

THE SOUTHEAST SOLOMON ISLANDS CULTURAL HISTORY PROGRAMME

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In 1967, Roger Green and I, as recent appointees to the Anthropology Department, Bishop Museum, began discussions on a Pacific region in whose prehistory we had mutual interests. At that time the earlier discoveries of Lapita ceramics in New Caledonia, New Britain, the New Hebrides (Vanuatu), Fiji and Tonga (as well as the plainware of Samoa and the Marquesas Islands) had rekindled questions of Polynesian forebears and Oceanic relationships, to which the Solomon Islands could then contribute almost nothing archaeologically. Also, except for fragmentary statements in the chronicles of Spanish discovery and the useful asides of anthropologists working in the Solomons, little was known of the ethnobotany and the agricultural systems, although several plant cultigens seemed to be unique to the region. By 1969, Garanger (1971), at the conference on Oceanic Culture History in Fiji, was to add to the archaeological pottery record with his definition of the Mangaasi ware from the central New Hebrides, and the discussions on the relationships of the two ancient ceramic traditions in the western Pacific (Mangaasi and Lapita) were to be a highlight of that meeting. This was a spur to the already firm conviction of Green and I that the vast area of the Solomons should be one major research focus for Pacific prehistory. It was soon after this that the National Science Foundation gave its support (Grant GS-2977) to our Southeast Solomon Islands Culture History project.

Our proposal delimited the research area to correspond with the Eastern District of the then British Solomon Islands Protectorate (Figure 1). The choice, apart from other pragmatic reasons, was governed not only by geographic position in relation to current archaeological work in the western Pacific, but also by cultural diversity as signified by the contemporaneous languages of the islands - Melanesian, Polynesian and a debated easterly extension of Non-Austronesian (or Papuan). Environmentally, the land masses of the archipelago - the high volcanic islands, large and small, e.g. San Cristobal and Anuta; raised reefs like the Reef Islands; coral atolls such as Nupani and Nukapu - together represented the potential diversity of subsistence systems and their developmental limits for human settlement. The thematic objectives of the project were posed as the following questions in the proposal:

1. What is the nature of the earlier cultural assemblages from Island Melanesia which may be ancestral to those already known for West Polynesia?
2. Are there early cultural complexes in Island Melanesia that reflect a people lacking horticulture, or with different horticultural systems or patterns of agricultural intensification from those found today in both Island Melanesia and West Polynesia?

