SCIENCE, EVOLUTION AND CULTURAL ANTHROPOLOGY A response to Ingold (this issue)

We are delighted that Tim Ingold has sought to draw our article to the attention of anthropologists.1 Our intention in publishing in a multidisciplinary, peer-commentary journal was to stimulate discussion with others interested in the study of culture. We hoped our article would encourage anthropologists to appreciate the diversity of methods and findings that draw on cultural evolutionary theory, and to consider such methods and findings in a constructive and unbiased manner. However, productive engagement is hardly likely to be facilitated by the inflammatory tone of Ingold's article, which egregiously distorts our arguments. We feel he does anthropology a disservice by propagating false oppositions between our approach and some of the best work in the discipline he purports to represent. In this brief comment, we would like to point out some of Ingold's major misrepresentations (summarized in italics).

1. We present anthropology negatively. While we did lament a lack of progress and faltering reputation in anthropology relative to other disciplines, Ingold grossly exaggerates our stance. Nowhere did we describe anthropology as 'nihilistic', 'self-destructive' or 'introspective', nor did we state that it had 'lost all credibility'. We took pains to justify our measured and constructive criticism of anthropology by citing and quoting anthropologists themselves. Indeed, we might also have cited Ingold's own position on the scientific status of anthropology: 'It would be a fair reflection of the current state of affairs in [anthropology] to observe that [...] [anthropologists] have pushed the issue of anthropology as science to the sidelines, if not excluded it altogether' (Ingold 2004: 177). Ingold's exaggeration only further perpetuates divisions between anthropology and other disciplines.

2. We seek to 'biologize' anthropology. Ingold fosters the false impression that we seek to reduce all cultural processes to biology or genetics. In fact, we argued that researchers can take advantage of the parallels between biological and cultural change to model a science of culture along the lines of evolutionary biology, with these biological and cultural sciences afforded equal status. This claim was explicitly non-reductive, and Ingold's portrayal of our exercise as no more than sociobiology, evolutionary psychology or memetics is misleading.

3. We present a distorted, idiosyncratic and flawed version of 'evolutionary biology'. We presented the accepted, mainstream version of evolutionary biology, explicitly taken from the leading evolutionary biology textbook of Futuyma (1998). To the extent that our perspective differs from the mainstream, it is in stressing the active role of organisms in constructing developmental and selective environments (Odling Smee et al. 2003). We advocated the integration of development into our theoretical framework, and noted with approval the emergence of 'evo-devo', niche construction theory and DST (one of us even contributed to the same DST volume as Ingold; see Laland et al. 2001).

4. We reduce people to 'trait-bearing cultural clones whose only role in life is to express[...] information'. Nowhere did we make any such claim. In fact, we wrote that '[b]rains are not empty vessels that simply store (or are 'infected by') memes; rather, there are rich, biologically evolved, developmentally generated cognitive structures in the brain that shape cultural transmission' (MWL: 369).

5. Our 'entire scientific project is based [on the distinction] between people in 'traditional' communities, whose behaviour is governed by evolved traits, and rational people like [MWL] who are in a position to study them'. We cited numerous psychological, economic and sociological studies of cultural evolution in Western populations, who are subject to the same fundamental processes of cultural change as people elsewhere in the world. Ingold's attempt to ascribe false political motives to our work does him no credit.

6. 'Studies of culture change inspired by neo-Darwinian models have signally failed to account for anything that could not be far more satisfactorily explained by other means'.

We cited numerous studies where evolutionary methods have been used to address specific problems. Many of these studies use evolutionary methods to extend and enrich (not replace) existing anthropological work. Interested readers who wish to judge for themselves might begin by reading Aunger's (2000) quantitative ethnography of Congolese food taboo transmission, Henrich's (2004) model of Tasmanian culture loss, Holden and Mace's (2003) coevolutionary analysis of farming and matrilineal descent, Mesoudi and Laland's (2007) coevolutionary analysis of partible paternity, Tehrani and Collard's (2002) phylogenetic analysis of Turkmen textiles, or Whiten et al.'s (2001) ethnography of chimpanzee culture. Ingold, in contrast, does not cite a single empirical study that uses his 'relational' theory to improve our understanding of a phenomenon.

Unfortunately we do not have space to highlight the many other distortions in Ingold's article. We encourage readers of ANTHROPOLOGY TODAY to consult our article and judge for themselves. It would be lamentable if anthropology were to be further ignored and decried by members of other disciplines because of unhelpful misrepresentation and scaremongering such as this.

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- Aunger, R. 2000. The life history of culture learning in a face-to-face society. *Ethos* 28: 1-38.
- Futuyma, D.J. 1998. Evolutionary biology. Sunderland, MA: Sinauer.
- Henrich, J. 2004. Demography and cultural evolution: How adaptive cultural processes can produce maladaptive losses the Tasmanian case. *American Antiquity* 69: 197-214.
- Holden, C.J. and Mace, R. 2003. Spread of cattle led to the loss of matrilineal descent in Africa: A coevolutionary analysis. *Proceedings of the Royal Society B* 270: 2425-2433.
- Ingold, T. 2004. Anthropology after Darwin. Social Anthropology 12: 177-179.
- Laland, K.N., Odling Smee, F.J. and Feldman, M.W. 2001. Niche construction, ecological inheritance, and cycles of contingency. In: Oyama, S., Griffiths, P.E. and Gray, R.D. (eds) Cycles of contingency: Developmental systems and evolution, pp. 117-126. Cambridge, MA: MIT Press.
- Masoudi, A. and Laland, K.N. 2007 forthcoming. Partible paternity and the evolution of human mating behaviour. *Proceedings of the Royal Society B.*
- Mesoudi, A., Whiten, A. and Laland, K.N. 2006. Towards a unified science of cultural evolution. *Behavioral and Brain Sciences* 29: 329-383.
- Odling Smee, F.J., Laland, K.N. and Feldman, M.W. 2003. Niche construction: The neglected process in evolution. Princeton, NJ: Princeton University Press.
- Tehrani, J. and Collard, M. 2002. Investigating cultural evolution through biological phylogenetic analyses of Turkmen textiles. *Journal of Anthropological Archaeology* 21: 443-463.
- Whiten, A. et al. 2001. Charting cultural variation in chimpanzees. *Behaviour* 138: 1481-1516.

'WHAT DOES WHAT I AM DOING MEAN TO YOU?'

A response to the recent discussion on Tribe

As an archaeologist who has recently completed a study about the meanings of archaeology in contemporary popular culture (Holtorf 2007), I have been following the discussion about Tribe in the pages of ANTHROPOLOGY TODAY with great interest. As Paul Rainbird (2006) notes, archaeology, unlike anthropology, is well established on our TV screens. The film historian Karol Kulik has even argued that the late 1990s and early 2000s should be considered a 'golden age' of archaeology in the British mass media. Between 1998 and 2002, an astonishing 651 archaeological documentary programmes (including repeats and episodes within series) were scheduled on the four British channels BBC1, BBC2, Channel 4 and ITV, the most popular attracting over 5 million viewers (Kulik 2006). Data collected by the Council for British Archaeology indicate that the five terrestrial TV channels taken together broadcast 31 series and 19 one-off documentaries with archaeological content in 2001 alone. Many of these series are being sold internationally and can be seen around the world.

Like anthropology, archaeology has its stereotypes and clichés in films and the media. Most common are references to the adventure