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## ARCHAEOLOGY IN SAMOA AND TONGA

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### Introduction

Samoa and Tonga are the two main island groups of a geographically and culturally defined area known as Western Polynesia (Burrows 1938). Although the importance of these two groups in Polynesian prehistory has been obvious, it is only very recently that either has been subjected to the intensive archaeological investigations with which this paper will be concerned. I begin by outlining the background within which the investigations are taking place, then describe the investigations themselves, and end with a few tentative conclusions based on results so far available.

### The Background

From the time that the islands were first extensively visited by Europeans, it has been apparent that the inhabitants of the Samoa and Tonga groups resemble each other more closely than either resembles the people of Eastern Polynesia, or the "Melanesian" people to the west. The position of Fijians has been debated, but it was generally thought that similarities between Western Polynesians and the inhabitants of certain parts of the Fiji group were due to late contacts of the latter with marauding Tongans, rather than to more deep seated ancestral relationships.

In spite of the similarities, many differences between Tongans and Samoans were also noted.

The islands which the two peoples inhabit vary physically. The Samoa group consists of three large high volcanic islands and several smaller ones, while the Tonga group is composed of many smaller islands scattered over a large area. It consists of a myriad of low or raised coral islands and a chain of small high volcanic islands. Tongatapu, the southernmost low island, is by far the largest, with an area of 100 square miles. Samoa is warmer and wetter, with more luxuriant vegetation.

The languages of Tonga and Samoa are not mutually intelligible, and are not as closely related as some Eastern Polynesian languages are. It has recently been suggested that Tongan and its satellites may have separated from the main group of Polynesian languages before the division of Samoan and its satellites from the Eastern Polynesian languages took place (A. Pawley pers. com.).

While the social systems of the two groups have many features in common, there is a fundamental distinction in the way they have developed. This may be briefly characterised by suggesting that Samoans appear to have followed a more democratic way of life, based on settled villages, while Tongans favoured a more feudal organisation, with dispersed settlement. The different emphases are apparent in the lives of both peoples today, seem to have existed at first contact, and according to tradition, reach far back into the past.

Museum Collections of artifacts from the two groups have furnished similar types of adzes and fishing gear. For instance, both groups seem to have favoured adze types 4C and 2E in Duff's classification (Duff 1959: 133, 137) with Tongan examples tending to be smaller and more highly polished.

There have always been observers who perceived certain features in Tongan culture which were not to be found in other Polynesian groups, including Samoa. These features included aspects of language, the debatable use of pottery, the custom of amputating fingers, and many others, (e.g. Hale 1846). Such features were sometimes attributed to contact with Fiji, though the theory of a 'pre-Polynesian race' has flourished as well in Tonga as elsewhere.

Modern Samoan children are taught that at one period in the past, thought to be from 950 to 1250 A.D., Samoa was overrun by Tongans, who at first ruled justly, but then became despotic, enslaving the Samoans and forcing them to engage in a public works programme of immense proportions (Henry 1958: 17-21, Masterman 1958: 10-11). A large number of field monuments in Samoa are now attributed to the Tongan period. Samoans revel in tales about the Tongan wars, probably because of the glorious climax to the episode, the expulsion of the Tongans by the first Malietoa and his brothers.

On the other hand, Tongan children learn little or nothing of the conquest of Samoa. Rather they are taught that Tonga was originally settled from the north, and that Samoa, and particularly Manu'a is to be regarded as a homeland (Wood 1943L2).

Many traditions seem to emphasise frequent contact between Samoa, Tonga, and parts of Fiji, and even political domination by one over the others, at various times in the past.

These various lines of evidence and belief then, suggest strongly persisting differences between Tonga and Samoa as well as the traditionally described contact and relationship.

Past archaeological work in the two groups is quickly related. Samoan material culture was studied by the Handys and by Buck (Handy and Handy 1924, Buck 1930). Only the most imposing of Samoan field monuments were described (e.g. Thomson 1927, Freeman 1944a, 1944b). The first serious archaeological investigations came with the visit of Golson and Ambrose in 1957 (Golson 1957). Since then there has been a surface survey in American Samoa (Kikuchi 1963), and several very brief reconnaissances. The most intensive work was that undertaken by the University of Auckland party, directed by Roger Green, and sponsored by the B. P. Bishop Museum through a grant from National Science Foundation (Green 1964a, 1964b).

