

cus), a description of a single specimen (Gabunia *et al.* on a maxilla from Georgia), and a review of Eurasian Miocene hominoid phylogeny (Begun). Those chapters that offer new analyses are the most valuable, and are probably alone worth the price of admission. In particular, Kelley's demonstration of the unreduced nature of *Ouranopithecus* canines and Richmond and Whalen's proof that the *Sivapithecus* humeri are indistinguishable in curvature are especially welcome, since they directly address claims promoted elsewhere in the same volume.

An idea that recurs here, and one that seems odd in a volume with the term 'phylogeny' in the title, is that cladistics, current best practice for phylogenetic reconstruction, is ill-suited for its stated purpose. Collard and Wood, for example, report that cladistic analysis of some craniodental data fail to replicate molecular topologies, a result they interpret as a reflection of morphological data unreliability. Their data, however, violate a prerequisite of cladistics, character independence; thus, the study highlights only the necessity for more rigorous character choice. This holds even if one suspects that dental metrics may be unreliable for different reasons (G. Naylor & D. Adams, *Systematic Biology* 50, 2001, 444-53).

Alba *et al.* go to rather greater lengths to disparage cladistics, arguing that their analysis of potential heterochrony in the cranium of *Oreopithecus* offers insight into the phylogenetic position of this European ape unavailable to the cladist. Indeed, they conclude that, without this knowledge, 'cladistics must be considered a blind exercise, potentially misleading and nearly unrelated to the true underlying biological facts' (p. 310). Interestingly, they do not offer much in terms of exactly how this knowledge leads to positioning a taxon on the hominoid family tree; indeed, their contention that *Oreopithecus* is a pongid (*sensu stricto*) is entirely cladistic, although based on a single bone. Instead, they dismiss the functional morphology literature in favour of their own (idiosyncratic) interpretations, assume their characteristics are derived (accepting synapomorphy, the major tenet of cladistics), then offer vague objections to cladistics itself, many of which are demonstrably spurious (see J. Farris, in N. Platnick & V. Funk (eds) *Advances in cladistics*, vol. 2, 1983). Even more surprisingly, the same authors present a phylogenetic interpretation of *Dryopithecus* earlier (Köhler *et al.*) as a cladogram based on synapomorphies; the authors are clearly content to use cladistics where its tenets agree with their preconceptions.

Perhaps the strongest message coming from this volume is that characters used in evolutionary interpretations of fossils must be examined critically. This is reiterated at length in the final chapter by Pilbeam and Young,

who show how character choice and atomization can lead to conflicting results. It is a warning that should never be forgotten, and this volume serves as a timely, although inconsistent, reminder.

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GHIGLIERI, MICHAEL P. *The dark side of man: tracing the origins of male violence*. xii, 323 pp., table, notes. Reading, MA: Perseus Books, 1999. £17.95 (cloth)

This book claims to uncover the roots of homicide, war, and 'terrorism'. Since the author is a well-known primatologist – described on the dust-jacket as 'a protégé of Jane Goodall' – I expected a controversial but at least scholarly account. I was wrong.

Each chapter – 'Rape', 'Murder', 'Genocide', 'War', etc. – begins with a tabloid-style sensationalist account of pathological violence. In the case of the 'rape' story, this is particularly harrowing, leaving few details to the imagination. As its climax approaches, the narrative suddenly breaks off, whereupon Ghiglieri – now donning his 'scientist' mantle – elaborates on the inescapably violent sexual urges of the human male.

'Murder is coded in our DNA', Ghiglieri tells us, 'just as it is in the genes of our close ape cousins' (p. 154). Mountain gorillas are 'natural born killers' (pp. 129-33). The great apes lead lives 'shaped by instinctive social "rules" that are violent, sexist, and xenophobic' (p. 8). Among apes, 'not only does "might make right", but superiority in combat is the only sure road to reproductive success' (p. 12). Humans share with our mammalian relatives the same 'basic biology', hence the same political drives – explaining why 'ten times more men than women worldwide are politicians' (p. 26).

Ghiglieri is no social or economic historian. For him, a male is a male is a male. Osama bin Laden, Idi Amin, an assortment of psychopaths and rapists, wild-living mountain gorillas, and Kung Bushmen are lumped together as case-studies – the latter counting as 'war-like' rather than 'harmless' on the basis that they 'defend waterholes and foraging areas' (p. 164).

