

Flush with the excitement of new findings

The authors piece together evidence from their wide-ranging, largely self-taught fields of expertise to flesh out their thesis that cultural and biological evolution go hand-in-hand. It seems probable that the publicity they got for their article two years ago on Ashkenazi Jewish intelligence convinced them that the time was right for a book. The Jewish piece, relatively little changed, appears as their final chapter.

The findings are new and the book feels a little raw. The authors know that many of their findings are subject to restatement on the basis of further research. One has the feeling that their objective is not to have the final word, but to reframe the argument. Intelligence researchers and others have long contended that there are statistically significant, measurable differences among populations. The essence of the counterargument has been "No, that can't be. There has not been enough time." Cochran and Harpending cite a vast body of evidence to the effect that yes, evolution can create vast differences among populations in the timeframe under discussion. They cite the great variety to be observed among dogs and other animals, and cultivated crops, just within the last century or two. The authors claim that the thesis that there have been no significant evolutionary changes in *Homo sapiens* over the past 50,000 years is about as likely as dumping a bag full of silver dollars on the floor and observing that they all land on edge. Simply impossible.

They are bold to suggest that interbreeding with Neanderthals may have sparked what they call the "great leap forward" and others refer to as the "Neolithic Revolution." They argue two ways. First, they establish the proximity of Neanderthals and modern humans for about 10,000 years during this timeframe, roughly 40,000 years ago. They point to evidence, admittedly rather meager, that there was cultural exchange between the hominids, and on the basis of what we know about ourselves, if they were that close, they almost inevitably interbred. They then argue by analogy with several better studied examples of introgression - the recombination of breeding groups that had become isolated - to argue that while modern humans coming out of Africa may have been overall superior competitors, it is quite likely that they could have benefited by borrowing a few well adapted genes from the Neanderthals. Whether or not the Neanderthal thesis turns out to be valid, the presentation in itself is very informative.

Harpending and Cochran frequently cite Jared Diamond. Surprisingly, some very prominent people one expects would be sympathetic to their findings are absent from their bibliography, among them Steven Pinker, Luigi Cavalli Sforza, Spencer Wells, Nicholas Wade, and even Philippe Rushton, whom they thank in their forward. They appear more driven to put forward provocative new ideas, and less affected by the fear of being shown to be partially an error.

The authors are extremely aware that they are baiting the bears of political correctness. Their thesis directly challenges the dogma of the American Anthropological Association, which stands behind its resolution that "WHEREAS all human beings are members of one species, *Homo sapiens*, and WHEREAS, differentiating species into biologically defined "races" has proven meaningless and unscientific as a way of explaining variation (whether in intelligence or other traits), THEREFORE, the American Anthropological Association urges the academy, our political leaders and our communities to affirm, without distraction by mistaken claims of racially determined intelligence, the common stake in assuring equal opportunity, in respecting diversity and in securing a harmonious quality of life for all people.

Keeping their exposure to a minimum, the authors make few observations on the broader implications of their findings. They make the commonsense observation that peoples who have dealt in farming and commerce for many millennia probably evolved skills that give them a competitive advantage. They dryly note that the Amerindians' lack of such historical experience perhaps "... underlies a current wave of discontent with liberal economic policies in South America." There is certainly more to be said, and one suspects the authors would readily tell it in a cocktail party conversation, but it would defeat their purpose to invite imbroglios such as greeted "The Bell Curve." Their objective is to get research pointed in more fruitful directions. As a former member of the American Educational Research Association, I say "Amen." We have spent far too much time, money, and psychic energy time trying to solve insoluble problems because we refuse to examine untenable hypotheses.

The most part prominent scientist to debunk the notions that human populations differ significantly in any fundamental way, and by the way, that IQ testing is meaningless, was the late Stephen Jay Gould. Cochran and Harpending take Gould all on directly on several occasions.

Take this book for what it is, an exposition of exciting new findings and an invitation to apply what we are learning in the field of genetics to bodies of knowledge within other disciplines, among them anthropology, paleontology, psychology, and history. I am sure that their hope is that in the end these studies will be able to enlighten public policy.