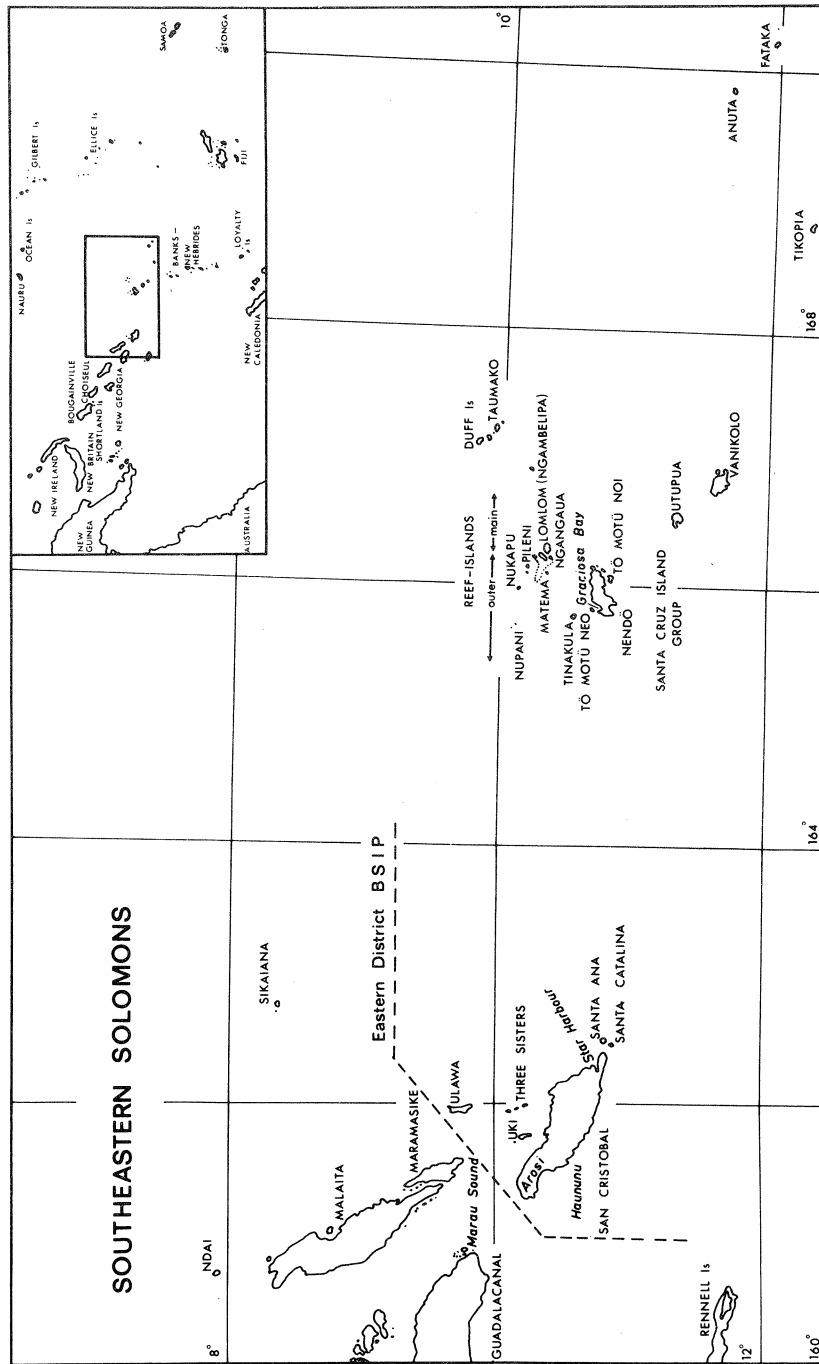


Figure 1. Map of the area covered by the Southeastern Solomon Islands Cultural History Programme, 1970-72 and 1977-79. (from Green and Cresswell, 1976, Fig. 1: reproduced by permission of the Royal Society of New Zealand).

3. As many of the earlier cultural historians of Melanesia have maintained, are the non-Austronesian-speaking peoples in Island Melanesia survivors of populations who occupied a much greater area before the arrival of Austronesian speakers? Or are they, as others have said, later migrants from New Guinea and the Bismarck archipelago with different languages, genetic make-up, and cultural content who established themselves only in marginal areas of Island Melanesia, but not Polynesia, at a much later point in prehistory.
4. Are the Polynesian-speaking peoples on the outlying islands of Melanesia remnants of populations left behind on these small islands as the Polynesians moved out into the Pacific, or are they, as the majority of scholars now hold, the result of drift settlements from the western area of Polynesia and able only to have established themselves as distinctive linguistic and cultural entities after the settlement of Polynesia and development of its culture?
5. Does the agricultural complex of West Polynesia really derive from western Melanesia as most theories maintain, despite a diversity of opinion on Polynesian origins? If so, when does this agricultural system appear in Island Melanesia, and what was its nature before its transfer to West Polynesia?

Our field strategy was interdisciplinary in its expression, which, on an archaeological base, included ecological studies through pollen analysis and ethnobotany, linguistics, material culture analyses, and ethnohistory. Cognizance of issues of culture contact encompassed the possibility of temporal control by archaeological identification of the Spanish "beginnings" of history in the region.

THE FIRST FIELD PHASE: 1970-1972

Some 60 publications emanated from the first field phase, the range of which is represented in the summary volume, edited by Green and Cresswell (1976), of contributions by twelve of the participants. These will not be reviewed here; rather will we attempt some generalizations that were to form the basis for the continuation of the project into its second field phase.

