

Concluding Remarks on Koné Region Prehistory

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In their 1956 monograph, Gifford and Shutler wrote that "much has been written, some of it speculative, about the overseas relationships of New Caledonian culture" (1956:93). They were referring primarily to the writings of various ethnographers (including J. Avias, J. Guiart, M. Leenhardt, and F. Sarasin) who had attempted to assess the cultural relationships between New Caledonia and other Oceanic groups on the basis of similarities or differences in material culture, kinship terminology, social organization, and the like. Avias (1949b) for example, in keeping with earlier twentieth-century concepts of racial classification, believed the New Caledonians to be a combination of the following peoples: "Ainoïdes, Mélanésiens, Australo-Tasmanoïdes, Polynésiens." Gifford and Shutler, working closely with the "aborigines" in 1952 were also "impressed with their obvious biological diversity," but were more circumspect in drawing external connections. Having obtained the first rigorously-excavated and directly-dated archaeological materials with which to reconstruct New Caledonian prehistory, they cautioned that "the discreteness of physical [biological] and cultural [artifact] traits should . . . not be forgotten" (1956:95). Perhaps their most significant discovery was the absence of any "pre-pottery cultural level," which to them ruled out the possibility of a "Palaeolithic stage of culture" on the island (1956:94).¹ Moreover, they recognized the strong similarities between the decorated pottery from sites 13 and 13A (Lapita) and that recovered many years earlier by Father Meyer on Watom (Bismarck Archipelago) and by W. C. McKern in Tonga (see Kirch 1996). This early ceramic horizon, soon to become known as "Lapita" after the site 13 toponym, was recognized by Gifford and Shutler as the material manifestation of a voyaging people. They further reasoned that the origins of these early sea-going potters would lie in the southeast Asian region, partly on the basis of ceramic manufacture technology (especially the use of the paddle-and-anvil) and partly on stylistic comparisons (e.g., with van Stein Callenfels' collections from the Karama River area on Sulawesi, Indonesia).

Gifford and Shutler's highly tentative conclusions on the origin of New Caledonian cultures have stood the test of time well. In the latest synthesis of New Caledonian prehistory, Sand (1995) notes the absence of any evidence for a pre-Lapita occupation of the island. Thus the New Caledonian cultural sequence has now been brought into line with island sequences for adjacent parts of Remote Oceania, such as the eastern Solomon Islands, Vanuatu, Fiji, and Western Polynesia (Tonga and Samoa). All of these regions were colonized by groups belonging to the Lapita Cultural Complex, the time frame for such colonization being the very end of the second millennium B.C. and the first one or two centuries of the first millennium B.C. (Kirch 1996). As Sand also points out, however, almost from the initial Lapita settlement of La Grande

¹ Despite this clear statement on Gifford and Shutler's part, the idea of a pre-ceramic, "Paleolithic" stage did not quickly die. Indeed, it was resurrected with Golson's excavation of the enigmatic tumuli on Île de Pins (see Introduction, this volume). Only with Green's (1988) demonstration that the tumuli are the incubation mounds of an extinct species of giant megapode bird, has this old idea finally been put to rest.

Terre, the ceramic sequence "is not monolithic, but varies from one region to another" (1996a:51). Indeed, the development of *regional diversity* within New Caledonia is one of the most fascinating aspects of the island's prehistory. It is in this arena that archaeology has much work yet to accomplish, even though substantial advances have been made since Gifford and Shutler's pioneering excavations (see Introduction, this volume).

The papers in this volume have attempted to reassess the *variability* inherent within Gifford and Shutler's collections from three sites, all situated within close proximity in the Koné region. Our emphasis has been on variation in ceramics, lithics, and other materials within these sites in order to tease out what may be important chronological, areal, or function differences. It is only by focusing on such a local scale of variation that the broader problem of understanding and explaining the development of regional differentiation in New Caledonia will ultimately be resolved. We make no pretext of such grand syntheses here; our aim has been far more modest, namely to demonstrate that the well-curated museum collections obtained by Gifford and Shutler almost a half-century ago are still useful in addressing significant problems in New Caledonian and Oceanic archaeology and prehistory. Each contributor this volume has already offered certain conclusions deriving from his or her own analyses. My goal in these brief concluding remarks is merely to draw attention to a few ways in which these analyses may contribute to the larger intellectual project of writing a history of New Caledonian cultural diversity.

