

istics, in terms of time depth and materials studied makes such involvement highly desirable. Archaeologists must continue to develop the self-criticism and greater awareness of the discipline's wider responsibilities shown in recent years and I recommend them to read Past Meets Present as part of this process.

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G. DE G. SIEVEKING and M.H. NEWCOMER, The Human Uses of Flint and Chert. Cambridge University Press, Cambridge. 1987. 263pp. £60.00 (Hard). ISBN 0-521-26253-4.

Reviewed by Andy Brown

Let it first be said that I did not attend the fourth international flint symposium held at Brighton Polytechnic in April 1983, of which this volume, along with a companion The Scientific Study of Flint and Chert (Sieveking and Hart 1987) are the published proceedings. I cannot, therefore, compare the content of the actual proceedings with those published, but in spite of the fact that a number of the papers (it is not clear how many, nor which) were commissioned as review papers, the presented papers appear to have been skilfully tailored by the editors to retain a real 'conference atmosphere'. That this is achieved by rather short, staccato presentations, however, has its drawbacks: part of that atmosphere is the frustration of some papers never going quite far enough.

This volume presents 30 papers with specific archaeological relevance, falling into the sub-headings of a) flint mines and exploitation of sources of raw materials, b) spatial aspects of flint and chert,

from exchange studies to deposition patterns on individual sites, c) technological aspects of production, and d) microwear-related topics. The companion volume deals with the more strictly geological aspects of flint and chert.

At the extractive end of flint exploitation, the general chronology of flint mining is considered in two papers, although here the use of radiocarbon dates is slack, and the exploitation of chocolate 'flint' in Poland and chalk flint in Scania are given particular attention. The former case study was a good example of that conference frustration which I mentioned above, for after four pages of description of various stages of mining activities and numerous figures of dubious relevance, Schild finally proposes alternative hypotheses to account for this data, each apparently with profound social implications: one turns the page expectantly, excitedly even, to find what? The bibliography!

The other papers in the group are concerned with the ad hoc extraction of flint nodules at Neolithic Hambledon, Dorset (R. Mercer) and the extraordinarily well-preserved multi-period mines of Old and Middle Kingdom Egypt (G. Weisgerber).

Robert Miller's model of the economic context of production and circulation of flint tools in the New Kingdom period around Thebes, as well as two other urban-related sites in the Middle East, provides both a stark contrast to the rather minimal view of extractive processes at the earlier sites described by Weisgerber as well as a link with the group of papers concerned with exchange systems. Miller's reconstruction reminds us that it

is futile to consider extraction alone. The nature of the demand, as seen through the analysis of contexts of deposition away from the extractive sites, surely occupies a vital place in understanding the exploitation of a raw materials source.

Andrew Sherratt concludes as much, having traced three stages of exchange in lithic materials in and around the Hungarian Plain. Set as it is within a discussion of changes in other contexts such as settlement organisation, Sherratt's paper puts exchange into a social context by acknowledging that lithic materials probably played a part in social strategies of pre-historic groups. Indeed, both Robert Zeitlin's paper on changing distributions of obsidian and pottery (note the use of materials in addition to lithics) in Pre-Columbian Mesoamerica, and John Burton's useful contribution on the socio-economic role of axes in New Guinea, serve to illustrate further that the exchange of lithic materials may be very much part of social and political strategies and not simply redistributions of unevenly spread raw materials.

Finally, at this regional scale of study, Roy Larick's paper deals with the circulation of a single artefact type -- the Solutrean point -- within the Perigord in the Upper Palaeolithic. Larick is able to suggest a distinct Solutrean "culture zone" in and around the Perigord within which area the criss-crossing of mobile social units led to the creation of deeply stratified and plentiful 'sites' which were, in fact, regular temporary stop-over locations rather than base camps. Linking the new interpretation with the introductory comments regarding the

social distance over which an artefact may convey its meaning is left to the reader, and might have been made more explicitly, but the paper is certainly one of the more satisfying of the 30 presentations.

This leads on to brief papers on k-means analysis and on flint and chert sourcing, both of which are used by Larick but which are exemplified in themselves separately. The case study by Ammerman *et al.* is particularly useful and would be a good place to begin if one was new to the subject of k-means analysis, but neither of the sourcing papers is memorable.

A third group of papers, numbering six in total, tackles various technological aspects of stone tool production. Cahen answers his own question "Refitting stone artefacts: why bother?" in general terms, and is supported by the subsequent paper on the Mousterian/Upper Palaeolithic transition in the Levant, although the latter paper is marred by over-complicated diagrams and illustrations. Refitting and experimental approaches are combined in a contribution describing intentional breakage as a technological strategy at Hengistbury Head, where the diagram in support (Fig. 3.5) is this time well conceived and useful. Experiment alone is employed by the remaining papers of the group, most notable of which is Harding's report on a typically pragmatic research programme on the production of ground flint axes.

The final group of papers is concerned with aspects of microwear analysis. Cook and Dumont provide a brief overview of developments since 1964 and, although the paper under-represents the potential of low-power analysis, its discussion

of theoretical issues is a useful introduction. There follow several case studies, two of which stand out. Firstly, taken in conjunction with another paper on heat pre-treatment, the contribution by Rosemary Bradley and Chris Clayton which describes the effect of the microstructure of flint on microwear trace formation, forms a breakthrough in understanding the variability of such traces which has been the major problem in microwear interpretation. More controversially, the paper by Newcomer *et al.* would have been a rather damning reflection on microwear inferences from polishes had it not been published in almost precisely the same form about a year ago (Newcomer *et al.* 1986) and had its findings not been brought into question by a scathing rejoinder by Moss (1987).

Whether or not the contributions reflect accurately the proceedings of the Brighton symposium, they form an important collection of papers -- important not only in that they provide a baseline against which we can measure progress in, say, another five years, but also in that they make accessible a range of scientifically-allied methods and a range of references. These latter reasons will, no doubt, contribute to the aforementioned progress.

Is the book good value? It certainly helps to think of the papers as only costing £2 each, since this makes some of the contributions excellent value. Perhaps too many of the papers are preliminary statements, but this simply reflects the 'frontier' nature of the work being presented, and also contributes to that 'conference atmosphere' mentioned earlier. Several papers are of the

calibre to be long-lived and repeatedly referred-to, and the bibliographies are generally accurate if not entirely consistent. My final comment is "nice book; shame about the title!"

References

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J. STREET-JENSEN (ED.), *Christian Jürgensen Thomsen und Ludwig Lindenschmidt, eine Gelehrtenkorrespondenz aus der Frühzeit der Altertumskunde (1853-1864)*. (Monographien: Römisch-Germanisches Zentralmuseum, Forschungsinstitut für Vor- und Frühgeschichte; Bd 6). Habelt, Bonn, 1985. 143 pp. £27.50 (Hard) ISBN 3-88467-014-X.

Reviewed by John Moss-Eccardt

The major part of this book consists of letters exchanged between C.J. Thomsen of 'Three Age System' fame and Ludwig Lindenschmidt, Curator of the Mainz Zentralmuseum, who, in later years, was opposed to the overall application of that system to European prehistory. However, this did not prevent a warm professional friendship developing between the two men during the