On the other hand McKern's study of Tongan material culture (McKern n.d.) has never been published, and only his account of surface monuments and a few brief excavations carried out in 1920-21 is generally available (McKern 1929). Golson also visited Tonga in 1957 (Golson 1957) and in 1959 Mr and Mrs Birks excavated a site previously tested by Golson and McKern (Suggs 1961). More

recently Poulsen, a student at the Australian National University spent a year excavating on Tongatapu, and I spent ten weeks there towards the end of his fieldwork period. These recent endeavours are the basis for the discussion that follows.

It should be emphasised that we are not yet in a position to talk of the entire island group in either case. Our investigations in Samoa were limited to Upolu, with only a very brief reconnaissance on Savai'i. Ethnological and historical information together with our own observations suggest that these two islands will prove to be culturally homogeneous. The position of American Samoa is not so clear. Kikuchi suggests that sites relating to social and domestic organisations in American Samoa furnish the same kinds of evidence as Western Samoa. He feels however that Upolu and probably Savai'i reached a state of political and religious development, which resulted in certain kinds of sites such as large mounds and elaborate fortifications, which are not present in Tutuila or Manu'a. He was unable to find any archaeological evidence in Manu'a which might reflect the traditional political and religious supremacy of Manu'a at an early period (Kikuchi 1963: 165).

In Tonga, recent work has been centred on Tongatapu, traditionally the religious and political centre of the group, until the nineteenth century upheavals, and geographically the island furthest removed from Samoa. McKern furnishes some data on field monuments in Ha'apai and Vav'u but carried out no excavations there. About the Niuas, closest of the Tongan islands to Samoa, nothing is known.

#### Site Survey in Tonga and Samoa

Field monuments in the two countries have been briefly described by Golson (1957), in addition to McKern's earlier (1929) work in Tonga. Little more detailed site recording has been done in Tonga, but I spent one and a half weeks going over sites on Tongatapu, not as a specific survey project but in order to familiarise myself with the kinds of sites occurring there.

In Samoa several areas were intensively surveyed by members of the Auckland party, who expanded the information collected by Golson and Ambrose. Green surveyed the Vailele area, including both the coastal mounds and those lying inland, some of which were recorded by Freeman (1944b).

An intensive survey was also made of the area behind Luatuanu'u village, east of Apia, on the north coast where a number of fortifications and a series of terraced ridges were located and mapped.

Extensive remains in the bush near the Mafa pass in the centre of the island, at the old traditional village site of Vaigafa, were recorded, and other sites on the south coast, and elsewhere in inland Upolu were visited.

In Western Samoa, as Kikuchi found in American Samoa, the greatest number of sites appear to be house or living sites. Depending on the terrain these may be terraced hillsides, or mounds on flat or gently sloping ground. They may be faced,

paved, or outlined in stone, but where stone does not occur naturally they may be in earth. House sites may take a large number of different shapes and sizes. Inland of Lautuanu'u, large earth terraces carry extensive stone pavements, with outlines of very small houses. There is little uniformity in arrangement on terraces, but pavements and house sites are consistent. In parts of the south coast, ridges running inland carry merely earth terraces with little or no stonework. In flat areas such as Vailele or Mulifanua groups of earth mounds are common. In swampy stony areas inland, such as Sauniatu, acres of land are covered with stone mounds, stone heaps, stone causeways - whole villages raised on rough stone foundations above the swamp. Certain recurring shapes of mounds, such as the so called "star mound", occur without stone facing at Lepa where stone is rare, but in stone at Vaigafa, Manono, or Sauniatu, where it is common.

In Samoa sites usually occur in clusters. Often these are known to local people as abandoned ancestral sites of present day villages. In some cases successive traditional sites are known, and the titles and organisation of present day villages can be traced to these ancestral sites. Although some former village locations are known by name, and in some cases the number of generations since abandonment is remembered, there are other locations which are unknown to Samoans, who will even go to the lengths of suggesting that stone foundations have washed down the river from a known location further inland. This suggests that village organisation and the custom of placing houses on raised foundations which the archaeologist can easily identify, reach some distance back into the Samoan past.

