

status, and scientific institutions in the British debates over the legitimacy of eoliths. Unlike other historians who have discussed the subject, O'Connor also makes an important distinction between arguments over eoliths and subsequent studies of primitive artifacts called pre-palaeoliths that were treated differently and more warmly received than the more frequently discussed eoliths. She also makes a strong argument that while geological debates over stratigraphy, successive glaciations, and the paleontological record formed a framework for developing chronological sequences of Palaeolithic artifacts, it was also true that archaeological sequences of Palaeolithic artifacts were also used by geologists as a means of organizing confusing Quaternary geological deposits. Thus, the relationship between geologists, paleontologists, and prehistoric archaeologists was not only close but also flowed in both directions.

While O'Connor acknowledges that the archaeological debates over Palaeolithic artifacts were not unrelated to contemporary research in human paleontology and theories of human evolution, her allusions to these connections are limited to brief statements and references to recent scholarship in the history of paleoanthropology. Given the scope and focus of her book this is not a major problem in itself. However, it does perpetuate a long-standing problem in the way scholars approach the history of anthropology and archaeology. Because of the disciplinary boundaries that exist between these fields of research today, many historians write the history of anthropology and paleoanthropology with little reference to research in archaeology, while historians examining the history of prehistoric archaeology devote far too little attention to developments in anthropology. O'Connor not only recognized the close relationship between Palaeolithic archaeology and the geological sciences, but also that a similar relationship existed between Palaeolithic archaeology and paleoanthropological research. Yet, we need more research that examines these relationships in greater detail. Paleoanthropologists and archaeologists will find in O'Connor's book an interesting account of how Palaeolithic archaeology emerged as a science and will discover the complex exchange of ideas between archaeologists and geologists that shapes current thinking. Historians of science will find an innovative and useful investigation of archaeological research and a work that highlights the connections between the history of archaeology and the history of the natural sciences.

Matthew R. Goodrum

Paddayya, K., Richa Jhaldiyal, and Sushama G. Deo (eds.): *Formation Processes and Indian Archaeology*. Pune: Deccan College Post-Graduate and Research Institute, 2007. 294 pp. Price: Rs 500.00

Walimbe, S. R., P. P. Joglekar, and Kishor K. Basa (eds.): *Anthropology for Archaeology*. Proceedings of the Professor Irawati Karve Birth Centenary Seminar. Pune: Deccan College Post-Graduate and Research Institute, 2007. 215 pp. Price: Rs 500.00

The "introductory" part of the first volume under re-

view contains three articles, the first two (successively by M. B. Schiffer and L. R. Binford) on the history and nature of the concept of "formation processes," and the third one, by K. Paddayya, on the role this concept occupies in Indian archaeology. This concept springs from the notion that archaeology cannot ignore the processes by which the cultural deposits got buried and were affected after they got buried. Both cultural and natural processes are at play, but on the whole, to understand the postdepositional context of the excavated artefacts, more importance is given to the factors related to the formation of the soil burying the deposits of the site. From this point of view, site formation studies are based on a wide range of soil and experimental ethnoarchaeological studies revealing the forces and processes the site has been subject to.

The problem is that such studies are still very rare in Indian archaeology, and from this point of view, the articles of the present volume have to be considered tentative in nature.

The first of the articles in the Indian prehistoric context is by B. Basak on the "Formation Processes of the Archaeological Record of the Chotanagpur Plateau with Special Reference to the Tarafeni Valley," where "an attempt has been made to understand past human behaviour from lithic assemblages and the distribution of sites across the landscape" (47). In the second article, V. Jayaswal discusses the "Archaeological Record of Eastern India with Special Reference to Pairsa Valley, Bihar. A Formation Processes Perspective," offering a summary of her excavation work in that valley. The third article by J. N. Pal dealing with "Formation Processes of the Stone Age Archaeological Record of the Northern Vindhya and Ganga Basin" is a clear and straightforward account of the field-studies conducted by him and his colleagues in that region. In the fourth article of this section, P. Ajithprasad discusses the "Formation Processes of the Acheulian Sites of the Orsang Valley, Gujarat," summarising the results of his field-work. Richa Jhaldiyal's study of the Acheulian occurrences of the Hunsgi and Baichbal basins in Karnataka specifically focuses on the details of the surface occurrences and offers a categorisation of sites. P. Vijaya Prakash studies the Stone Age sites of northeastern Andhra Pradesh, dividing them into a number of geographical zones.

The articles in the protohistoric section begin with B. Khrisat's study of the settlement site of Budihal where he dwells on the sediments associated with stratigraphy, without letting us know if this sediment study was based on actual laboratory analyses. G. L. Possehl adds a brief note on the disappearance of one of his sites, Chosla, in Gujarat. V. Shinde and R. Mehrotra study Balathal, but mercifully without the tag of "formation processes." In the historical section, C. M. Sinopoli discusses site distributions of the Vijayanagara and post-Vijayanagara contexts in the survey of the metropolitan region around Hampi in Karnataka. L. Wandsnider studies the archaeological consequences of the Kurumba nomadism in the Tungabhadra valley, while L. Rainville studies the cultural debris in a Karnataka village. M. D. Petraglia and

D. A. Knepper discuss the prehistoric site formations in eastern United States. In the section on faunal remains, G. L. Badam, P. P. Joglekar, and A. Deshpande-Mukherjee write notes on their study of faunal remains including shells, and in the concluding, botanical section D. Q. Fuller and S. A. Weber try to lay down laws on the botanical samples from some Indian sites.