Stratigraphy and Paleoenvironments

The single greatest impediment that stands in the way of utilizing the Gifford-Shutler collections in renewed analyses stems from their method of excavation according to arbitrary 6-inch levels. As Leonard shows in his geoarchaeological studies of sites 13 and 26, however, it is still possible to reconstruct much of the natural stratigraphy in these sites, by applying modern laboratory methods to the sediment samples collected by Gifford and Shutler in the field. In site 26, no obvious major breaks in the depositional sequence are evident, and it is likely that a simple age-depth interpretation of the site's stratigraphy will not be too far off the mark. For site 14, however, the stratigraphic picture emerging from Leonard's work is more complicated. Clearly, this site has had a more complex depositional history involving a littoral mode of deposition in its early phase and a shift to a terrigenous mode in later time periods. The change between these phases is physically marked by a discrete concretion layer. Notably, these stratigraphic changes correspond well with the "cultural stratigraphy" revealed in the ceramic analyses carried out by Manning and Reiten. Thus only the earlier phase (below the concreted deposit) contains significant quantities of the characteristic Podtanéan paddle-impressed pottery, whereas the upper deposits are marked by the advent of incised ceramics much like those present at Oundjo, site 26. Site 14 seems to have spanned a long time period, quite possibly with a lengthy interval when it may have been abandoned. In any event, it is encouraging that the independent geoarchaeological and ceramic analyses of Leonard, Manning, and Reiten all converge on a consistent reinterpretation of this key site's chronology. Since "residue" (sediment) samples were curated by Gifford and Shutler from all of their excavations, similar reanalyses will be possible for their other sites in the future.

Miller's study of the molluskan remains from site 13 has demonstrated that it is possible to extract much useful data relating to paleoenvironmental change and past subsistence practices

from the Gifford-Shutler collections. Miller was able to test a model (derived from work on Lapita sites elsewhere in the southwest Pacific) of possible mollusk size reduction due to human predation. While this hypothesis was only weakly confirmed, a more significant pattern emerged from her data: a shift in molluskan habitats is strongly indicated, from a dominance of sand-dwelling mollusks in the deeper levels, to a dominance in mud- or mangrove-dwelling species in the upper levels. Miller argues that such changes may in fact be a proxy measure of changing sediment budgets in the Koné region, as the streams draining the interior valleys began to bring increased quantities of terrigenous sediment down to the coast, altering calcareous sand environments to muddy shore environments. Such sediment budget changes in turn may reflect the expansion of humans into the interior reaches of the island, where they would have been practicing various forms of agriculture and land use that exposed interior slopes to erosion. Indeed, Miller's findings--while they need to be tested with additional data--are consistent with evidence from other parts of La Grande Terre for increased human impacts on local environment during the first millennium B.C. (Sand 1996, 1995a). Another local indication of paleoenvironmental change appears to be the shift from a possibly-extinct, large species of *Placostylus* landsnail to other, extant species in the later site 26.

Although Gifford made great use of his natural science colleagues at Berkeley and elsewhere to identify the various faunal and floral materials recovered from his excavations, there is also room here for renewed analyses. Steadman's contribution demonstrates that with access to enlarged reference collections, it is possible to expand the list of bird species represented in the Gifford-Shutler materials, and to correct certain earlier mis-identifications. Given the exciting advances made in recent years with regard to prehistoric avian extinctions in Oceania (Steadman 1989, 1995), filling in the record for New Caledonia may prove quite rewarding.

The Ceramic Assemblages

Most of the contributors to this volume focused their attention on the abundant ceramics obtained from the Lapita, Podtanéan, and Oundjo sites. They have been able to greatly expand our understanding of the range of methods used in the manufacture of ceramics, and how these methods changed over time; they have also revealed that much stylistic variation in these assemblages was masked by Gifford and Shutler's over-broad categories. The main contribution of their work is thus to provide a detailed portrait of ceramic chronology and development in the Koné region, information that will be essential for comparison with ceramic sequences in other parts of the island, and in turn for building up an understanding of regional variation within La Grande Terre.

Ultan re-examined the site 13/13A decorated ceramics, the "type" material for the Lapita ceramic series. Although hampered by the rather small size of his sample, as well as the small mean size of the sherds themselves, he was able to show that the dentate-stamped ceramics from site 13/13A fall well within the range of stylistic variation now demonstrated for other Lapita assemblages in Remote Oceania, such as those from the Reef/Santa Cruz Islands and from Fiji. His catalog of the decorative motifs present in this assemblage, based on the Mead system, provides important data for further inter-site comparisons.