Isolated sites also occur in Samoa, and they are often interpreted by local people as pigeon snaring mounds or chiefly burial places. One well known site near Lotofaga on the south coast, known as le malumalu o le pisaga, or the temple of the ghosts, is still widely feared by many of the villagers.

The surface of Tongatapu is covered with mounds. They have been estimated to number from 1500 to 3000 but this is largely guesswork. The largest and most impressive are the langi or Royal Tombs, and some esi or chiefly resting places, many of which have been described by McKern. These employ terracing and stone work in varying degrees of elaboration, and for many McKern was able to collect traditional information. However the greatest number of mounds are just plain earthen mounds with no distinctive features, which vary greatly in shape and size. Many are burial mounds of common people, and white coral sand brought to the surface by ants has proved to be a good indication of their function. Some are refuse heaps, including several recently excavated sites. There is little evidence that mounds were extensively used as house foundations. While mounds are scattered over the surface of Tongatapu they do seem to occur in clusters, and the clusters vary in character, some having a number of large mounds, other small mounds, and other a mixture, while some areas have apparently no mounds at all. In Tonga it is not possible to identify and map old village sites, as can be done in Samoa, because the functional character of the mounds is as yet not fully determined.

Cook described a village at Mu'a, but this site, the King's Village, is generally considered exceptional in Tonga, other early visitors describing the people living dispersed over the land. The question of settlement pattern appears to have been far more drastically affected by European contact than does Samoan, where the traditional land tenure and village systems still operate. The Tongan system seems to have been affected first by civil war with European weapons, then by missionary laws (Nayacakalou 1959).

In both Tonga and Samoa fortifications are numerous. It has been suggested that Tongans probably learned the art of war from the Fijians and passed it on to the Samoans (Best 1927: 309-314). In spite of an amazing lack of information on Samoan fortifications in the literature, they are very common. Most usual is the transverse ditch and bank across a ridge, but terraced and ring ditched hill tops are also present. The Samoans were engaged in a civil war when John Williams arrived in 1830 (Williams 1837), and they indulged in two more major wars and several minor ones between that time and 1890 (Masterman 1958). It was not uncommon for an entire district to leave its land and shelter for years in the fortifications of a friendly district, as happened in 1849-50 (Samoa Reporter no. 9). Thus many of the fortifications which exist in Samoa must have been built or rebuilt last century, but there is no reason to suppose that fort building was an entirely new development. Traditional accounts relate one civil war after another, over a long period, interspersed with conflicts with visiting Tongans or Fijians.

In Tongatapu the land does not present the same opportunities for fortification, and forts are usually extensive ring ditches on flat land. Many large Tongan forts are located in present day townships, which are said to have developed from 19th century fortified settlements. Certainly the Tongans were peaceful when Cook visited them. On the other hand traditions persist that Tongans built forts in Samoa centuries ago, so it is possible that many 19th century Tongan forts which survive today could be merely the last stage of rebuilding on the same site. One tradition indeed relates that the fortification at Mu'a, which relates to an old shore line, was built by the Tui Tonga Takalua, who is variously estimated to have lived in the late 14th (McKern 1929:93, 101), mid 15th (Wood 1943:66), or early 16th (Thomson 1894:396) century. Only detailed study and excavation can determine the age and development of fortifications in either group.

### Excavations

Excavations in Samoa centred on the Suga earth mounds at Vaialele. In 1957 Golson made a small excavation on one side of a bulldozer cut through one of a number of low mounds situated relatively close to the coast. The earliest layer in this mound yielded pottery, and three consistent radio-carbon dates within the first century A.D. (Grant-Taylor and Rafter 1963:158). The remainder of the mound consisted of a series of house floors.

During the recent excavations a much larger area of mound 1 was uncovered, and three other mounds, Va-2, Va-3, and Va-4, were tested.

