



Play, not war. !Kung men like these playing a traditional game in Namibia may attack other individuals, but they rarely gather to make war on other societies.

and blurred by intermarriage. “In my view the default for nomadic foragers is nonwarring.”

The new study is “a very valuable contribution to the study of mobile foragers,” says anthropologist Richard B. Lee of the University of Toronto in Canada, who has studied hunter-gatherers in the field for 40 years. Endicott agrees that the paper offers a “valuable corrective” to an “erroneous” view of mobile foragers as warlike.

However, critics find fault with Fry and Söderberg’s selection of societies and their restricted samples and ask how well these societies represent the past. The descriptive data of the SCCS can’t provide the key metric on how many people died in war compared with other causes of death, Hill says. He and economist Samuel Bowles of the Santa Fe Institute also argue that Fry should have included sedentary hunter-gatherers, such as warring fishing societies in British Columbia. And limiting the data to early ethnographies ignores a host of additional data—and deaths—says Harvard University anthropologist Richard Wrangham. “There is lots of evidence of war in some of the societies that they list as having no killings,” he says. For example, the Andamanese Islanders are reported as having few killing events, but other researchers have documented additional killings there, often between groups.

Part of the dispute comes down to the definition of war. For Fry, war implies the killing of any outgroup member because they are in the outgroup; having a personal motive makes a homicide. His critics argue that personal motives may indeed spark “wars” in small-scale societies. “Feuds are warfare, revenge raiding is warfare,” Hill says. Researchers on both sides caution against using living people as direct models of our ancestors.

Anthropologist Polly Wiessner of the University of Utah in Salt Lake City, who has studied both the relatively peaceful !Kung and the relatively violent Enga people of Papua New Guinea (*Science*, 28 September 2012, pp. 1593 and 1651), agrees that few mobile foragers often wage war today. But given that some foragers do fight fiercely, she hopes the battle lines among scientists will shift to asking what promotes and what inhibits warfare. “We should be asking how coalitionary aggression, which does appear in our phylogeny, was harnessed among our successful ancestors.” —ELIZABETH CULOTTA

ANTHROPOLOGY

Latest Skirmish Over Ancestral Violence Strikes Blow for Peace

Are hunter-gatherer societies warlike? That question has sparked a war of its own among scientists. Some anthropologists see these traditional societies as largely peaceful, relying on trade networks with outsiders for survival, while other researchers cite frequent deadly clashes among neighboring groups. The question has implications beyond today’s dwindling foraging peoples, because our ancestors lived as hunter-gatherers for most of prehistory. If war is a common feature of the foraging way of life, then perhaps it was a driving force in human evolution.

On page 270 of this issue, two researchers fire a salvo in support of peace. Using existing ethnographic data, Douglas Fry and Patrik Söderberg of Åbo Akademi University in Vasa, Finland, conclude that people living in mobile foraging societies, such as the !Kung of southern Africa and the Semang of the Malay Peninsula, today rarely engage in what most modern people call “war.” Rather, two-thirds of killings in such societies occur among people of the same group, and most lethal events stem from personal disputes. “These findings imply that warfare was probably not very common before the advent of agriculture, when most if not all humans lived as nomadic foragers,” says cultural anthropologist Kirk Endicott of Dartmouth College, who was not part of the study.

But those on the other side of the debate say that the paper lacks the numerical data to evaluate how common war and homicide actually are. “This is essentially a list of anecdotes—there’s no real method in these eth-

nographies,” says anthropologist Kim Hill of Arizona State University, Tempe, whose own detailed field studies found warfare in three South American groups. He and others cite recent work suggesting that ancient war was frequent enough to have influenced our evolution, for example by encouraging altruistic cooperation among warriors (*Science*, 5 June 2009, p. 1293).

Fry and Söderberg drew on data from the Standard Cross-Cultural Sample (SCCS), a respected ethnographic database set up by other anthropologists in the 1980s. The pair pulled out all mobile societies in which hunting, gathering, and fishing brought in 95% of the people’s food—21 societies in all—then studied the oldest ethnographic descriptions that were highly rated by the SCCS scholars. “To be purists, we took only the oldest high-quality sources for each culture,” says Fry, an anthropologist; he argues that the oldest studies best reflect a society’s traditional ways.

The pair then scrutinized every instance of lethal aggression recounted in the ethnographies. They found that more than half of societies did not practice what they would call war on outside groups. Overall, 55% of cases had a single killer and single victim. Also, most killings were driven by personal motives, such as fights over women and revenge, and are better classified as homicides or sometimes feuds than as war, Fry says. Such societies are too small to wage wars, he notes, and groups rarely fight each other because group membership is flexible