The ceramic traditions in the South East Solomon and Santa Cruz Islands

The archaeological finds of Lapita sherds in a number of sites on the Reef Islands and one on Nendö¹¹ at time levels of some 3,000 years B.P. fill in a distributional gap of this Oceanic pottery style. Importantly, analyses of decorative motifs and vessel shapes indicate greater affinity with the western Lapita forms of New Britain than with those of Fiji and West Polynesia. A nearly contemporaneous plainware from the Polynesian island of Anuta (and, undated, on Taumako) has been attributed, with some reservation, to the Lapita tradition, as a form simpler not only in decoration, but also in vessel shape. It will be recalled that such a stylistic "devolution"

has also been recorded for the Eastern Lapita ware. Plainware finds in the Solomons, published concurrently during our project, from Santa Ana (Davenport 1972a) and Bellona, a Polynesian outlier to the west of Rennell (Poulsen 1972), of some 3,000 and 2,000 years of age respectively have also been related to Lapita. In both cases the questions of their cultural linkages remain unsolved, but the low numbers of sherds within single sites on each island and temper analyses suggest exotic origins, whereas from the Santa Cruz region local manufacture is largely indicated.

A further pottery "tradition" does not complicate the picture; the finding of Spanish ceramics on Nendö and at Pamua in San Cristobal is the archaeological marker for the end of prehistory - and contributes to history in documenting the possible fate of the third ship of Mendaña's 1595 expedition that missed the landfall in Graciosa Bay.

Lapita - subsistence and economy

The subsistence base of the Lapita culture has been the source of considerable discussion, and the faunal accompaniments of ceramics in the Santa Cruz-Reefs sites indicate that pig husbandry and therefore agriculture was at least a part of the economy. On Anuta, the pig is absent from the archaeological record throughout, but this may be a function of the small size of the island, for surely the competitive nature of the pig:man relationship would be critical on an isolated landmass of only 0.4 km². The remarkable range and number of fish hooks in the Anutan sequence bespeaks of the emphasis on fishing from the earliest settlement of the island, perhaps as compensation for the animal husbandry component of agriculture that could not be adapted.

The sourcing of the lithics that are part of the Lapita array - volcanic glass from Talasea (New Britain), the Lou Islands (Admiralties) and the Banks Islands; chert from Ulawa - demonstrates that some of the industrial components in the economies of the early settlers of the Santa Cruz group depended on the maintenance of traditions of long distance voyaging. Thus, if it is accepted that the culture represented by Lapita had a seminal role in the settlement of the eastern Pacific, then throughout the cultural transformations that were to ensue the retention and indeed further development of sailing technology is patent without the benefit of direct archaeological evidence.

The project area - relationships and divergences

Archaeologically, the region centred on San Cristobal appears to have had a rather different course of prehistory from the eastern islands of Santa Cruz. Relationships seem to have been most closely expressed at the beginning and at the end of prehistory. Although many artifacts excavated from both regions show "Melanesoid"

characteristics in common, especially towards the latter ends of the time spectrum, divergencies are expressed in terms of economies, settlement patterns and the expressions of agricultural intensity. The cultural affinities of the San Cristobal region appear to lie more with the larger islands further to the west such as Malaita and eastern Guadalcanal.

The linguistic surveys of the project added considerably to available data, and a revised subgrouping of the Austronesian languages by Green yielded a model for prehistory which confirmed the archaeological impression of the east-west separation in the extant languages. The Polynesian languages of the eastern region are grouped as Samoic-Outlier, while those of Vanikoro and Utupua have considerable interest (but so far no archaeological attestation) in being separate from the Eastern Oceanic subgroup to which most of the other languages belong. The presence of Non-Austronesian languages in the Reefs and on Nendö has been the subject of some dispute in terms of identity, extent, and historical precedence to Austronesian speakers in the region. However, if, as seems to be commonly accepted, the Lapita culture was an Austronesian-speaking one, whose language stemmed from one of the descendant Proto-Oceanic subgroups, then there is a possibility that the archaeological record of Lapita peoples in the Santa Cruz region overlies that of still earlier Oceanic Austronesian-speakers. Are the Utupua-Vanikoro languages relicts of such a substrate?