Manning and Reiten undertook to reanalyze the ceramics from site 14, Podtanéan, from both stylistic and technological perspectives. As noted above, they independently demonstrated

a major change from lower to upper deposits within the site, which correlate with sedimentary changes documented by Leonard's geoarchaeological study. It is only in the lower, deeper levels that paddle-impressed ceramics (Podtanéan in the sense of Green and Mitchell [1983] and subsequent authors) occur. Upper levels are marked by the presence of incised and other forms of decoration, which mark the end of the Koné Period (as defined by Sand 1995) and the emergence of the Oundjo ceramic tradition. What is particularly important, is that the style changes documented by Manning are matched by important technological changes emerging from Reiten's study of the plain (undecorated) sherds. The earlier, Podtanéan ceramics are characterized by thinner, redder fabrics indicative of oxidized firing methods, while the later, Oundjo ceramics have thicker vessels with inoxidized cores, and much fire clouding. Moreover, the presence of carbonaceous residue on sherds from the upper deposits is suggestive of functional changes in vessel use as well. In sum, the transition from Podtanéan to Oundjo ceramic traditions involved more than changes in the method of surface treatment and decoration. It will be informative to compare such changes with detailed ceramic sequences from other parts of the island.

The ceramics from site 26, the "type" site for the Oundjo ceramic tradition, were the subject of analyses by Plowman and Casella, again from stylistic and technological perspectives. Plowman contextualizes his study in terms of the problem of New Caledonian "heterogeneity," and his analysis brings out the considerable range in decorative techniques that characterize the Oundjo ceramic complex. This range had been somewhat masked in Gifford and Shutler's study due to their overly-broad classificatory categories. An important issue arising from Plowman's study (but which will take additional work to resolve) is the question of whether the diversity of decorative techniques and specific motifs represented in the site 26 assemblage reflects external contacts both with other parts of La Grande Terre, and/or with neighboring archipelagoes, especially Vanuatu. In this regard, Casella notes changes in ceramic temper which might also correlate with changing social configurations, such as long-distance exchange relationships. Her analysis also demonstrates that even within the Oundjo tradition there were important technological changes.

Non-Ceramic Artifacts

Ceramics dominated Gifford and Shutler's perspective on New Caledonian prehistory, and they have continued to be the central concern of most archaeologists who have worked on the island (e.g., Frimigacci 1975; Galipaud 1988; Sand 1995, 1996a). This is as it must be, for of all the kinds of material culture present in New Caledonian sites, ceramics present the greatest range of variability and hence the great potential for tracing chronological change and regional interaction. Nonetheless, there is a need to expand the purview of New Caledonian prehistory beyond a "cerami-centric" perspective. Sand (1996) has begun to do this with his study of settlement landscapes, including inland habitation complexes and intensive agricultural systems. It remains the case, however, that several aspects of New Caledonian archaeology are seriously neglected. One of these is the lithic or stone flake industry and its role in the lifeways of ancient New Caledonian peoples.

Marais and Price offer a first step toward rectifying this problem with their analyses of the lithic assemblages from sites 13/13A and 26. Rejecting Gifford and Shutler's out-moded "typological" categorization of stone tools, they each performed an attribute analysis of the

chipped stone collections from these sites. In both sites, lithics are fairly abundant, and evidence of edge-damage suggests that there was much use of flakes with usable edges as "expedient" tools (rather than the production of formal tool types). Hopefully, their studies will encourage other archaeologists working in New Caledonia to pay more attention to this neglected class of artifacts, so that patterns of regional variation can be studied on the basis of more than ceramics alone.

In this vein, Rapp's study of the numerous shell net sinkers from the Koné region sites is also noteworthy. One might have anticipated that such a mundane artifact category would exhibit little variation among site assemblages, yet this proved not to be the case. Rapp's study raises more questions than he can answer, such as whether changes in the net sinkers reflected changes in fishing strategies. Again, however, we hope that his work will stimulate others to pay more attention to variation in non-ceramic artifacts.

In closing this volume, I simply wish to pay tribute once again to Edward W. Gifford, one of our founding academic "ancestors" in the field of anthropology at the University of California at Berkeley. Not only did Gifford revitalize Pacific archaeology, opening the field to the many who would follow, but his foresight in so thoughtfully and carefully preserving and curating his collections continues to provide young investigators with new opportunities for research and understanding.