Having dealt with hunter-gatherers (he himself having been an 'international wilderness guide among remote and primitive tribesmen', p. x), the author warms to his theme. 'Now we return to the big question: are men born to be lethally violent? The answer is yes. Aggression is programmed by our DNA' (p. 30). War 'is a male reproductive strategy' (p. 165). 'Human murder is no accident. Instead, murder is encoded into the human psyche' (p. 133). 'Wars erupt naturally everywhere

humans are present' (p. 163; author's italics throughout).

So what cure does Ghiglieri recommend? 'To stop violence', he writes, 'we must decide that our justice is *lex talionis* justice' (p. 256). The 'we' invoked here is – transparently – the United States. Ending terrorism requires a 'leap': 'This leap must propel us to patriotic loyalty within our national community and carry us beyond it toward global cooperation between nations' (p. 256). This means unstinting support for Israel, whose military exploits 'we' should admire (p. 254). Specifically, Ghiglieri hails his government's 1998 aerial bombardment of a Khartoum pharmaceuticals factory ('allegedly manufacturing precursor chemicals for deadly VX nerve gas'), concluding that 'as in all forms of war, *the greatest immunity possible relies on the individuals of a social group maintaining a firm will and resolve to employ swift, decisive, and massive retaliation in response to any terrorist incident*' (p. 255; author's italics).

Ghiglieri fails to mention Nelson Mandela, apparently unaware that today's 'terrorist' might turn out to be tomorrow's internationally respected 'freedom-fighter'. There is no exploration of the possibility that successive US governments armed and trained more genuinely psychopathic terrorists than any state in modern history. Above all, Ghiglieri shows no glimmering of awareness that in struggling for global peace and stability, issues of social or economic justice might possibly merit attention.

Ghiglieri's argument about primate 'killer males' is unoriginal, having been presented with rather more scholarly competence by Wrangham and Peterson in their *Demonic males* (1997). Being honest, these authors concede that among bonobos – whose cognitive skills are remarkable – 'there are no reports of males forcing copulations, battering adult females, or killing infants' (p. 205). The correlation implied here between human-like intelligence and a co-operative lifestyle may be real: sophisticated cognitive and symbolic skills are hardly likely to be fostered where violence is the rule. Given that speech in the human case does seem to have evolved (Knight, Studdert-Kennedy & Hurford (eds) *The evolutionary emergence of language*, 2000), the bonobo case makes Ghiglieri's preferred evolutionary scenario seem puzzling at best.

Conflicting with Ghiglieri's sweeping claims about ape/human evolutionary continuity, a sophisticated recent Darwinian literature documents the extraordinary – indeed revolutionary – changes undergone within the lineage *Homo* on the road to symbolic culture, self-consciousness, and language (see, e.g., Maynard Smith & Szathmáry, *The major transitions in evolution*, 1995, pp. 271–309; see also the debates around the evolution of 'counter-

dominance' involving Boehm, Erdal, Knauff & Whiten, among others). Ghiglieri has no interest in any of this. His take-home message is that with the exception of some technical tricks, five million years of human evolution accomplished remarkably little. Dumb brutes we always were, and dumb brutes – if Ghiglieri has anything to do with it – we seem likely to remain.

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## Legal anthropology

JUST, PETER. *Dou Donggo justice: conflict and morality in an Indonesian society*. xi, 263 pp., illus., bibliogr. Oxford, New York: Rowman & Littlefield, 2001. £20.95 (paper)

Why would a woman falsely accuse a young man of assaulting her with a bush knife? Why would a catechist be made to confess killing a goat he never touched? And why would a community's council of elders uphold both of these accusations as a kind of potential super-truth, above and beyond the events that 'really' took place? In this book, Peter Just provides the answers to these and other questions by revealing the 'moral ontology' lying behind Dou Donggo notions of justice and legality. In doing so, he makes an important contribution to the anthropology of law, whilst providing insights into life in the highlands of western Sumbawa, one of Indonesia's lesser-known islands.

By 'moral ontology', Just means 'the fundamental cultural assumptions that the people have about the nature of the world, the beings who inhabit it, and their relationships to one another, as well as their ideas about causation, liability, and the like' (p. ix). The first part of the book is aimed at revealing a number of these assumptions. Just introduces the village of 'Doro Ntika', describing very vividly the aural, visual, and social 'density' of communal life (pp. 55, 96). He argues that despite half a century of social, religious, and economic change, the Dou Donggo legal system has retained both its autonomy and a 'sense of balance' (p. 71), accommodating and resisting change in equal measure. Fearing the police and eschewing the courts of the Indonesian state, Dou Donggo people continue to place their trust in their *doumatuatua*, a charismatic group of (male) elders and healers. Just argues that it is through public displays of emotion, particularly at various evaluative fora, that the village is constituted as a 'moral community'. Such displays reveal the importance of giving