

youths are dissuaded from taking math and science prerequisites in high school.

The AAAS report "illuminates the gap between lip service and real service to the students underparticipating in science and engineering on college and university campuses," says Daryl E. Chubin, of the congressional Office of Technology Assessment. "Hereafter, no institution can claim either a lack of awareness of recruitment and retention problems, or of insight into the array of models and methods to address these problems."

Chubin says he suspects government intervention will be needed to drive the "structural change" sought by Malcom and her coauthors. The AAAS report recommends government intervention. In particular, it suggests adding how well an institution trains its handicapped, minority and women students to the list of factors considered by federal agencies in awarding research grants. "We're not talking about replacing this as a notion of [a proposal's] scientific merit," Malcom says. Instead, she suggests using it to choose between otherwise equally meritorious proposals.

"Such structural reform is firmly within our grasp," Chubin adds. "Thanks to AAAS, we have the instruction manual for change literally in hand." □



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## Anthropology

Bruce Bower reports from Chicago at the annual meeting of the American Anthropological Association

### High-level utensils

Analysis of household objects uncovered in continuing excavations of a village in El Salvador entombed by the searing ash of a volcanic eruption around 1,400 years ago reveals a curious and surprising pattern, reports project director Payson D. Sheets of the University of Colorado at Boulder. Residents of the thatched-roof communal structures placed the majority of utensils in daily use — including ceramic vessels, pots, mortars and obsidian blades — in elevated storage areas rather than on or near the ground within easy reach.

Vessels and pots often turned up on top of ceiling rafters and columns, as well as in niches placed near the top of walls, Sheets says. Inhabitants of the windowless structures suspended some vessels from the ceiling with rope made from the fiber of a type of cactus they cultivated, he notes. Roofs also served as storage areas for obsidian blades and unexplained thin stone slabs, with some blades placed in accessible spaces above doorways. Reasons for the emphasis on elevated stashing of commonly used objects — also observed in a storage building on the site — remain unclear, Sheets remarks.

About 20 feet of volcanic ash buried the community, known as Ceren, yielding one of the best-preserved prehistoric villages in Latin America, according to Sheets. Architectural styles at Ceren display links to the Maya culture, he points out. For instance, excavators in 1990 uncovered an earthen-domed building with a central kiln surrounded by a rectangular adobe bench that may have served as a community sauna, much like those still in use by Maya groups.

Last year's field season also documented the first human remains at Ceren — three teeth discovered in an ash-filled depression about halfway between the village and a nearby river. More human remains may turn up along the river, Sheets

suggests, since Ceren's inhabitants probably fled toward the water as hot ash rained down on their homes.

### Kalahari conservatives

A review of archaeological evidence at southern African sites inhabited by hunter-gatherers known as the !Kung reveals a striking consistency over the past 40,000 years in their way of life, even after the !Kung came in contact with herding and agricultural societies, reports John E. Yellen of the National Science Foundation in Washington, D.C.

"The !Kung underwent change, but they show a surprising degree of cultural conservatism," Yellen contends.

Scientific debate currently rages over the extent to which contact with outsiders transformed hunter-gatherer societies in various parts of the world (SN: 4/29/89, p.264).

Yellen has excavated !Kung archaeological sites with colleague Alison S. Brooks of George Washington University in Washington, D.C. They find that the range of stone and bone tools excavated from three Kalahari sites remains largely unchanged over the past 40,000 years. This suggests that contact with Iron Age peoples nearly 2,000 years ago did not greatly alter the !Kung way of life, Yellen concludes.

Animal bones uncovered at four !Kung campsites show that although they ate fewer wild species beginning in the 1960s, Kalahari residents consumed the same number of species and the same proportions of small and large game as before, Yellen adds.

"Cultural conservatism" appears a successful strategy for adapting to an environment in which rainfall and food availability shift unpredictably from year to year, as in the Kalahari, he argues.