Environment and agriculture

Pollen analysis of archaeological sites proved to be of little interpretative value, but on the bases of vegetation surveys and the coring of selected sites on San Cristobal, Santa Ana and Santa Cruz, indications of significant forest clearing were obtained from time levels varying from 3,400 to 1,300 years ago. Physiographic change in the region of importance to the development of human settlement was first recorded in the recent conversion of lagoon to lake on the island of Tömotu Noi, close to the Lapita site of Nanggu on Nendö, but reflecting ecological events well after that period of occupation. Also, more recent surveys have revealed Lapita sites on the margins of the Tömotu Noi lake, probably when it was still a lagoon.

The agricultural systems of the Solomons have the variability expected from their diverse geological histories, but it is on the high volcanic islands that differences in field cultivation components are inexplicable purely on ecological grounds. In the western islands of New Georgia, extensive fossil terracing for irrigation of taro was found. Reported also by Mendaña in 1568 on Guadalcanal, this technology was not discovered within the Eastern District project area; nor indeed, were drainage forms of water control found in the extensive swampy areas of San Cristobal or Santa Cruz. All systems have the elements of arboriculture common to Oceanic agriculture, but the Santa Cruz region is distinctive in the number of tree species, some of which must be regarded as endemic

domesticates. The intra-regional distribution of these domesticates transcends ecological and cultural differences, with the exception of the small atolls, but even here, tree products from the higher islands are known in traditional and modern exchange - and are lexically distinguished. It is interpreted that in this region, agricultural intensification has been directed in the past towards genetic aspects of the local flora rather than to environmental adaptation of adventive crops.

THE SECOND FIELD PHASE: 1977-1979

The main thrust of the second phase of the project, again supported by the National Science Foundation (Grant no. BNS76-17672), was towards the filling in of the cultural sequences of individual islands or island groups. Included were some on which there had been insufficient archaeology, e.g. the Duff Islands, and also Tikopia, which had been the subject of only the briefest of surveys in 1971. Also, concentration was on the eastern Santa Cruz region of the original project area. In the new field work, a considerable enlargement of the site inventory was registered with the Solomon Islands Museum, Honiara for all islands. However, in this account we will describe individual studies, now in various stages of analysis, according to specific island location.

Santa Ana

Pamela Swadling (National Museum of Papua New Guinea) continued her excavations on coastal occupation sites. Generally, the cultural debris recovered was recognizably ancestral to the material culture array recorded in early collections and the ethnography of the region. The basal feature of the main excavation was a religious structure, which, with its portable artifact content, was evocative of the poorly preserved "canoe house" structures still standing in one of the island's villages. The pre-European stratum above, with its artifacts and raw materials (chert) showing immediate relationship with San Cristobal and Ulawa, also contained items suggesting contact with Santa Cruz, e.g. a bone arrowhead typical of that region, and uncharacteristic of San Cristobal weaponry. The 3,000 year old ceramic horizon was not reached in any of the excavations, leading to the suggestion that this horizon as known from rock-shelters represents a discrete, earliest phase of a temporary or refuge nature followed by a hiatus before colonization by the forebears of the present population.

The evidence for sustained contact with neighboring islands indicates a time-depth for relationships that are ethnographically associated with trading for food. The inferences for local food production are therefore that land resources may have been fully utilized on the island, to the extent that any intensification of agriculture was inadequate to cope with demand. In the agricultural survey by D.E. Yen (Bishop Museum), a possible archaeological imprint of such intensification was the walling in the past of almost all

cultivable land (with legendary accounts of construction) assigned to clan ownership. One such tract, the most densely walled on the island and situated on the central plateau of uplifted calcareous soil but at the interface with eroding volcanic soil from the surmounting hill, was mapped and excavated. Here there were four stages of wall building, the third of which was dated as less than 200 years of age. The indications are that such intensification was carried out until recently on some of the best of the agricultural soils available on the island.

