

1541, was the first form of measured music taught in the monastic schools. And it is probable that further research will show that songs preserved in this *Cancionero de Palacio* became a part of the heritage of the Western World from Spain.

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A Reappraisal of Peruvian Archaeology. Assembled by WENDELL C. BENNETT. [Memoirs of the Society for American Archaeology, Number 4.] (Menasha, Wis.: 1948. Pp. viii, 128. Paper.)

The papers included in this volume were originally presented at a conference on Peruvian archaeology held in 1947 under the auspices of the Viking Fund and the Institute of Andean Research. For purposes of the review, the papers may be considered as falling into two categories, the first consisting of those whose importance is primarily in the realm of theory and the second, those largely factual in nature.

The initial paper, "The Peruvian Co-Tradition," by Wendell C. Bennett is the first of the theoretical papers and introduces the concept of an "area co-tradition." Though based on the culture-area concept developed in the Americas primarily by Clark Wissler, an area co-tradition also takes into consideration temporal depth. It represents an area within which the constituent cultures have been interrelated over a period of time and share common, basic characteristics. Though other areas are mentioned for comparative purposes, Bennett is primarily concerned with defining a Peruvian co-tradition. Geographically, this is considered to include the coast and highlands of Peru and the Titicaca basin of Bolivia. In considering subdivisions of this area, Bennett departs from the conventional division of both highlands and coast into northern, central, and southern regions. Instead, five major east-west divisions are made which embrace both coastal and highland zones. Such a division is considered to have a sounder basis on both geographic and cultural grounds and promises to lead to more fruitful syntheses of the basic archaeological data.

Though Bennett mentions that the Peruvian co-tradition can also be divided temporally and briefly states his own most recent time divisions which have since appeared in greater detail,¹ this problem is dealt with more fully by other authors. Gordon R. Willey deals with one aspect in his paper, "A Functional Analysis of 'Horizon Styles' in Peruvian Archaeology." Though horizon styles have long been used both as a descriptive device and to reconstruct Andean prehistory, they

¹ Wendell C. Bennett and Junius B. Bird, *Andean Culture History*, American Museum of Natural History, Handbook Series No. 15, 1949.

implications had not previously been thoroughly explored. Willey describes and considers five of these horizon styles. The first, the Chavín horizon, is interpreted as primarily the diffusion of a religious cult and its associated symbols, accepted willingly by the early communities. The next two successive horizon styles, White-on-Red and Negative, are considered primarily the diffusions of technical processes lacking the broader implications of the other horizon styles. The succeeding Tiahuanaco horizon is interpreted as a movement carried by force in a period of social tension terminating the regional developments that had intervened since the decline of the Negative horizon. The militaristic implications are, of course, similarly present in the final Inca horizon.

Of particular importance for their theoretical implications are the three papers grouped by Bennett under the title "Developmental Classification." The first paper by Wm. Duncan Strong, "Cultural Epochs and Refuse Stratigraphy in Peruvian Archaeology," traces in detail the manner in which the classification of the cultural periods has developed. The contributions of Julio Tello and Max Uhle are first considered together with the elaborations on this foundation primarily by A. L. Kroeber and Strong himself. To this early work, which relied largely upon stylistic analysis and grave association, richer detail and correction of earlier misconceptions have been provided by recent work in stratified refuse deposits in many areas. Period designations which had grown from the earlier archaeological work tended to be inconsistent and required revision, a task which was attempted in the course of recent work in the Virú and Chicama valleys, the concepts crystallizing at the Chiclín Conference of 1946.² Strong presents the basis for these periods which he designates Pre-Agricultural, Developmental, Formative, Florescent, Fusion, Imperial and Colonial. He bases the periods on the following criteria: "(1) the economic base, (2) the artistic level achieved, and (3) the political organization, insofar as it can be envisaged" (p. 101). It might be questioned whether artistic level should have the same weighting as the other factors in determining period grouping, for while it is undoubtedly of value in chronological determination, it need not have an inherent functional relation to economic base or political organization. This logical inconsistency appears to be met in the paper by Julian H. Steward, "A Functional-Developmental Classification of American High Cultures," which "takes into account basic technologies and associated socio-religious patterns rather than stylistic peculiarities" (p. 103). This brief paper of two pages presents a broad classification of South and Middle American cultures in terms

² Gordon R. Willey, "The Chiclín Conference for Peruvian Archaeology," *American Antiquity*, XII (1946), 132-134.

of Pre-Agricultural, Basic Agricultural Beginnings, Basic Inter-areal Developmental or Formative, Regional Formative or Developmental, Regional Florescent, and Empire and Conquest periods. Period names and characteristics have been subsequently clarified by Steward in a recent paper which clearly shows the value of such conferences as this one in stimulating the synthesis of basic data.³ The third paper in the series, "A Sequence of Cultural Development in Meso-America" by Pedro Armillas provided much of the comparative data for this region used by Steward in his later synthesis.

Factual articles in the volume will be mentioned only briefly, though this should not be considered an indication of lesser value since they contain both important new data and valuable summaries. For example, a summary of physical types in the Peruvian area is presented by Marshall T. Newman and the best available description of early preceramic cultures in the Chicama and Virú valleys is given by Junius B. Bird. Additional information on the northern area include a report on the Pariñas and Chira valleys by S. K. Lothrop, a discussion of stone sculpture in the Callejón de Huaylas by Richard Schaedel, and an analysis of Peruvian stylistic influences in Ecuador by Donald Collier. A paper by George Kubler deals with the possibility of using archaeological objects found in guano deposits on the coastal islands as a means of obtaining absolute dates for the cultural horizons. A late seventh-century date is suggested for Mochica-associated artifacts. Absolute dating is also considered in a brief paper by John Howland Rowe who considers some documentary material on the Chimú. The southern portion of the area is treated in two papers. One by Alfred Kidder, II, deals with the position of the Pucara site in the north Titicaca basin while Wendell C. Bennett considers the cultural sequence of the south Titicaca basin.

The papers in the volume, mentioned above, are summarized and discussed in a final paper by A. L. Kroeber. Allocation of space in this final paper indicates the importance of the emerging period classifications but it may well be that the impact of the concept of co-traditions will be equally great. The volume is a timely survey of the current status of Peruvian archaeological research. The stress upon methodology and theory make it essential reading for archaeologists and historians as well as the general student of Latin America.

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³ Julian H. Steward, "Cultural Causality and Law: A Trial Formulation of the Development of Early Civilizations," *American Anthropologist*, LI (1949), 1-27.