



An old friend. Getting inside the mind of Stone

Age ancestors in order to understand how modern humans reason

**JOHN TOOBY AND
LEDA COSMIDES**

HOW THE MODERN MIND EVOLVED

Stone Age priorities

In the ongoing scientific battle over the roots of human nature, Leda Cosmides and John Tooby began their careers in an academic no man's land. On one side were mainstream psychologists, who consider evolution irrelevant to understanding the mind. On the other side were sociobiologists, who put human nature firmly in the genes. Now, thanks to the couple's award-winning research on the evolution of the mind, that middle ground is growing increasingly crowded.

The husband-and-wife team from the

University of California at Santa Barbara call themselves "evolutionary psychologists." They argue that the key to understanding how the modern mind works is realizing that the brain's evolution was shaped by our early ancestors' needs to find mates, obtain food and negotiate with the most treacherous beasts on the savanna: each other. These Stone Age priorities produced a brain far better at some kinds of reasoning than others.

One of the most powerful influences on the evolving mind was our ancestors' dependence on social alliances to survive. For cooperation to work, Cosmides and Tooby contend, early humans had to develop a keen sense of what constituted a fair bargain—or a scam. In an ingenious experiment, Cosmides found people are indeed far better at solving a logic problem when it is presented as a social scenario in which they must spot "cheaters"—people who eat food to which they

are not entitled, for instance. When the same problem is presented in abstract terms, people perform terribly. In 1988, Cosmides won the American Association for the Advancement of Science's prestigious Prize for Behavioral Science Research. Last year, Tooby received a Presidential Young Investigator Award.

Cosmides and Tooby have quickly won converts from mainstream psychology and sociobiology alike. Their new book "The Adapted Mind," which they co-edited with anthropologist Jerome Barkow of Canada's Dalhousie University, encompasses studies of a wide range of human behaviors, from sex and violence to culture. The starting point for understanding all these human traits, the authors believe, is the realization that our modern-day skulls harbor a Stone Age mind.

BY WILLIAM F. ALLMAN