The Reef Islands

R.C. Green (University of Auckland) returned to the productive Lapita site SE-RF-2 to double the excavation area exposed in 1971 to 153 m², representing 15% of the total site surface. The long-term character of the settlement, dated from 1100 B.C., was supported by definitions of a range of structural features including activity areas, aligned postholes, fireplaces, ovens, various pits and a possible water well. Quantitative evidence in the form of faunal remains will detail further the local economy of the Lapita culture, while the extremely rich range of exotic lithic materials recovered - oven stones, obsidian, chert and muscovite garnet schists - will document the overseas contacts of these people over distances ranging from 26 to several thousand kilometres.

Green excavated two mound sites on the Main Reefs, differing physically from the pottery sites yielding the highly decorated Lapita ware. One, provisionally dated to the last half of the first millennium B.C., was more inland but shared the character of a mantling of volcanic ash (probable source: Tinakula) with the Lapita sites. It yielded pottery largely undecorated, with the exceptions decorated only on the rims. Although the midden suggests a similar but not as rich range of faunal remains to the earlier Lapita sites, lithic materials were less varied, with adzes in shell rather than imported stone, and obsidian of a poorer quality similar to that from the Banks Islands.

The second mound site was situated in a village abandoned in the early 20th century. The deposit proved to extend from European times back into prehistory, was aceramic, and with portable artifacts assignable to the earlier ethnographically documented material culture of the Reef Islands. A shift in economy is indicated from the Lapita and plainware pottery periods, for here the accent was on shellfish species typical of either mangrove or sandy mud-flat environments. The latter may reflect an environmental change, attested by traditional accounts of lagoon silting and expansion of mangrove swamps. A feature of this site is that the volcanic ash which mantles the pottery sites was here found marking its sterile base.

Undoubtedly the final analyses of these data will produce a definitive sequence for the Reef Islands. The nature of the transformations will emerge through comparisons with equivalent data

from the other nearby islands investigated in this project, and from the more distant sites of early pottery bearing peoples in the western Pacific.

An anthropometric study by Stephen Black (University of Auckland) of physical variability within populations of speakers of Melanesian and Polynesian languages was centred in the Reef Islands because of the proximity of, and historical intercourse between, these groups in this area (Davenport 1964; 1969; 1972b). The survey indicated that there must have been cultural barriers to gene flow operating in the region, despite the ethnographic evidence for a traditional trade network in the Santa Cruz region, in which ceremonial goods, food and women were among the exchanges.

Santa Cruz

P.C. McCoy (Bishop Museum) and P.L. Cleghorn (University of Hawaii), with the initial assistance of R.C. Green, conducted further site surveys on the main island of Nendö and the off-shore island to the north, Tömotu Neo. The Lapita settlement of Santa Cruz, represented from the first phase of this project by one site on the south-east coast of Nendö, has now been demonstrated to have been widespread on the island. Excavations were conducted on seven coastal sites on the western side of Nendö. Pottery assemblages were found in five sites, and the two without pottery, on artifactual evidence, were clearly the latest in the cultural sequence. Two of the ceramic sites yielded pottery with minimal decoration, while a further two were characterized by vessel types and decoration resembling the Lapita collections from the early Reefs and Nanggu sites. The other important site contained the two styles of pottery, the Lapita and the plainware, in stratigraphic order with the incised and dentate stamped ware at base, deposited on a fossil beach, and the plainware in two layers above, possibly separated in time by a thin sand deposit. These two layers were characterized by ceramics with limited decoration, notably associated with simple and compound fish hooks of shell (supplanting the stone of the earlier phase), shell adzes and chert flakes; traces of round houses and circular stone-lined ovens are also associated with this ware, forms of which have persisted into recent times. Such structural features were parts of the settlement pattern found in the survey and excavation of a village that still existed in 1924, and whose artifactual content indicated a shallow time depth with a mixed assemblage of historic and indigenous materials. A more distinct stratification of such items was uncovered in an excavation of a site in Graciosa Bay: a traditional dance circle in a modern village revealed, under the surface European layer, two strata of habitation, characterized by the remains of one dominant activity, the working of shell, predominantly Trochus armrings. Bone arrowheads were among the other excavated remains in an array characteristic of ethnographic collections of Santa Cruz material culture.

