The Weekly Newsmagazine of Science

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Cover: Scientists who aim to understand why some kids become perpetual troublemakers and eventually violent criminals increasingly express frustration with standard investigative methods, and some believe that the future of their field depends on research innovations. Page 153 (Warner Bros., Courtesy of Kobal)

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Letters

Pig problems from crowded conditions

In the article "Livestock's role in antibiotic resistance" (SN: 7/18/98, p. 39), you did not explain why livestock growers have found it beneficial to administer subtherapeutic doses of antibiotics to their animals. The reason was apparent in the accompanying photograph, however. Pigs crowded into cages with uncomfortable slatted floors cannot be expected to thrive.

Intense animal confinement systems are a major source of pollution of streams and groundwater. If not treated, this water can cause human illness and result in still more antibiotics being prescribed.

Bina Robinson Swain, N.Y.

Too big a feast?

The explanations offered by archaeologists for feasting in "Banquets in the Ruins" (SN: 5/23/98, p. 331) perhaps explain why our field is not considered a serious science. Hayden's statement that "Decisions to hold feasts depend largely on the existence of a food surplus" is like a meteorologist averring that the occurrence of rain depends largely on the existence of clouds.

Feasting is a nonanalytical term for some intriguing regularities, not all of which should be lumped together during explanatory attempts.

Human psychological motivation is irrelevant to explaining cultural phenomena, particularly in the political arena. Anthropologists want to know why certain cultural practices are invented and persist, where they occur and for how long, and conversely, why they do not occur where they do not-not why people as individuals participate in

them; this is a given like clouds and rain.

Rosalind L. Hunter-Anderson Micronesian Archaeological Research Services GMF, Guam

The news about plasmas "Plasmas put the hurt on microbes" (SN: 6/6/98, p. 364) presented this technology as new. The use of gas plasmas for sterilization has in fact a long history, with U.S. patents as far back as the 1960s. There are today two companies that produce and sell gas plasma sterilization equipment worldwide for use primarily in hospitals. Perhaps the U.S. military should be less willing to fund "new" technology without first determining how new it is.

James M. Gibson Odessa, Fla.

The use of plasmas for sterilization does date back several decades, but up until now the plasmas were created in vacuums or required other special circumstances that limited their widespread use. The new technology creates plasmas in a simpler, more useful way, contend the researchers involved. –J. Travis

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