

## NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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## TRANS - PACIFIC CONTACTS

REVIEW

"Early Formative Period of Coastal Ecuador: The Valdivia and Machalilla Phases" by Meggers, G.J. Evans, C. and Estrada, E. 1965. Washington. Smithsonian Contributions to Anthropology, Vol. 1. 234pp, 196pls.

This handsomely produced volume describes the investigation and definition of one of the earliest ceramic societies in South America, discovered along the semi-arid Facific Ecuadorian coast. It deals with the "Formative Period" of regional development of Latin American prehistory through the introduction of a ceramic technology into a human society organised around a coastal subsistence economy. The discovery by the authors of this work that the ceramic development was not locally evolved but an introduced technology from outside the area is a significant milestone in South American prehistory. However, what must be considered as even more revolutionary and one of the most dramatic ethnographic discoveries of this decade, was unveiled when an endeavour was made to trace the source of this very distinctive ceramic ware - a path of research that lead dramatically away from the American continent, across the Pacific Ocean to terminate at the Islands of Japan.

The human culture sequence revealed in the sites excavated along the Ecuadorian coast is divided into two distinct Phases based on the presence of two distinguishable pottery complexes. Named Valdivia and Machalilla after towns near the sites, each of these Phases is further subdivided into four and three Periods respectively by recognisable changes in sherd type and design frequencies. The beginning of the Valdivia Phase, recognised by the first appearence of pottery on the Pacific coast is dated about 5000 - 4300 years ago. The appearance of the later Machalilla Phase which overlaps the third Period of the Valdivia Phase is dated to about 4000 - 3400 years ago, and introduces a divergence in ceramic ware and an interchange between the two groups. The termination of the two Phases took place about 3400 -3000 years ago, and is related to an "abandonment of sea-orientation subsistence economy". Both Phases therefore spanned some 2,000 years, which carbon 14 and obsidian dates related to sherd design changes, have subdivided into a fine chronology of human history. The subtle changes in pottery type frequency described in this work demonstrates the extreme sensitivity of pottery sherds as artifacts for revealing trends and time in human evolution, much the same way as paleontologists use incomings and extinction of fossil species for gauging geological time and events.

The scholars of Polynesia however, where pottery remains are generally of rare occurrence, highly developed studies of seriation techniques as admirably outlined in this work will not have more than general interest. But what will be most significant to students of the Pacific region, as already mentioned, is the source and transmission of the alien ceramic technique that

transformed the culture of the early Ecuadorians. The sudden appearance of a ceramic technology of high artistic level in the earliest Period of the Valdivia sequence indicated a direct introduction from beyond the area. The stylistic qualities of the sherds representing bowls, dishes and figurines are not traceable to any known source on the Pacific coast of Central or North America. From comparisons made at first hand by the authors the Valdivia pottery is considered to be derived from Japan, where incision technique, form and decoration patterns find their counterparts in the contemporary Early and Middle Jomon Periods of Honshu and Kyushu. (Earlier reports on these findings have appeared in Estrada et al. 1961 and 1962) The transmission of the Valdivia pottery inheritance from its Japanese source is considered to be the result of a purely accidental voyage. Beginning off the S.E. coast of Kyushu, a boatload of Early Middle Jomon fishermen. some 5,000 years ago, are envisaged to have been carried northwards during the months of October or November by strong west and north winds and gales of the northern Pacific latitudes into the N.E. Current Zone. The craft was driven along the great circle route to North America where S.E. coastal currents bore them down past California to the coast of Ecuador. Here, the S.E. current meets the N.W. - flowing Humboldt Current, and at the disturbed junction of these two opposite streams a land-fall was made, terminating one of the longest hypothesised drift voyages of all time - a voyage of 9,450 miles (8,230 nautical miles).

To Polynesian ethnologists the significance of such an event must be the impact that an obviously small alien group accidentally made in transforming a culture. Ferdon (1963) has emphasised this very fact that similar circum-Pacific influences are likely to have reached scattered Pacific island outposts creating diversity within the Folynesian culture. Influences in Polynesia for example derived from the American continent (and vice versa) have long been postulated (Handy 1930: 23-24), but as now becomes apparent one single canoe sailing eastwards or one balsa raft by chance borne westwards could have been a profound influence on human culture in its landfall area. In the reviewer's opinion the cultural influences that Meggers, Evans and Estrada have uncovered in their work on the pottery of the early Ecuadorians must truly rank as one of the most dramatic trans-Pacific contacts that could ever be envisaged - let alone proved; a sobering reality to those who deal with cultures of the Pacific region.

## REFERENCES

Estrada, E. Meggers, B.J.

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"A Complex of Traits of Probable Trans-Pacific Origin on the Coast of Ecuador." Am. Anthrop. 63: 913-39.

Estrada, E. Meggers, B.J. Evans, C.	1962	"Possible Trans-Pacific Contact on the Coast of Ecuador." Science, 135 (3501): 371-72.
Ferdon, E.N. Jr.,	1963	"Polynesian Origins." Science, 141 (3580): 499-505.
Handy, E.S.C.	1930	"The Problem of Polynesian Origins."  B.P. Bishop Mus. Occasional Papers, 9(8).