From layer V of Va-1, the pottery bearing layer, more pottery and a number of other artifacts were recovered. Immediately above layer V was a brown layer



(IVc) with a few potsherds and other artifacts. A large oven dug into the sterile in an area where layers V and IVc were absent, but sealed in by the first of a series of gravel house floors which follow, has been dated to the 12th or 13th century A.D. This suggests a lapse of eleven or twelve centuries between the pottery making occupation, and the reoccupation of the site (Green and Davidson 1965). In this case it is likely that layer IVc represents an old soil horizon (C. Wright, pers. com.). The actual mound consists of a series of house floors and earthen fills which appear to represent continuous occupation. The most recent floor before historic times has been dated to the late 17th or early 18th century, by a charcoal sample from a fireplace associated with the occupation. The most recent use of Va-1 is as a burial place for two plantation labourers and is dated to after 1880 by Melbourne Exhibition and Advance Australia clay pipes included in the grave goods.

Va-2 and Va-3 did not yield pottery bearing layers. Dates for their basal deposits suggest that the land on which the mounds are located was first occupied in the 10th or 11th centuries A.D. (Green and Davidson 1965). Thereafter these mounds went through a period of building activity also reflected in Va-1 and Va-4. Few artifacts were recovered from these sites, but a wealth of stratigraphic and structural information was obtained.

Va-4 has not been radiocarbon dated. Unlike Va-2 and Va-3 it does contain a pottery bearing layer at its base, which has been only slightly sampled. The latest occupation of VA-4 is a European house, so that this mound, like Va-1 must span a long period of time.

The best collection of artifactual material from the Vailele excavations comes from layer V, the pottery bearing layer of Va-1. A reasonable sample of pottery was obtained including a number of rim sherds. No decorated sherds were found. Other stone artifacts include: adzes, octopus lure sinkers, hammers, grinders, and rough flake tools. Lumps of crushed rock which have been used as the tempering agent in the pottery occur in the deposit, suggesting that the pottery was actually made at Vailele. The artifact assemblage from this layer exhibits some differences from later Samoan material culture as described by Buck (1930), and from that recovered from upper layers at Vailele, and elsewhere. Pottery, adzes, and octopus lures show similarities with early materials from the Marquesas and the Society Islands (Emory and Sinoto 1964, and Sinoto and Kellum 1965). But expected resemblances between this early material and that recently excavated in Tonga have not appeared.

To test another kind of site, and try to recover evidence of fishing activities, an excavation was carried out in an extensive coastal midden deposit at Lotofaga village on the south coast. While most of Lotofaga is situated on high ground, a portion of the present village is built on a low sandy strip at the edge of the lagoon. Here wave action has exposed a beach section with several feet of cultural deposit. Separated from this area by a rocky outcrop is a small cove at the foot of the cliff, where a deeper section was exposed. One excavation (A) was made here, and two (B and C) were made in the sandy strip about 100 yards apart. In B and C cultural material was continuous to a depth of almost 6 feet. A series of layers contained sand, branch coral and beach shell, volcanic stones, and small amounts of food shell and

bone, stone flakes and adze fragments, with occasional other artifacts. Postholes and ovens at various levels impeded precisely controlled midden analysis, and in one square a burial was encountered in a shallow pit dug from a level approximately halfway down the deposit.

Excavation A revealed a thick series of upper layers of post-European debris, ranging from very recent cans and coconut husks, to copper nails and old glass. Underlying these were a series of pre-European layers, very similar in content and incidence of structural features to the other two excavations, B and C. The matrix of these layers, however, was clay mixed with sand, rather than clean sand. This deposit, like those of excavations B and C rested on clean white beach sand which contained less branch coral and rolled shell than did the cultural layers above it.

In both B and C a charcoal stained layer with a number of ovens rested on the clean beach sand at the base of the deposit. A sample from one of these ovens, which contained a human tibia, has yielded an early 13th century date (Green and Davidson 1965). Unfortunately this layer was not productive of artifacts.

A tradition in Lotofaga relates that the low lying sand was once part of the lagoon. This is in keeping with the geology of the locality. Towards the end of the Tongan occupation, estimated from Tongan and Samoan genealogies at 950 - 1250 A.D., Tongans enslaved the Samoans, who were at that time living inland, and forced them to carry sand to fill in the shallow part of the lagoon making it habitable. Present day Samoans do not believe this. Nonetheless the early 13th century date for the first occupation characterised by a charcoal layer and an oven containing human bone, ties in well with the genealogically dated tradition that it was not occupied until then.