There is a serious gap between the admirable goals of site formation studies, as set out in the opening articles by Schiffer, Binford, and Paddayya, and the actual contents of the articles that followed, although in most of the cases the articles carried the tag "formation processes." Only Richa Jhaldiyal's article stands out because of her attention to the site details and their locations.

The second volume under review contains the proceedings of the seminar held on the occasion of the birth centenary of Irawati Karve who established the foundations of anthropological studies in the Deccan College, Pune, through her studies on the Indian kinship systems and bioanthropological studies of human skeletons excavated by her archaeology colleagues in the same institute. The three introductory articles by Nandini Sundar, S. M. Channa, and S. R. Walimbe examine her contributions to these fields. The kinship studies, which were undertaken with reference to the Indian language zones, remain her primary contribution. The bioanthropological studies in the Deccan College might have taken off with Karve's study of the Langhnaj human skeletal material, but these studies were subsequently developed by a chain of scholars who did not necessarily belong to the Karve tradition. The cultural anthropology section of the book has a number of articles. The first one, by K. K. Bhan, is on the ethnography of stone beads, metal objects, and pottery in western India with reference to the Indus civilization. In the fourth of these articles D. K. Bhattacharya discusses some dimensions of human evolution – the relationship between tool manufacture and changes in the human brain, for instance. K. K. Basa examines the application of the principles of New Archaeology in India with reference to the works of S. C. Malik, H. D. Sankalia, and K. Paddayya. The only person to have done a systematic study of New Archaeology in India is Paddayya who has a close familiarity with the total theoretical scenario in this field. The other articles in this section are by J. N. Pal on the archaeological sequence of the Ganga plain with copious references to the survival of hunting-gathering behaviour among certain communities, and by M. L. K. Murty on how the village goddesses and socio-economic and religious lives of the village people provide insight into the agricultural and pastoral behaviour in historical Andhra. R. Gaur and R. N. Vasishat summarise the palaeontological and other related researches in the Siwalik zone, while A. Sonakia and A. R. Sankhyan discuss threadbare the contexts and possible dates of the Hathnora hominin fossils. K. A. R. Kennedy's thoughts on the priorities of south Asian palaeoanthropological research are noteworthy and so is J. R. Lukacs' graphic comparison of stature estimates of the Ganga plain Mesolithic skeletal samples with those of the early farmers and nomads of the northwest and the living tribes and castes

of India. Finally, S. R. Walimbe discusses the usefulness of DNA studies in biological anthropology. The volume has two biographical sketches of Irawati Karve in the beginning. On the whole, this is a useful volume, provided one is interested in the history of anthropological and archaeological research in the Deccan College with reference to one of its distinguished scholars.

Dilip K. Chakrabarti

Pálsson, Gísli: *Anthropology and the New Genetics.* Cambridge: Cambridge University Press, 2007. 268 pp. ISBN 978-0-521-67174-3. Price: £ 15.99

Zwischen der Anthropologie und der Genetik bestanden seit je enge Beziehungen auf verschiedenen Ebenen und die Humangenetik bildete gewöhnlich im Universitätsstudium der Anthropologie ein wichtiges Unterrichtsfach; mitunter wurden von beiden Disziplinen gemeinsam Forschungsprojekte realisiert. Mit der zunehmenden Entwicklung der Genetik in den letzten Jahrzehnten entstanden verschiedentlich sogar gemeinsame Lehrstühle für "Anthropologie und Humangenetik".

Die äußerst dynamische Ausweitung und Vertiefung der genetischen Forschungsproblematik und deren mitunter spektakulären empirischen Ergebnisse, wie z. B. die Entschlüsselung des genetischen Kodes des Menschen, aber auch die Feststellung verschiedener Fehlvarianten, die mit Abnormalitäten in der Ontogenese verbunden sind, die Analyse der genetischen Entfernung zwischen dem Neandertaler und dem *Homo sapiens recens*, die Auswertung des genetischen Materials bei Vaterschafts- oder Verwandtschaftsnachweisen oder bei der Identitätsfeststellung von Personen in zweifelhaften Fällen, beeinflussten nachhaltig nicht nur die Humanbiologie, sondern auch verschiedene andere Fachgebiete, u. a. die medizinischen und juristischen Wissenschaften, die Kulturanthropologie, Völkerkunde, Bioethik und Soziologie. Aber sie warfen auch viele Probleme auf, z. B. ob und inwieweit ein Sonderverhalten des Menschen, wie die Neigung zu Gewaltanwendung und Alkoholmissbrauch oder zu Homosexualität vor allem von Genen gesteuert wird, oder ob es umweltlich, genetisch-umweltlich oder epigenetisch bedingt ist (148). Die neuzeitliche Humangenetik ist mithin kein bioethisch neutraler Forschungsbereich, denn einerseits helfen deren Ergebnisse wesentlich ein neues "Menschenbild der Biologie" zu konstruieren, die Grundlagen der Eigenheiten des Menschen und seine Singularität zu bestimmen, andererseits aber verursacht diese genetische Transparenz "weitreichende kulturelle und soziale Implikationen" (i), die vorerst noch kaum abzusehen sind.

Die vorliegenden Ausführungen des bekannten Anthropologieprofessors und Schriftstellers G. Pálsson ermöglichen einen zusammenhängenden Überblick über die Erfolge, aktuellen Probleme und Ausrichtungen auf dem Gebiet der modernen Genetik, besonders der Fragestellungen, die sich mit dem Menschen befassen. Der Autor weist auf die mannigfachen Verbindungen und Zusammenhänge zwischen diesem Wissensgebiet und der Anthropologie hin und dessen vielfältigen, nachhaltigen