I.W. Keyes

REVIEW: Four monographs from the Library of Early Civilizations published by Thames and Hudson, 1965. Each priced (NZ) 37/- for hard cover and 19/- for paper.

These four books are part of a series based on "The Dawn of Civilization" which was published five years ago. Each monograph is an enlargement or modification of separate chapters of the earlier work, with which interested readers will already be familiar. The present form of the publication is, however, very much easier to manage in the lap or in bed. The price, especially of the paper-back edition, no longer precludes purchase for pleasurable reading, although they will no longer pass as acceptable coffee-table decoration, being so much smaller. The serious undergraduate will probably find the text too compressed for sustained argument, but each will provide an unexcelled introduction to further study suggested in the bibliography. Those of us who have an interest in pre-history uninhibited by the threat of examinations will find each book a delight.

This monograph is a complete rewriting of the chapter "Roots in the Soil" of the earlier publication, although the author calls it "a sort of interim report, based on the results of excavations up to the end of 1963". The bibliography includes only those references published after 1960 and needs to be taken in conjunction with the bibliography of the chapter in The Dawn of Civilization.

- 2. "Egypt to the End of the Old Kingdom". Cyril Aldred. This is part of the earlier publication chapter "The Rise of the God Kings". The section on the Old Kingdom has been rewritten from "Architecture of the Old Kingdom" and the discussion and illustrations of the pyramids has been extended. Plates have been added to the chapters on sculptures but the bibliography remains the same.
- 3. "Early Mesopotamia and Iran". M.E.L. Mallowan. The text is the same as in the earlier publication, but there has been an increase in the number of illustrations. The bibliography has one addition post-1960.
- 4. "The Royal Hordes. Nomad Peoples of the Steppes".

  E.D. Phillips. The text is the same as chapter XI in the earlier publication, with additional subsections on Transcaucasians, Other simple Contacts, Scythian Religion, The Scythians and Greek Settlements. There has been substantial rewriting of the sections on the Animal Art Style of the Scythains, and chapters 5 & 6 which cover the period and culture of the Sarmations, Huns etc., which was compressed into the final paragraph of chapter XI previously. Thus the new section in the chronology VI is added and together with this, a greatly enlarged bibliography and number of illustrations.

Each monograph is strongly recommended.

A.G. Buist

REVIEW: The Preparation of Archaeological Reports by Leslie Grinsell, Philip Rahtz and Alan Warhurst. London 1966.

John Baker Publications Ltd. (Eng. price 10/6).

This excellent small book opens with an 1898 quotation from Pitt-Rivers "A discovery dates only from the time of the record of it, and not from the time of its being found in the soil." The authors proceed to spell out the way to reach the discovery. The text is based on a series of lectures given at the Bristol University first published in a duplicated booklet. The text of the booklet has been revised and illustrations added for this first printed edition.

The chapters follow the sequence to be adopted in writing a report, with a section on preliminary advice. This contains an unfortunately small paragraph on 'clarity of style and freedom from jargon' but this does contain the good advice that 'one's report should be submitted to an exponent of good English who knows little or nothing about archaeology' for correction.

The advice on writing drafts and revising ends with the statement "what is easy to read has generally been difficult to write", since very few authors are able to produce a satisfactory text at the first attempt. These preliminary remarks could well have been expanded for the benefit of editors and, even more important, the ultimate readers.

Alan Warhurst follows with a chapter on "illustrations" which clarifies the technical problems, but which needs to be read in conjunction with Wheeler's advice on section drawings in Archaeology from the Earth, as well as the other authors cited. Philip Rahtz's chapter on "The Text" is headed by a harsh statement from Petrie which is softened somewhat by the following pages which contain the suggestion that the planning of the report begins before the excavation starts. Once again, however, the details of a good recording system are scant and other texts must be consulted to amplify the points made. The section on the arrangement of the text is really the nubby core of the book: if pages 43 to 52 were compulsory reading for degree examinations, technical publications would be a joy to read and the task of an editor a happy one.

Leslie Grinsell writes the last two chapters, starting with the quote that "advance in knowledge by no means keeps pace with the feverish activity in digging." He points out the possibilities of a non-excavation report and finally lucidly explains the preparation of a final draft for printing. The Harvard system of references is explained rather more fully than on the cover of the NEWSLETTER, and there is a crisp section on indexing. These last two chapters have the cozy glow of Old World Archaeology but we of the New World can be tolerant since the advice is easily transposed.

The book is strictly limited to the subject of the title, is easily read and provides answers to many of the problems of local archaeologists. With the help that a study of the text and illustrations can give any archaeologist, no matter how amateur, will be able to write a report worthy of his work in the field or in the soil. The editor of the NEWSLETTER pleads that you get a copy and keep it at the bedside, along with Fowler's MODERN ENGLISH USAGE.