The entire "raised beach" at Lotofaga appears to be a cultural deposit which has been built up over the last 700 years. It is not a midden in the true sense of the word, with the exception of the post-European layers of excavation A. Rather it is the result of centuries of Polynesian living. Modern Samoans still carry fresh sand every day to scatter around their houses, and they still cover their house floors with branch coral and shell. Local concentrations of coral throughout the excavation are probably old house floors. As today, the majority of the rubbish was probably dumped on the beach for removal by the tide, and only small items were mixed into the sand and remained to be recovered by excavation.

This project suggests that many long established villages may prove to be built on similar deposits. Additional finds of lengthy sections in Upolu and Savai'i show that Lotofaga is not unique in this respect. Excavations in other low-lying coastal villages would probably produce similar results. The problem now is to find more concentrated deposits, which are more productive of artifacts.

Cultural material from Lotofaga was on the whole disappointing. Pig, dog, rat, shark and other fish were present. Other bone has yet to be identified. Small flakes and broken adze fragments throughout suggest stone working and using of stone tools in and around houses. Only a few adze portions were complete enough to type. Most interesting were the rare items of fishing gear. A broken unfinished



one-piece hook in Turbo shell shows that these hooks were not unknown. A broken stone lure is evidence that these items were made in material other than pearl shell in the past. No pearl shell was found in the deposits.

The burial was laid supine in a shallow pit, with head to west, and covered with two slabs of coral. Other burials, sometimes with grave goods, are reported to have washed out of the section in recent years.

The only other excavations in Samoa were made in order to recover dateable charcoal during site surveys. Apart from Va-1, Golson's excavations in Samoa were small tests and did not produce much information.

In Tonga, McKern's excavations formed the starting point for further work. He tested several burial sites and a number of midden deposits, recovering pottery in small quantities from a number of the latter, and in fair amount from one site (McKern 1929:101-119).

Golson tested six sites (Golson 1957: 8-11). Four yielded some depth of deposit but little or no material culture, and two, including the Mangaia mound already tested by McKern, yielded pottery in fair quantity. The Mangaia mound was further excavated by the Birks (Suggs 1961: 101-102) yielding more pottery, and structural evidence in the form of pits.

Poulson has excavated a number of sites on Tongatapu, all shell middens, some mounds and some not. From these sites he has recovered large quantities of pottery and other material culture. This material, which is of great interest, is now being studied, and it is hoped that a radiocarbon date will soon be available, as the material would appear to belong to an early time period. The pottery is much superior to the Samoan, and many fine decorated sherds may be added to the few recovered by McKern, Golson and Birks. Adzes do not closely resemble those from Samoa. Numerous ornaments were found, which are totally absent from sites so far excavated in Samoa.

My own excavations in Tonga did not furnish extensive material culture, so I am not in a position to discuss this aspect further. I spent eight weeks investigating a particular kind of site, the small burial mound, which does not seem to be present in Samoa. Tongan burial mounds are said to be of several different kinds depending on the status of those buried in them (McKern 1929:30-31). The finest monuments in Tonga are the famous langi, burial places of the sacred kings. Little was known about the smaller mounds, and two were selected for excavation, to see whether they were in fact burial mounds, and how they were constructed. Both proved to be burial mounds, and, although they differed considerably in size, they were shown to be different stages of the same kind of mound, rather than two different types. Both sites appear to have been originally habitation sites, with pits, postholes, fireplaces and midden areas. At one site burials had originally been made on the ground surface of the habitation area, possibly under the floor of a house. Then a low mound had been built to accommodate further burials and habitation ceased. The other site consisted of three successive mounds, the first very low, the second larger, and similar in size and shape to the first site, and the third resulting in a considerable increase in size.

