

BOOK REVIEW

How molecular genetics and other disciplines pushed forward understanding our past

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Before the Dawn (Recovering the Lost History of Our Ancestors)

Nicholas Wade, Penguin Press 2007.

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The history of human origin, dispersion all over the world and biological, cultural and social changes are thoroughly described with the aid of different scientific disciplines. This excellent book will attract many readers as it allows them to enter the world of archaeology, which, since its very beginning, has always had a taste of adventure, not only because it is not so far from treasure seeking, but also for the many books and films that have depicted the scenes in dramatic colours.

Nicholas Wade has profited from the development of new instruments acquired by archaeology from molecular genetics during the last decade. The huge amount of information brought by molecular genetics has offered archaeology the possibility of solving many problems

that were once only hypothetical or allowed for more than one explanation. Nevertheless, indications exist that these can now be investigated and tested.

Unfortunately, the book, especially in chapters 5 and 9, may create a suspicion of racism because it has accepted the original theory of Lahn, which is not fully compatible with the ideas of Lewontin and Cavalli-Sforza about the variability of human genomes. However, Wade's view in this case seems to address the problem objectively and in an acceptable way. Also, his view that aggression is a biological feature, probably more brutally expressed in our ancestors, could raise criticism from some philanthropic philosophers who deny our biological origins.

The book stresses the biological bases of human evolution, at present supported by

the results of molecular analyses, which allow archaeologists to explain not only the time and place of the birth of modern human beings, but also the routes of their dispersal all over the world and, moreover, the density of the original populations and the number of individuals that moved from Africa to India and other places. It is shown that the numbers were very low, between a hundred and a few thousand, and most probably represent a bottleneck with the effect of founding allelic content in the newly inhabited areas.

In contrast to the sequence of changes, both biological and cultural, the 'exact' dating is not yet unequivocal; owing to the fact that the inheritance of Y-chromosome polymorphism and mitochondrial DNA, which is the basis for time estimation, differs substantially, as does mutability. Nicholas Wade effectively combines the results of different scientific disciplines: parasitology for dating the change from the furred ape to the naked man and from the naked man to the dressed, and linguistics and sociology for language development.

We must be grateful to Nicholas Wade for bringing together so much information and so many concepts from different scientific disciplines and for touching on problems that have become sensitive in our society ■

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