The Cultured Chimpanzee
Reflections on Cultural Primatology

Short of inventing a time machine, we will never see our extinct forebears in action and so be able to determine directly how human behaviour and culture have developed. However, we can learn from our closest living relatives – the African great apes. *The Cultured Chimpanzee* explores the astonishing variation in chimpanzee behaviour across their range which cannot be explained by individual learning, genetic, or environmental influences. It promotes the view that this rich diversity in social life and material culture reflects social learning of traditions, and more closely resembles cultural variety in humans than the simpler behaviour of other animal species. This stimulating book shows that the field of cultural primatology may therefore help us to reconstruct the cultural evolution of *Homo sapiens* from earlier forms, and that it is essential for anthropologists, archaeologists, and zoologists to work together to develop a stronger understanding of human and primate cultural evolution.

**William C. McGrew** is Professor of Anthropology and Zoology at Miami University in Ohio. He has studied the socioecology of wild chimpanzees throughout their range – from Senegal to Tanzania – for over 30 years. Among other works, he has written *Chimpanzee Material Culture. Implications for Human Evolution* (Cambridge, 1992) and edited *Great Ape Societies* (Cambridge, 1996) with Linda Marchant and Toshisada Nishida.
The Cultured Chimpanzee
Reflections on Cultural Primatology

W. C. McGrew
Professor of Anthropology and Zoology
Miami University (Ohio)
‘The animals themselves are always more important than the books that have been written about them.’

Niko Tinbergen (1953)

‘Chimpanzees are always new to me.’

Toshisada Nishida (1993)
## Contents

<table>
<thead>
<tr>
<th>Preface</th>
<th>page ix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>xi</td>
</tr>
</tbody>
</table>

### 1 Introduction
- Levels of study 4
- Human uniqueness 7
- Palaeoculture 12

### 2 Definition
- Checklists 17
- Beyond behaviour 19
- Essentials 21
- The way we do things 24

### 3 Disciplines
- Anthropology 31
- Archaeology 35
- Psychology 39
- Imitation 41
- Teaching 43
- Zoology 46

### 4 Creatures other than primates
- Fish 54
- Birds 55
- Mammals 57
- Cetaceans 58
- Discussion 60
## CONTENTS

5 Primates 63
   Capuchin monkeys 64
   Macaque monkeys 67
   Great apes 71
   Discussion 77

6 Chimpanzee ethnography 86
   Provisioning 95
   Tradition 98
   Doing ape ethnography 99

7 Chimpanzee material culture 103
   Shelter 107
   Subsistence: faunivory 111
   Subsistence: herbivory 117
   Social material culture 120
   Self-maintenance 123
   Significance of material culture 125

8 Chimpanzee society 131
   Vocal communication 132
   Grooming 133
   Social scratch 135
   Grooming hand-clasp 137
   Cross-species social traditions 143
   Cultural life 148

9 Lessons from cultural primatology 162

10 Does cultural primatology have a future? 190
   Things to do 190
   Cultural survival 194

   References 197
   Author index 224
   Subject index 231
Preface

One of the inspirations for this book is another slim volume, Jane Lancaster's [1975] *Primate Behavior and the Emergence of Human Culture*. Although written almost 30 years ago, it foreshadowed many of the issues taken up here, especially the implications of ape behaviour for modelling the evolutionary origins of humanity's complexity. There is a prophetic chapter, 'Social Traditions and the Emergence of Culture'. She worked with what was known at the time, especially the innovative food-processing of Koshima's Japanese monkeys and the elementary technology of Gombe's chimpanzees (see below). Much of what she said holds today, but much has changed. For example, there was no hint in her book of comparative analysis of cultural variation across primate communities. Further, all of the examples described for chimpanzees were for material culture [although there was a pioneering treatment of play in vervet monkeys], upon which I focused in an earlier book [McGrew, 1992]. Absent, because they had not yet been studied, were the nonmaterial cultural aspects of social relations and structure, and communication. These are treated here.

In the earlier book, I tried to set out my biases, and disappointingly, they all remain: naturalist [not experimentalist], empiricist [not theoretician], publisher [not story-teller], monolinguist [not polyglot], and evolutionist [not creationist]. In the last 10 years, as cultural primatology has emerged as an entity, it has done so in parallel with the 'culture wars' in the arts, humanities, and even the social sciences. Perhaps only the word *ecology* has been more misused than the word *culture* in this period. This state of affairs has made it an interesting time to try to keep one foot in social science and the other in natural science. One of the results of
the strife [at least for me] has been the affirming realisation that the most important single base for this book and the work it contains is the scientific method. I am first, last, and always, a scientist, and all the discourses, texts, and voices in the world are not worth a jot, by comparison with a good hypothesis tested with clear data. If that is not a nailing of colours to the mast, what is? If it damns me in the eyes of contemporary cultural anthropologists, so be it.

