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Robin Torrence

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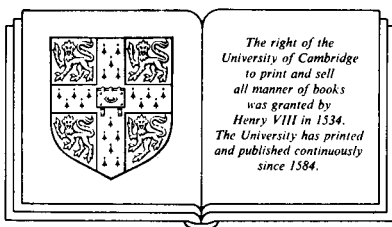
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*ROBIN TORRENCE*

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# Production and Exchange of Stone Tools

Prehistoric Obsidian in the Aegean



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*For* JOHN

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## PREFACE

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Rarely have the high expectations generated by the ‘New Archaeology’ of the 1960s and 1970s been achieved. As it has turned out, reconstructing human behavior on the basis of the remains preserved in the archaeological record is much more problematical than had been foreseen. Archaeological methodology for making inferences about the aspects of social life that were defined as interesting and important have subsequently been found to be extremely simplistic at best and at worst totally inadequate. In contrast, some would argue that the study of exchange is a notable exception. Largely as a result of the many new techniques for sourcing raw materials, the enthusiasm for reconstructing prehistoric exchange systems has continued to grow rapidly. Unfortunately it is not all that easy. The relationship between a distribution map of goods and the exchange system(s) which operated in the past are not as straight-forward as the large number of studies might lead one to believe. Prehistoric exchange cannot escape the need for the development of rigorous methods for linking the static material remains of the archaeological record to past dynamic behavior, what Binford has termed ‘middle range theory’.

This book is an attempt to fill the need in archaeology for a middle range theory for exchange; that is, to develop theory relating the process of exchange with its material consequences. Although a general form of archaeological inference is already used implicitly in most studies, by exposing the structure of the logic behind it, a wide range of new approaches are highlighted. In particular, it seems clear that although most emphasis has been placed on using the nature of consumption as a reflection of type of exchange, the study of the acquisition of raw materials and production of goods hold just as much potential. Such a general argument can flounder if left at the theoretical level. It can, however, gain force if illustrated with respect to a specific category of goods. I have therefore concentrated on the class of artifacts that I know best, stone tools. But there is no reason why the same principles cannot be applied to any exchanged material, be it shells, pottery, metal or whatever.

The same comment is relevant for the analysis of Aegean obsidian exchange which forms the core of the book. Admittedly it is only one case study and the data are deficient in several areas, but I think it is extremely important to evaluate the ideas proposed here by actually putting them into practice. In this way the strengths as well as the weaknesses of the approach can be illustrated. I hope that my attempt to build archaeological theory for exchange will spark others to carry out the research needed to answer the questions posed by the analysis of prehistoric Aegean obsidian exchange.

*Preface*

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The ideas presented here have been germinating since 1981 when I completed my doctoral thesis on Aegean obsidian. That I was able to move beyond those initial attempts to come to grips with the confrontation of high-level theory with real archaeological data (what Colin Renfrew called my ‘wrestling with angels’) is due to the perceptive criticisms and the patience of a large number of scholars and friends. In the first place I must thank Colin Renfrew who first invited me to join the Melos project and who has since supported my attempts to give meaning to my data, and with Jeremy Sabloff has constantly urged me to publish the ideas. I hope they are glad I let them grow a little first. Insightful comments by William Rathje in response to my lecture in Tucson provided an important turning point in the research. Lewis Binford’s work has always been a model of what was needed in archaeology; he also helped me to understand the necessity of testing middle range theory in the present world. Many scholars working in Mesoamerica have commented on my dissertation and shared the results of their own attempts to solve similar problems on different data sets. John Clark, Thomas Hester, Michael Spence, Harry Shafer and Payson Sheets have been particularly helpful. I must single out the benefits gained from the lengthy and persistent criticisms of John Clark, whose knowledge of flint knapping gives him an invaluable perspective. Conversations with the following over the years have also contributed to the theory building: James Brown, John Cherry, Jack Davis, Clive Gamble, Larry Keeley, Isabel McBryde, Catherine Perlès, Colin Renfrew, Curtis Runnels, Robert Santley, Todd Whitelaw, Sander Van der Leeuw, and Malcolm Wagstaff.

Research in Greece has been carried out through permits from the Cycladic Ephorate of the Greek Archaeological Service, whose cooperation is gratefully acknowledged. Colin Renfrew invited me to study the quarries on Melos and the assemblages at Phylakopi and provided assistance of many types. In the field I was aided at times by John Cherry, Alec Daykin and Mathew Freedman. Permission to study material from other excavations has been graciously extended by the following scholars: Gerald Cadogan, the late Jack Caskey, Sinclair Hood, Thomas Jacobsen, and Peter Warren. In Greece I have also benefited from the assistance and company of many friends but especially Betty Banks, Tucker Blackburn, Peter Callaghan, Jack Davis, John and Gatewood Overbeck, Elizabeth Schofield, James Wright, and all the members of the Melos project.

Research funds have been scrounged from many places but I am grateful to the Universities of Southampton and Sheffield, the British Academy and the National Endowment for the Humanities for institutional support.

Clive Tilley and David Leigh took many of the photographs of Demenegaki and Sta Nychia, respectively; whereas figure 44 is the work of Nick Bradford. Lewis Binford, Isabel McBryde, and David Phillipson also donated photographs from their own fieldwork. John Owen and Dave Maddison of the Geography Photographic Lab at Sheffield University are to be praised for their excellent developing and printing and constant good humors. Sarah Colley prepared the excellent artifact drawings. The remaining line drawings are the product of Barry Vincent, who depended in

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many cases on originals by John Cherry. The typists Val Kinsler, Dorothy Cruse and before them Ann Larson helped spot inconsistencies and errors as well.

In the end it was always John Cherry who helped me through the many ups and downs. It was through him that I become involved in exchange studies; he has also assisted in all phases of the work from the fieldwork, through the laboratory analyses to the illustrations. Most of all he has provided a shoulder to lean on and all the painful pushing and prodding that was needed to complete the job. The final product is therefore dedicated to our life together.

Sheffield

*Thanksgiving 1984*