All burials were in oval pits, with white sand covering the body. In some pits, discoloration of the sand suggested decayed mats or tapa. Orientations were not uniform, though most had heads to east or north. Almost all were extended, some supine, some on one side, some almost prone. There were a variety of arm positions. No grave goods were found. A large number of infants and young children were found, evidence of a high infant mortality rate. However there were few immature individuals over the age of two or three. Some of the adult skeletons exhibit interesting pathological conditions.

As yet no indication exists for the age of these two mounds, which are typical of numerous others throughout Tongatapu. They are old enough not to be claimed by any of the surrounding villages, but probably belong to the immediately pre-historic period. Certainly they seem to be a peculiarly Tongan development, and probably are a feature of late Tongan culture. A few sherds and broken adzes were found in the fill of the mounds and it appears that at least some pottery, though undecorated, was used in the vicinity of the larger mound.

### Discussion

At this point in our knowledge it would be foolish to generalise too extensively from the presence or absence of types of sites, and/or artifacts. Nevertheless one may say that investigations in Tonga and Samoa are not yet producing an abundance of closely similar traits.

Mounds, and ditch and bank fortifications are common to the two groups. Yet fortifications have recently been reported for several other Polynesian groups (Marquesas, Society Islands, Rapa) besides New Zealand. They are also abundant in Fiji. The differences in terrain in Samoa and Tongatapu are sufficient to preclude identity of fortifications, even if they were the direct gift of one group to another. They may have arisen from necessity in both cases. They may be part of a common ancient tradition. Whatever the case, recent work in Samoa has demonstrated that fortifications there are numerous and impressive. Because the terrain in Samoa consists largely of steep ridges divided by canyon like stream valleys, Samoan forts are mainly ridge forts, while Tongan forts, in Tongatapu at least, are flat land, ring ditch sites. Consequently Samoan forts bear more resemblance to some New Zealand pa than they do to the Tongan forts. Forts said to exist on the uninhabited volcanic islands of the Tonga group, may prove to be far more similar to Samoan sites. Only further study can elucidate the actual development and relationships of fortification devices in these and other areas.

Until further progress is made in interpreting mounds, these can also be used to prove either similarity or difference between the two areas. Many mounds are of similar appearance in Tonga and Samoa. Yet those so far investigated in Tonga have proved to be burial mounds or refuse mounds, while those in Samoa have proved to be house mounds, composed largely of sterile fill and not used for burial. It is not to be expected that stone work would be found on Tongatapu as it is in Samoa and much of Eastern Polynesia, and investigations in some of the northern Tongan islands may reveal stone facings, walls, and pavements, in addition to the coral facings and coral blocks known in Tongatapu.

Pigeon mounds are supposed to occur in both Tonga and Samoa. McKern described in detail mounds with a central stone-lined pit which were known to Tongans as pigeon snaring mounds (McKern 1929: 19-20). Other mounds lacking in this feature are today also said to be pigeon snaring mounds. Sites with the central pit are not yet known from Samoa. Early accounts of pigeon snaring in Samoa are strangely lacking in mention of mounds (e. g. Samoa Reporter 1851), although Buck (1930:543) briefly described such platforms. While some Samoans will identify certain mounds today as pigeon mounds, others are emphatic that these are special burial mounds for chiefs.

Generally however, Samoan burial practice did not seem to include mound building. In addition to the irregular mounds in the bush sometimes interpreted as burial sites, there are numerous descriptions of raised cairns over chiefly graves (Kramer 1902: 182-3). Moreover, ethnological accounts suggest that in the past, as today, common people were buried in the ground, sometimes with a few stones marking the spot. White sand is said to be scattered over the body which lay with its head to the east. The burial encountered at Lotofaga conformed to this type except in orientation. The use of white sand, if correct, is a feature found in Tonga also. In Tonga, the majority of the dead, at one period anyway, appear to have been interred in mounds, and many of the mounds are used for burial. Other mounds, however, of similar appearance, are now said to be pigeon mounds or esi (chiefly resting places), and it is very difficult at this point to distinguish various types of mounds, which are variously classified according to form, supposed function, or a mixture of both.

