

William N. Morgan, *Prehistoric Architecture in Micronesia*. Austin: University of Texas Press, 1988. Pp. xvi, 166, maps, plates, illus., bibliography, index. US\$49.95 cloth.

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In this attractively printed monograph, William N. Morgan presents examples of the prehistoric as well as traditional architecture of Micronesia in tropical Oceania primarily in a descriptive manner, aided by numerous photographs and superb line drawings. The author, who is an accomplished professional architect trained at the Harvard Graduate School of Design, reveals his fascination and appreciation of Micronesian architecture through highly self-motivated research endeavors. Morgan's personal interest in prehistoric architecture in Micronesia began decades ago when he first encountered the enigmatic *latte* stones of the Mariana Islands. The megalithic stone foundations of the House of Taga on Tinian must have made a profound impression on him; they are truly extraordinary cultural achievements attributed to the prehistoric inhabitants of the Marianas. It was also while Morgan was stationed on Guam with the United States Navy in 1954 that he heard from an aviator about a "Venice-like city built on a shallow reef. . . . Stone walls surrounded innumerable rectangular islets bigger than football fields, and a network of canals and seawalls extended from the open Pacific to dense mangrove swamps along the shore" (p. vii). This aviator's tale must have induced in Morgan a long-lasting and perhaps ever-increasing curiosity about prehistoric architecture in Micronesia. More than three decades later, the author confirmed that the aviator was accurate in describing the magnificent stone structures of Nan Madol in Pohnpei (Ponape). Morgan's volume is interesting, as it is in many ways based upon his somewhat romantic and nostalgic intellectual journey into parts of Micronesia that have retained architectural splendors and intrigues from the prehistoric past.

The volume is organized principally into five geographic areas within Micronesia: Palau, the Yap Islands, Pohnpei, Kosrae, and the Mariana Islands. Other main geographic areas of Micronesia--such as the Marshall Islands, Kiribati, Nauru, and Chuuk in the central Carolines--were excluded from the volume as the author deliberately chose to concentrate only on the five geographic areas mentioned above.

Although there is an apparent lack of any theoretical scholarly direction, Morgan is genuine in his thematic approach to his subject matter.

The essence of his approach can be seen in the preface where he quotes William H. Prescott that "the surest test of the civilization of a people . . . is to be found in their architecture, which presents so noble a field for the display of the grand and the beautiful, which at the same time is so intimately connected with the essential comforts of life" (p. vii). Using this approach, Morgan's appreciation of the aesthetic and functional qualities of Micronesian architecture binds together otherwise scattered architectural traditions in the western Pacific. The approach is effective, as the wide variety of designs and concepts that evolved in prehistoric Micronesia are seen more from a humanistic perspective than from a purely scientific or engineering point of view. For a reputable architect in the modern sociointellectual context, taking a humanistic rather than a highly technical and quantitative architectural approach must have required a great deal of courage. Throughout the volume, one is reminded of Morgan's introductory comment that "the study of prehistoric architecture presents an opportunity to deepen our understanding of creative human instincts and to expand our awareness of architecture" (p. vii).

In terms of overall presentation, the volume is delightfully well illustrated by high quality, high resolution photographs and carefully executed line drawings. Newton Morgan should be commended for the production of sharp and crisp photographic plates, often employing small lens apertures to allow pan-focus images. Camera angles appear to have been carefully selected to most effectively capture architectural details. The black and white photographic images of the Yapese *pebaey* are particularly excellent, as they illustrate the intricate bindings of wooden posts, beams, and rafters as well as carvings, paintings, and the stone-lined fire pits. To complement the photographs, the author has included transverse and longitudinal section drawings of Bechiyal *pebaey*, a wood-framed structure built on an elevated hexagonal stone platform. Like many other superb line drawings included in the volume, the line drawings of *pebaey* are truly outstanding, conveying the structural logic and engineering marvels of the Yapese meetinghouse in a concise manner. Perspective drawings prepared for the royal tomb compound of Nandauwas and other structural remains at Nan Madol on Pohnpei and the sacred compounds at Leluh on Kosrae are other excellent artistic achievements. In addition, Morgan succeeds in presenting the impressive terraces at Ngchemiangel Bay on Babeldaob's west coast in Palau by combining several illustrative methods. A high resolution black and white aerial photograph coupled with a reconstructed plan based on a photogrammetric survey prepared by R. M.

Towill Corporation of Honolulu provides an excellent overview of the sculpted hills at Ngchemiangel. The reconstructed plan is particularly striking, as it shows the complex character of the artificial landscape in western Micronesia. This is also perhaps the first time the extensive nature of Palauan terraces is visually recorded in an effective manner by a professional architect.