Meanwhile, I shall fly today to Conakry, hoping to see the chimpanzees of Guinea engage in the lithic technology of nut-cracking. Theoretical disputes are the last thing on my mind, by comparison with the prospect of seeing apes in action.

Oxford, Ohio, 1 August 2003
Acknowledgements

This book was wholly written while I was a visiting research fellow at the Leverhulme Centre for Human Evolutionary Studies, in the Department of Biological Anthropology, University of Cambridge, all of whom I thank for their support. I am grateful especially to Rob Foley, Marta Lahr, Mike Petraglia, and Jay Stock for their intellectual companionship. At the same time, I was a visiting bye fellow at Selwyn College, Cambridge, and I thank them for their hospitality, especially David Chivers and Ian Thompson.

For help in over 30 years of chasing chimpanzees, there are too many persons to be thanked here by name. Most of my field companions from 1972–91 are mentioned in the preface of my Chimpanzee Material Culture (1992). Since 1992, I am grateful for collegiality in the bush to: Anthony Collins, Craig Stanford, Charlotte Uhlenbroek, Bill Wallauer and Janette Wallis at Gombe; Moshi Bunengwa, Mike Huffman, Kenji Kawanaka, Michio Nakamura and Shigeo Uehara at Mahale; Adam Arcadi and Richard Wrangham at Kanyawara; Jill Pruetz and Peter Stirling at Assirik; Mboile Camara, Philip Fulton, Susannah Johnson-Fulton and Djanny Kanté at Fongoli; Tanya Humle and Yukimaru Sugiyama at Bossou. Special thanks go to Linda Marchant, who was there with me at all of these sites, except Fongoli. Without these good colleagues, little could have been accomplished.

Field research abroad requires funding, and for this I am most grateful to the Rebecca Jeanne Andrew Memorial Award (Miami University), the Philip and Elaina Hampton Fund for Faculty International Initiatives (Miami University), the L. S. B. Leakey Foundation, National Geographic Society, the National Science
Foundation (BSC-0122518), Max Planck Gesellschaft, and Primate Conservation Inc.

Each of us has experienced the frustration of writing about a topic, only to discover after it was published that someone else was writing and publishing the same ideas in parallel. This messiness in science is understandable and is part of the game, but it can be reduced by sharing unpublished material, whether this be manuscript, datum, or photograph. I have been blessed by the generosity of the following colleagues, many of whom did not agree with my point of view but who did such sharing with me: Michael Alvard, Christopher Boehm, Christophe Boesch, Gillian Brown, Richard Byrne, Robert Foley, Dorothy Fragaszy, Michael Huffman, Marta Lahr, Kevin Laland, Louis LeFebvre, Linda Marchant, Michio Nakamura, Toshisada Nishida, Melissa Panger, Elizabeth Pimley, Luke Rendell, Zhanna Reznikova, Carel van Schaik, Sabine Tebbich, Ifke van Bergen, Hal Whitehead, Andrew Whiten, and Richard Wrangham. If I have forgotten anyone, please tell me, and I will buy you a beer.

This book would never have been written, were it not for Tracey Sanderson, the commissioning editor at Cambridge University Press, who shepherded it all the way from lunch in Buffalo to completion. She scrutinised it chapter by chapter during those 6 months in Cambridge, and our periodic editorial meetings were essential to keep me on track. I am truly grateful, and insist on this too-short paragraph.

I still write in longhand, so someone else had to word-process the text, and for that I am most grateful to Diana Deaton and Carol Kist, who saw so many versions of it sent back and forth trans-Atlantically that they will be glad to see its backside. Lauren Sarringhaus helped me put the first draft into final form, Alysha Kocher, Daniel Pesek, Jacklyn Ramsey, and Samantha Russak helped with the copy-editing and the indexing. Cara Wall Scheffler found the back-cover image of the human version of the grooming hand-clasp, and most importantly, Linda Marchant made critical
comments on the whole text. In the end, of course, all remaining errors are my responsibility.

Finally, my deepest gratitude goes to two sets of beings whose lives are intertwined: the apes and the people who keep them safe. It is likely that the chimpanzees never knew or cared that I was there to study them, but at least some of them tolerated my presence, and so made my life easier. I admire even the ones who fled from me (however much I cursed them at the time), for their dignity and tenacity in a world that seems hellbent on extinguishing them. To the people in conservation, from those who sit in air-conditioned offices in capital cities to the guards, rangers, and field assistants in the bush, words cannot express my respect for your dedication, in the face of being overworked and underpaid, year after year, and now decade after decade. The chimpanzee might have survived the last century without your protection, but certainly will not in the current one. You are both truly reasons for hope.