The apparent parallels in the Santa Cruz and Reefs sequences may be expectable, for the reason of proximity alone, but the nature of the transformations within the ceramic phases and between ceramic and aceramic in terms of commonality and divergence between the two island groups will undoubtedly have to take into account differential external factors.

Vanikoro and Utupua

These islands, partly because of their irregular accessibility, became the operational base for a number of sub-projects. P.C. Lincoln (University of Hawaii), while exploring further the nature of the Reefs and Santa Cruz Island languages (his results questioning a Non-Austronesian content for any of them) collected data on the six languages, some of which are in grave danger of extinction. These are to be compared with subgroupings outside the immediate project area as well as within it, to elaborate further a linguistic model that, if it does not guide archaeological work, will at least assist immeasurably in its interpretation. R.C. Rose (Bishop Museum) collected material culture items to supplement the record of Koch (1971) for the Santa Cruz region. The comparisons with Museum collections from islands both inside the project area, and from islands with which prehistoric contacts are already implied from archaeological and linguistic data, are liable to elucidate, at least, the manifestation of more recent relationships in material terms.

P.V. Kirch (Bishop Museum) conducted survey and excavation on Vanikoro (see Kirch's report in this volume). No sites of relatively great time depth were found, but his discovery of Mangaasi decorated pottery in one site dated to after A.D. 200, together with his finds on Tikopia (see later), introduced a fourth ceramic tradition into the prehistory of the project area. With the similar but earlier-dated Mangaasi ware reported by Ward (1979), a participant in our project in 1971, from the Banks Islands, the prehistoric penetration northwards of peoples bearing the pottery tradition of central Vanuatu is confirmed.

There was some research emphasis on the environment of Vanikoro. Preliminary surveys gave some credence to the Darwinian observation of atoll formation by the sinking of volcanic cores. In some areas the incidence of kauri (Agathis) trees, for which foresters gave conservative estimates as 600 years old, at sea-level behind mangrove stands and low dunes may be evidence of comparatively recent subduction of volcano formations originating in the Pleistocene (Hughes 1978). Sedimentary studies connected with vegetation survey and pollen analysis by Jocelyn Powell (Royal Botanic Gardens, Sydney) demonstrated recent coastal swamp formation with the deposition of reefal sand dunes and the erosion of slope soils, while in a series of expansive plateau tracts, swamp formation seemed to have been accompanied by forest clearing. Excavation of one coastal swamp site by Yen uncovered the first example of direct water control in

agriculture in the project area; drainage for taro planting. The excavation produced a system, which, on the dating of the immediate provenience of two digging sticks at the base of one drain, was only a few hundred years old. The use of the upland swamps for agriculture was also indicated by excavation, and appeared to postdate the surrounding forest clearance. The agricultural survey of Utupua produced such drainage systems in action on post-mangrove swamps - and the informal, rather crude technology indicated by the Vanikoro excavations appeared to be confirmed by the live systems of the neighboring island. Overall, the emphasis in the Vanikoro-Utupua systems of the past seemed to be a reflection of the present - slash and burn swiddening, tree cropping and a cursory attention to more intensive field systems of edaphic control.

