

LAPITA CALÉDONIEN:
ARCHÉOLOGIE D'UN PREMIER
PEUPLEMENT INSULAIRE OCÉANIEN

Christophe Sand, 2010.

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Reviewed by:

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Christophe Sand, Director of the newly established Institute of Archaeology of New Caledonia and the Pacific (IANCP) in Noumea, is a rare breed. A very active field archaeologist across many regions of the Pacific, a prolific writer and publisher, a high profile public advocate for archaeological heritage, an educator and an academic. Anglophones are also blessed with the fact that Sand is as comfortable speaking and writing in French or English, both of which he does with extraordinary frequency.

This latest publication is a summary of Lapita in New Caledonia, an archipelago which has seen the most long-term and sustained research on Lapita of any region in the Pacific, much of it under the direction of Sand and his long-term colleagues Jacques Bolé and John-André Ouetcho over the last 25 years. It is also a publication that went towards the recent award to Sand of the HDR (l'habilitation à diriger des recherches), a French diploma of higher education.

The book begins with both a preamble and prologue where Sand outlines highlights in relation to the 25 years of his association with Lapita research. The gathering of archaeologists and Pacific Islanders in New Caledonia 2002 to celebrate the 50th anniversary of the first excavations at Foué stands out. There was a binding effect and display of underlying commonalities that were invoked at that anniversary. Sand expresses hope that Lapita might somehow have a similar binding effect for future generations of the mixed populations of New Caledonia. This and other aspects are further explored in the prologue which discusses Lapita research and its association with contemporary Pacific societies in general.

The book is logically laid out with an introduction followed by eight chapters and a summary. Chapter 1 outlines the well-trodden history of Lapita, from the discovery of the first sherds at the beginning of the 20th century, to early archaeological excavations, to the development of definitions and various theories related to Lapita. Biogeographical influences and social dynamics are outlined in Chapters 2 and 3 where initial Lapita settlement of Near Oceania and, in more detail, Remote Oceania and New Caledonia is discussed. Chapter 4 comprises the stratigraphy and chronology of New Caledonian Lapita sites. Chapters 5–7 focus on New Caledonian Lapita material

culture, Lapita pottery (5), dentate-stamped pottery specifically (6) and stone and shell artefacts (7). Chapter 8 summarises subsistence strategies. A final synthesis discusses initial Lapita settlement of New Caledonia and its transformation over time, the emergence of a distinctive 'Southern Lapita' and the subsequent cultural diversification that develops across the *Grand Terre* and Loyalty Islands.

Much of the data and many sections of the book can be found in English in other publications most of which are conveniently referenced. The book is a summary, necessarily so considering there have been some 50 Lapita sites recorded in New Caledonia. More detailed data on particular sites can be found in published articles or various on-going analyses. Some will have reservations regarding certain aspects or arguments found in the book, as I do myself, with such things as the decades-old mantra of parallels seen in the design structure and motifs of Lapita with contemporary material culture in the Pacific (mostly Polynesian), connections with tattooing and dentate-stamping, and the robustness of the concept of Lapita provinces. But whether one agrees with Sand's summaries or models used or connections made is not really the point. The fact is that he has published a substantial contribution on Lapita which can be compared, discussed, referenced and critiqued for generations to come. If only all areas within the Lapita distribution were as well researched and published.

The book does considerable justice to the rich Lapita record of New Caledonia. It is a handsome, solidly-bound, large format volume, on quality glossy paper. To say it is well-illustrated is an understatement. There are 15 maps, 148 figures and 130 photographs most of which are in colour. In the age of digital publishing, e-press, print on demand and ebooks, this publication is a reminder of the very different aesthetic qualities found in superior productions. The Société des Océanistes are also to be commended. Even for those who don't read French this volume with its wealth of illustrations and tables of data and detailed list of references must be a first stop for a deeper understanding of Lapita in New Caledonia and the wider region.

EXPERIMENTAL AND ARCHAEOLOGICAL
STUDIES OF USE-WEAR AND RESIDUES
ON OBSIDIAN ARTEFACTS
FROM PAPUA NEW GUINEA

Nina Kononenko, 2011.

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There is a growing appreciation of the importance of morphologically informal stone tools in the field of lithic analysis. Ethnographic accounts of stone tool using behaviour routinely document an emphasis on sharp working edges rather than formalised morphologies while the scarcity of secondary retouch in lithic assemblages in many parts of the world illustrates a similar trend in the archaeological record. As a consequence researchers are increasingly looking to expand their purview from the traditional study of retouched forms and select core varieties to a more inclusive focus on all artefacts in an assemblage. If we wish to know what happened in the past then we need to find ways to study all of the materials that are at our disposal – including the lowly flakes so often relegated to the position of debris. Use-wear and residue analysis provide an important means for expanding the scope of lithic analysis in the sense that macro and micro traces can be utilised to identify the use and function of ‘tools’ regardless of retouch or standardised morphologies. This book furthers our appreciation of the utility of use-wear through the experimental and archaeological study of informal obsidian technologies from Papua New Guinea.

Kononenko’s book is designed with the purpose of providing a resource for students and specialists seeking to employ use-wear and residue analysis. It covers the development of a methodology and experimental programme for investigating wear formation, an extensive reference set of high quality photos of wear characteristics, and finally presents an archaeological case study to demonstrate the utility of the approach for investigating past behaviour.

After an introductory overview of the themes of the book in Part One, Parts Two through Four serve to outline Kononenko’s methodological approach for the functional analysis of obsidian tools.

