountered in attempting to fit the complex communities of the Maya into preconceived types such as city, town, and village will continue to plague scholars for some time to come. The Altun Ha data contribute to ultimate solution of these problems by increasing the range of known variability.

The bulk of volume 1 is devoted to Group A, which was intensively investigated throughout the seven-year project. Pendergast chooses to deviate from previous technical descriptions of Maya architecture in two important ways. First, descriptions of caches, burials, and tombs are integrated into the construction histories of the buildings from which they were recovered. This format allows a much clearer appreciation of the correlation between important ritual events and structural modification than can be found in the traditional separate presentations of such data. The construction of a major tomb in Structure A-1, for example, coincides with profound alteration in the design of access ways to the summit of the building. Access from the east and the main plaza is blocked while new access ways from the south and a flanking elite residence are constructed. The detailed presentation of tomb contents in this context clarifies the political

and religious importance of the interred individual and renders the transformation of Structure A-1 into his mortuary shrine understandable. The subsequent association of the summit with the flanking elite residence reinforces the notion that following the interment Structure A-1 no longer served the public in the same fashion as in its earlier forms.

Second, Pendergast chooses to analyze the pottery associated with Group A buildings, critical to intersite comparisons, without employing the now-standard type-variety system. While I can empathize with his criticisms of this system, complete avoidance of it makes his ceramic descriptions difficult to correlate with published descriptions of other ceramic assemblages.

The emphasis throughout the architectural descriptions is on the modifications of design that affect visual impact and physical access to and uses of exterior and interior spaces. The result is a sensitive portrayal of the changes that occurred in the public facilities at Altun Ha through the Early Classic heyday and the darkening Late Classic years of the community. Pendergast is careful in his summary of this volume not to preempt the overview that will be supplied in the final volume of the series. Nevertheless, it is clear that he envisions a definite and ultimately tragic change in the function of Group A from a theater of public service to the grand cemetery of a disaffected elite reflecting upon past glory.

This volume is a significant contribution to our understanding of public life in Maya civilization. The illustrations are superb, and the figures are published at a gratifyingly large scale.

DAVID A. FREIDEL

Department of Anthropology,
Southern Methodist University,
Dallas, Texas 75275

A Psychologist in the U.S.S.R.

The Making of Mind. A Personal Account of Soviet Psychology. A. R. LURIA. Michael Cole and Sheila Cole, Eds. Harvard University Press, Cambridge, Mass., 1979. vi, 234 pp. \$15.

It is rare when an individual or a very small group of individuals working together can influence an entire scientific discipline to the degree that A. R. Luria, L. S. Vygotsky, and A. N. Leont'ev influenced psychology in the Soviet Union. This autobiography provides a fascinating account of the intellectual and personal life of the member of this "troika" whose work is best known in the West. In ten chapters Luria covers his early years, his intellectual awakening under the tutelage of Vygotsky (1896-1934), and his later attempts to deal with classic psychological problems such as the role of genetic and cultural factors in human cognition, the relationship between speech and thought, and the normal and abnormal functioning of the brain. In the final and perhaps most interesting of these chapters, Luria reflects on a problem that confronts all of modern social science—the problem of how we can utilize increasingly sophisticated scientific techniques in the study of human psychological phenomena without losing sight of the fact that we are studying complex, living human beings. In addition to the chapters written by Luria, Michael Cole has contributed an introduction and epilogue.

While the major focus of this volume is on Luria's approach to human psychological processes, the book also provides valuable insights into some of the social and political forces that have influenced the development of Soviet science in general. In the opening sentences of the book Luria writes, "I began my career in the first years of the great Russian Revolution. This single, momentous event decisively influenced my life and that of everyone I knew" (p. 17). The Revolution influenced Luria's life in at least two ways. From Michael Cole's epilogue we learn that as Jews in tsarist Russia Luria and his father had been denied access to