The further study of the intensification of arboriculture in the Santa Cruz region noted during the first phase of this project (Yen 1974) centred on Vanikoro and Utupua, with the species Canarium harveyi chosen as the representative subject because of possibility of preservation of its nut shells in archaeological contexts. Collections, however, extended to wild species, and to the allied nut species arguably cultivated (C. indicum and C. salomonense) and were made in Santa Cruz, the Reefs, the Duffs, Tikopia, San Cristobal and Espiritu Santo, with samples obtained from the Banks. While the distribution of the large-fruited form C. harveyi var. nova-hebriidense as limited to the eastern region of our project area and the Banks Islands (Leenhouts 1955) was confirmed, its identification as a 'wild' species could not be authenticated, for every tree found in these islands was cultivated. A study of variability of the species and its allies is expected to exemplify the process of human selection by which such Pacific cultigens have originated; samples from archaeological excavations in Santa Cruz, the Banks Islands and Tikopia, as well as comparative material from New Britain are also to be considered.

Duff Islands

B.F. Leach (University of Otago) and Janet Davidson (Auckland Institute of Museum) recorded 58 sites on these islands, including open habitations, burial grounds and cave shelters. The excavation of one shelter and adjoining habitation site produced small amounts of plainware pottery, obsidian, chert and chalcedony flakes, shell adzes, ornaments and fish hooks. Carbon dating documented a continuous occupation for about 2-3,000 years, beginning early in the first millenium B.C. Another major excavation was a mound in which 202 burials were recorded. Dating between A.D. 1000 and 1600, the population, with anthropometric indications of mixed Polynesian and non-Polynesian descent, was associated with a rich array of grave goods, including many evocative of the Santa Cruz and New Hebrides traditions. Laboratory analyses include the pathology of the human bones, since preliminary examination suggests the widespread incidence of yaws in the population.

Tikopia

Archaeological and environmental investigations were conducted by P.V. Kirch and D.E. Yen in 1977, and continued by Kirch in 1978. The combined initial transects, test-pitting the island's flat lands, with their primary objectives of site location, show that early occupation sites, often pottery-bearing, were consistently located behind present-day foreshore villages. Physiographic features of exposed reef lines and inland erosion patterns, together with an agricultural excavation of the most intensively cultivated tract at the erosional interface of the volcanic interior and calcareous coastal tracts, all suggest land accretion through time. Such processes include the formation of talus land for agricultural use, and the conversions of lagoon to lake and inlet to swamp at surprisingly recent dates.

From the sustained excavation of several major archaeological sites, Kirch has defined three distinct prehistoric cultural periods for the island. The first is a ceramic horizon extending back to c. 900 B.C. With its minimal decoration, this pottery falls into the Lapitoid Ceramic Series with a common, though generally later distribution, from New Britain to western Polynesia. Certainly, the possibility of such relationships will be the subject of considerable discussion, taking into account not only the disparity of datings, but also the stylistic differentiations of Western and Eastern Lapita and the question of the identity of the succeeding plainware traditions as local transformations or as adventive traditions in either or both regions. Indeed, the key may be in the associated artifactual arrays, in which preliminary study has shown a possibility that the early pottery-bearing horizons of similar date on Tikopia and Anuta are differentiated by the presence and absence, respectively, of lithic materials from distant sources.

The second horizon, beginning c. 100 B.C., is again ceramic, and identifiable with the Mangaasi tradition of the central New Hebrides. This is followed by an aceramic phase, beginning at c. A.D. 1200 and lasting until A.D. 1800, when it continues on into the historic period. This phase is recognisably Polynesian in its artifactual characters. Again, the subject of further testing is the proposition that the "Polynesian outlier" identity of Tikopia dates back to only seven or eight hundred years ago.