Concentrated midden sites are numerous in Tonga, and productive of artifacts. The lagoon of Tongatapu is extremely productive of shells, particularly the to'o and koloa'a shells which are most numerous in middens. The lagoon surrounding Upolu offers similar shells only in very small quantity in limited areas, and shell fish seem to have been much less important in the diet of Samoans. Tongan middens reflect a shell fish gathering and dumping pattern more comparable to that found in New Zealand, with Chione and Amphidesma shells, while this kind of shell collecting and the resulting shell middens are rare or absent in Samoa.

A very noticeable difference between Tonga and Samoa is the archaeological evidence for villages in the latter. In Samoa enough abandoned villages with and without any associated traditions are now known, to suggest that nucleated villages similar to modern villages must have existed for several centuries at least. In Tonga archaeological evidence for house sites is presently lacking, consequently villages cannot be identified. Modern Tongans live in villages, but it is said that these are the result of nineteenth century conflicts, and that in former times a more dispersed type of settlement prevailed. This has yet to be verified but available evidence tends to confirm it. Certainly it is clear that Tongan settlement has been considerably modified since European contact, and there are a number of early accounts of Tonga, to give a clear picture of Tongan life at certain points of time. Samoa on the other hand, where the archaeological evidence for villages is quite clear, was virtually unknown and undescribed until 1830, a time when Tonga was apparently already much changed.

In spite of superficial similarities, the bulk of sites in Tonga and Samoa are not the same. Mounds are different in their internal structure because they were for different purposes. Fortifications are different in form, because they reflect a different terrain and a different settlement pattern, at least during the historic period. In the nineteenth century Tongans clustered together in large forts, while Samoans abandoned their villages and fled to scattered refuges and to the bush, in times of war. It appears on present evidence that burial practices and settlement pattern were different, at least during the centuries immediately preceding European contact, although a better time control over sites, particularly in Tonga, is necessary to substantiate this. Traditionally this difference in settlement pattern extends back into the past and forms the basis for the present situation.

If after comparing the surface sites in the two groups, we try to work back in time to find close similarities we are disappointed. Our knowledge of economy and settlement pattern in the more remote past is almost non-existent, but there are now a number of artifacts from a site known to be early in Samoa, and sites thought to be early in Tonga because of the material they yield.

Adzes from the early horizon at Vailele, and adzes from excavated sites in Tonga, seem to be less similar than the bulk of the museum adzes from the two groups. Samoan pottery is restricted in form and type and is in these and other respects unlike Tongan pottery. In Polynesia decorative motifs on pottery are restricted to Tonga. Ornament forms cannot be compared as they are lacking from Samoa. Fishing gear is almost entirely lacking from both groups, and excavations have so far failed to produce the typical lure forms known from museum collections. It is possible that sites have not yet been found in Samoa which will yield material comparable to that found in Tonga. At present, however, the Samoan material, such as it is, shows a greater relationship with later Samoan material, and with early materials from Eastern Polynesia. The early Tongan material suggests closer relationships to the west, particularly Eastern Melanesia.

Investigations so far open up many new and exciting possibilities. First however, the Samoa sequence must be expanded, while the Tongan material must be dated. In both areas an effort must be made to define more thoroughly the culture of the closing stages of the prehistoric period. The northern islands of the Tonga group must be investigated as we do not even know whether pottery occurs there. On the whole the picture is one of promise. Much has been achieved in a small time, but the problems now posed require an immense amount of work for their solution. Yet it may soon be possible to outline a preliminary sequence in both groups and so trace the relationship between Samoa and Tonga more exactly. As neither exists in isolation the relationship of both to Fiji and other western groups on the one hand, and the relationship particularly of Samoa, to the eastern groups on the other hand must be explored. But at last we have touched upon a long neglected field which should prove of great interest to all those concerned with Polynesian prehistory.

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See PLATES VI to VIII





**SU-Va. I. Layer "Natural" complete. Site I from north-west.**

J. GOLSON, 1957.



**SU-Va. I. View of first stage operations when completed.**

R. GREEN, 1963/64.

**PLATE VI: SAMOA**



**SU-Va. I. Looking south-west at work on cutting II (Golson Cut).**

**R. GREEN, 1963/64.**



**SU-Va. I. Cutting II from north.**

**S. SCOTT, 1963/64.**