Part Two provides an overview of the analytical and methodological approach with special emphasis on the unique characteristics of obsidian. The chapter includes a detailed outline of the variables utilised for describing the use-wear/ residue patterns observed on tools (i.e., scarring, striations, edge rounding, polish and residues) as well as an overview of the use of replication experiments as a key component to functional studies. A discussion of analytical protocols provides a step-by-step description

of the preparation and pre-examination of experimental and excavated artefacts, the extraction of residues, and the documentation of wear and residue traces. A final segment of the chapter discusses equipment and procedures for the use of microscopes and cameras when analysing and documenting wear traces.

Part Three presents an overview of the experimental methods for the study. A brief review describes the benefits and limitations of experimental research for functional analysis, the results of previous study (as well as areas where existing knowledge is deficient), and the specific aims of the experiments completed for the study. A presentation of the main factors of obsidian wear formation then serves to highlight the range of and justification for the materials that were experimentally worked, their condition, and the mode/duration of activities completed.

Part Four provides a detailed overview of the results of the replication experiments conducted at Kononenko’s Papua New Guinea study area with local materials. The presentation of wear formation is organised by use material (e.g. soft woods, tubers, shell, and chicken skin (to imitate tattooing and scarification)) and outlines the characteristic features of the relevant wear variables formed from a variety of use actions (e.g., scraping, cutting, engraving, gouging and drilling). Summaries for each use material category touch on key diagnostic wear traces, the relative ease with which wear is formed, and how the duration of use influences edge characteristics. The residues remaining on or near the working edges of the experimental tools as well as hafting and prehension wear are covered in a similar, though less detailed, fashion. The results of a second set of surface and subsurface control experiments are also presented. The goals of these studies were to observe how post-depositional factors affect the preservation of use-wear patterns and residues on experimentally used tools as well as to monitor the formation of mechanical and chemical damage not related to artefact use.

The final three parts of the book present a case study of the Fao site on Garua Island, West New Britain, Papua New Guinea. Here the results of the experimental programme are utilised to explore artefact function on Middle and Late Holocene (6000–2000 years ago) obsidian assemblages with emphasis on investigating patterns of cultural continuity and change.

Part Five outlines the environmental background and archaeological context of the study area. Topics covered include descriptions of the stratigraphy and chronology of the archaeological deposits and an overview of the largely informal lithic assemblage including a brief discussion of recording protocols and general assemblage characteristics. A second part outlines the organisation of supplementary tables (found at the end of the book) reporting the results of the use-wear/residue analysis.

Part Six presents the results of the analysis of the 1395 obsidian artefacts (190 of which had signs indicating use) from the Fao site. Discussion of the results – like

their experimental counterpart presented in Part Four – is grouped by materials worked and includes the main forms of wear and residue observed on tools, interpretations of the mode and duration of use, and description of general edge and shape characteristics for the artefacts selected for each use activity. Comparison of the wear traces and corresponding functional interpretation for the obsidian artefacts indicates that the kinds of activities undertaken and materials processed at Fao were generally similar for the Middle and Late Holocene occupations. The few traits that did differentiate the two time periods relate to the intensity of use of certain resources (e.g., a wider use of hard wood in the Middle Holocene) and preferences in the selection of tools used in specific tasks (e.g., large flakes in woodworking activities during the Middle Holocene).

Part Seven, concludes the study with an explanation of the broader implications of the use-wear/residue results for understanding past behaviour on Garua Island. Using a variety of information sources (e.g., ecological data and ethnographic analogy) assessments of artefact function together with supporting archaeological evidence are utilised to reconstruct different characteristics of the various occupations at the Fao site. While the assemblages display a near absence of retouched forms, wear-traces on unretouched edges demonstrate spatial patterns in the location of specific activities as well as differences in the distributions of used and unused artefacts. These relationships are further interpreted to discuss characteristics in the overall intensity and duration of individual occupations and are used to argue for both a generalised pattern of low mobility as well as continuity in subsistence, site structure and settlement patterns during both chronological periods. Summary discussions of the implications of the study for future research and the potential/limitations of functional analysis conclude the chapter.

The volume succeeds handsomely in its goal of providing a reference for the development of future studies of artefact function through use-wear and residue analysis. Beyond the 77 pages (not including references) of written text explaining the study, the extensive collection of photographic plates provide an extremely useful comparative sample of wear patterns on obsidian tools. So often it is the case that researchers who seek to employ use-wear must build their approach and reference collection from the ground up. Thanks to the information provided in Kononenko's study, future studies can take a running start.

One criticism I do have, however, is that efforts to streamline for accessibility have caused the level of detail relayed in the book to at times suffer. The presentation of Kononenko's study proceeds at such a pace that I occasionally found myself wanting more. This was particularly the case concerning the discussion of the individual experiments. The photographs hint at a deeper story behind the design and execution of each experiment. Expansion in this regard would provide valuable information both from the perspective of replicating experimental conditions and

in the interest of a greater appreciation of the nuances in the relationship between artefact use and wear formation.

That being said, the breadth of information and reference material contained in this book certainly presents a handy primer to the development of a programme in functional analysis from experimental design to archaeological case study. For this reason Kononenko's work represents an important reference for anyone interested in use-wear analysis and its role within the ever expanding field of lithic analysis. Its accessibility and the fact that it is freely available for download (doi: 10.3853/j.1835-4211.21.2011.1559) make it a worthwhile resource for specialists, students and general enthusiasts alike.