From archaeological and agricultural excavations, there is evidence of changes in the subsistence system that incorporate the local extinction of megapodes, the gradual disuse of fire in agricultural technology, and the rise of arboriculture that appears to have a greater emphasis on environmental conservation than intensive production. The elimination of pig husbandry is documented archaeologically, as is the fluctuation of elements of marine fauna in the diet. Possible cultural explanations for these phenomena, especially when environmental reasons do not suffice, are to be explored

asynchronously in the light of ethnographically attested tapu restrictions on food on Tikopia, and on islands of possible past cultural connection with Tikopia. The ethnographic recording of the planting of the Calophyllum tree for the purpose of dune stabilization is an example of local domestication that goes beyond food production. Although bark of this tree was recovered in archaeological contexts, there is no way of knowing when the species assumed its conservational importance as a domesticate. However, finds of Canarium nut shells, beginning approximately at the time of emergence of the Mangaasi-type pottery, indicate early contacts with Vanikoro (the species being absent in the New Hebrides).

A CONCLUSION

No cultural horizons predating the Lapita assemblages of Santa Cruz and the Reef Islands have been found within the project area, although it is as yet too early to be committed to the view that the near-contemporaneous plainware tradition, with its wider distribution, bears a direct relationship to Lapita. However, the progress of this and other Pacific research programmes has produced a much clearer picture, not only of the distribution of Lapita in its Western and Eastern manifestations, and "Lapitoid" ware, but of the life style of these early Oceanic settlers through the associations of lithics, dietary remains and portable artifacts in sites, and in some cases, the nature of the settlements and residential features. The intrusion of the New Hebridean Mangaasi ware into the margins of the Santa Cruz region, with its clearly stratified succession over the plainware in Tikopia, has important implications for the prehistory of the region, which, in contrast to eastern Oceania, can hardly have undergone its cultural transformations in relative isolation. We are in a position to modify further the linguistic model - the only model we really began with in our cultural history objective. Further, we are now able, if thought necessary, to produce alternative models for the history of Lapita settlement in the western central Pacific on an archaeological data base (cf. Clark and Terrell 1978), and, on this constraint, to limit the confusingly infinite range of configurations. Such a material data constraint, however irksome, is preferable, in terms of human history objectives, to reliance on analogies with the differential colonization behaviours of migratory bird species.

The differentiation of the San Cristobal and Santa Cruz regions by archaeological criteria seems to be attested by the ecological evidence, for, although similar courses of forest clearance in prehistory are indicated, the manifestations of agricultural development in terms of components of systems, e.g. intensification of field practice and tree cropping, are divergent. The varying island forms in the project area offer different environmental backgrounds in the dynamics of physiographic change and the development of agricultural forms through natural and humanly influenced phenomena. The Santa Cruz region is distinguished in the latter case by a prehistoric emphasis on "genetic" rather than environmental modifications, in the domestication of important

economic species whose distribution hardly went beyond the confines of that region, but were adapted into its variable ecologies. In this respect, we can see the present living results of the effects of transported environmental factors, which provide some reflection of an original unifying exchange of other materials over much longer distances, now only a part of the archaeological record.

The identification of Lapita long-distance voyaging as specialised trade has been repeatedly avoided by Green (1979, In Press), on the score of the quantity of the imported material involved and the absence of evidence for reciprocity in the transactions involving a range of items. Throughout the prehistory of the region, however, there emerge implications of material exchanges within the project area, inter- and intra-regional, centring on Santa Cruz and San Cristobal. Such exchanges are also inferred in the archaeological record at the margins of these regions - with Guadalcanal and Malaita to the west; and with the Banks Islands, the New Hebrides and nuclear Polynesia to the east. Indeed, the systems recognized as trade and intercultural contacts, such as the ethnographically recorded Santa Cruz system whose relic expressions are still palpable, and the Vanikoro-Tikopia connection which still survives as a part of today's oral heritage, may have their evolutionary roots in the earliest long-distance voyaging that we recognize as a Lapita cultural trait.

This account of the Southeast Solomons project, as reportage by one of its participants, can only indicate some of the directions of the eventual interdisciplinary syntheses that will define the culture history of the region and its external relationships through time. Forthcoming specialist reports are to repair the inevitable injustice done, by omission, to the participants and their research in this summary; monographic treatments on Tikopia, Santa Cruz and the Duff Islands are in preparation.

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