While Morgan's strengths lie in the area of architectural discussions and visual presentations, his weakness is found in the descriptive portion of the monograph. Each chapter begins with straightforward introductory remarks, followed by descriptions of certain aspects of island geography, biology, history, ethnography, and archaeology. Since citations tend to be sparse, it is often unclear where the author obtained much of the factual data. For example, he states that "some 1,500 types of fish abound within the fringing reefs" in reference to Palau (p. 3). According to Dr. Steve Amesbury, ichthyologist at the Marine Laboratory at the University of Guam, there are 892 known species of reef fishes around Palau (personal communication, 1989). The discrepancy between the number quoted by Morgan and the figure given by an expert in the study of fishes appears rather excessive. With regard to matters pertaining to subsistence economy, Morgan makes some statements that need to be clarified. The use of traditionally important food plants such as breadfruit, taro (*Colocasia*, *Cyrtosperma*, and others), coconuts, yams, and sweet potatoes is described for many parts of Micronesia in general. Although the author included cycad nuts (*fadang*) as another probable primary food item for the inhabitants of the Mariana Islands, the prehistoric use of *fadang* is still being debated. What may have been an important food item in the Mariana Islands not mentioned by Morgan appears to be rice, as discussed by several researchers (Craib and Farrell 1981; Takayama and Intoh 1976; Yawata 1940, 1963).

Aside from these details, some serious flaws can be detected in the use of certain words that should have been perhaps changed or omitted. In discussing the traditional Micronesian navigational technology that still exists on Pulawat [*sic*] and Satawal (p. xv), the author refers to the local inhabitants as the "natives." The use of the word "native" as a noun should be avoided as it might connote an Eurocentric bias. We must be particularly sensitive to the selection of words so that proper respect to the indigenous people may be duly acknowledged by all parties concerned. In a separate context, the present reviewer found another word used by Morgan to be an unsatisfactory choice: "neolithic" to describe the prehistoric technology on Kosrae (p. 109) and Yap (p. 150). The

concept of neolithic is usually reserved for certain parts of the Old World and its applicability to Oceania is still tenuous. Unless clearly defined, the meaning of such a word tends to be nebulous in discussing the prehistoric architectural technology of Micronesia. On more mundane matters, Vanuatu is misspelled on p. xiv and *Micronesica*, a scientific journal of the University of Guam, was repeatedly misspelled in the bibliography.

Morgan's volume touches upon culturally significant taboos and symbolic meanings associated with space, construction, decorative motifs, and architectural components in some traditional Micronesian structures. Social ranking is clearly important, underlying some taboos concerning the range of permissible behaviors. For example, Morgan states that many taboos are associated with the threshold (*iis*) of each doorway of the Palauan *bai*. According to traditional Palauan custom, a man without rank was not permitted to cross or touch such thresholds. Cultural information of this kind is intriguing and should have been more thoroughly collected not only for Palau but also for other island groups. Taboos associated with architecture are still observed and well respected in the outer islands of Yap. In Ulithi, for example, the cardinal direction of the long axis of Women's Houses is offset by about ninety degrees from that of other houses in order to signal the distinct sociocultural presence of women in menstruation (personal observation, 1983). In this respect, especially, this reviewer feels rather strongly that Morgan could have included more of the outer islands of Micronesia in the present volume. Often on outer islands one can gain greater insights and more detailed cultural information concerning traditional customs and beliefs. Although there may be less grandiose architectural structures on low coral atolls, the outer islands represent vital parts of Micronesia that should never be overlooked.

Concerning the prehistoric architecture of the Mariana Islands, Morgan could have perhaps gained deeper appreciation of the function of *latte* from some of the pioneering archaeologists. Dr. Laura Thompson and Dr. Alexander Spoehr, who reside in Hawaii, should have been consulted as their knowledge of *latte* is truly impressive. Another extremely important pioneering archaeologist for the Marianas as well as Palau is Dr. Douglas Osborne of southern California. Morgan's benign omission to interview these noted experts in the field of Micronesian archaeology has weakened the section on the prehistoric architecture of the Mariana Islands. At the same time, it is highly regrettable that Morgan does not seem to be aware of some of the most recent and exciting archaeological endeavors on Guam, where information on set-

tlement patterns has been greatly enhanced by systematic surveys and carefully designed and executed areal excavations.

The last point this reviewer wishes to raise is an issue that can easily be compelling for a large number of people, including the indigenous people of Micronesia. In reference to Nan Madol, Morgan expresses a concern that "the magnificent monuments also are in urgent need of restoration and preservation if they are to continue to exist as the record of a distinguished past and thus an inspiration for future generations" (p. 62). Not only for Nan Madol but also for other Micronesian architectural remains, it is the sincere hope of this reviewer that Morgan's concern with regard to restoration and preservation will be seriously considered by appropriate agencies in the newly emerging Micronesian political entities.

On the whole, owing to Morgan's expertise in the field of architecture, the volume provides professionally convincing and well thought-out discussions, particularly on construction methods and materials for architectural structures in Micronesia. It is a beautiful book that is bound to become an important reference resource in Micronesian studies. Morgan's work is important at another level in that through his presentations of various architectural wonders found in Micronesia, he has introduced Micronesian architecture into the literature of world architectural history.

## REFERENCES

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