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SĀMOAN SETTLEMENT PATTERN AND STAR MOUNDS OF MANONO ISLAND

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The Sāmoan Archipelago is known in the archaeological literature of the Pacific as having some of the most densely structured pre-contact landscapes observable in surface surveys. Multiple enclosure walls, raised house mounds, ceremonial platforms, roads, and fortified ridges with high walls and deep ditches still dot the plains and hilltops of some of the islands (Green 2002a; Jennings *et al.* 1976; Jennings and Holmer 1980; McGerty *et al.* 2002; Quintus 2011; Taomia 2002). In every case where extensive mapping has been fulfilled, the visible settlement pattern highlights a dense human occupation, extending to nearly every liveable ecological environment. One of the major challenges that archaeologists have faced in the last half century is the possible chronological diversity and political dynamics that these cultural landscapes might encapsulate at the local level (Green and Davidson 1969, 1974). This topic is furthermore complicated by the complexity of sequencing oral traditions in a meaningful chronology, the still-unclear understanding of the impact of first European contacts on Sāmoan demography (Green 2007), and the consequent changes that Sāmoan societies witnessed before the first permanent occupation of the archipelago by missionaries (Davidson 1969).

In this paper, we would like to present—as a gift to the long contribution of Jeffrey T. Clark to the archaeology of Sāmoa—a case study on the settlement pattern of the small island of Manono, located between ‘Upolu and Savai‘i (Fig. 1), and the question of star mounds, a topic that Clark tackled in a number of papers (Clark and Herdrich 1993; Herdrich and Clark 1993; Quintus and Clark 2012). The mapping of part of the northern portion of the island and focused excavations on some of the main archaeological structures identified have generated new data about Sāmoan settlement patterns.

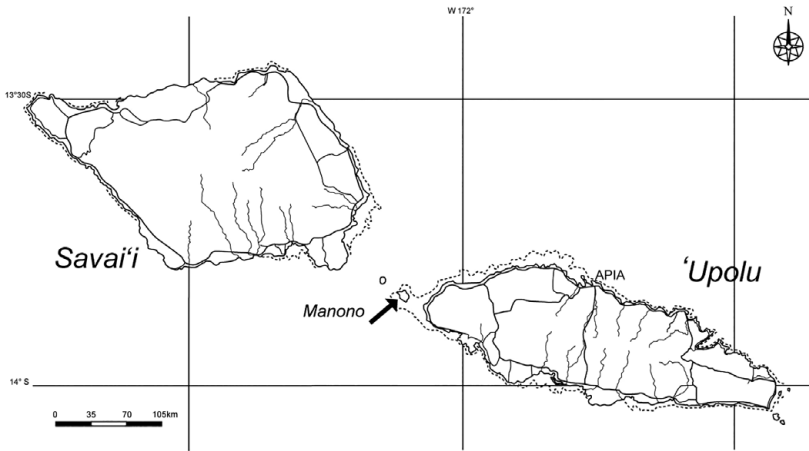


Figure 1. Position of Manono Island between Savai'i and 'Upolu.

Archaeologists have known of the presence of star mounds on Manono since the 1960s. Star mounds are a uniquely Sāmoan type of raised platform with a series of arms/branches/rays developing out of the central core of the structure (e.g., Davidson 1974; Herdrich 1991; Herdrich and Clark 1993; Ishimura 2006). These mounds are usually located inland in isolated areas and under forest cover, and have been identified as former locations of ritual pigeon-catching meetings for Sāmoan elite, combining sports, *mana* 'power and prestige' and feasting (Herdrich 1991). Usually, star mounds appear to be isolated features in the landscape (Herdrich and Clark 1993: 55–56; Ishimura 2006: 237). Because of this, we did not anticipate that the complete mapping of Manono's hilltop would lead to the discovery of 13 star mounds, aside from the single already known structure. This forms a cultural landscape that has to this day no equivalent in the archaeological literature of 'Upolu and Savai'i but is reminiscent of recent discoveries on Olosega Island in the Manu'a group (Quintus and Clark 2012, Fig. 2). After having summarised the general chronological background for Manono, and detailed the main features identified on the northern slope of the island and on the hillfort, we will present the typological diversity and some tentative data on the general chronology of the star mounds surveyed. This will allow us to question anew the significance of the cultural changes that appear to have characterised the century preceding the arrival of Christian missionaries in Sāmoa in the 1830s.

MANONO'S ARCHAEOLOGICAL SETTING

Manono Island is a small raised volcanic cone about 2.5 km long and 1.8 km wide, the highest point at 90 m corresponding to the lip of one of the old craters. The island is located at the northwestern limit of 'Upolu's lagoon, being today 3.6 km from the western point of the main island (Fig. 2). Its formation is linked geologically to an alignment of volcanic cones that dot the Savai'i-'Upolu axis, related to volcanic activity over a magnetic "plume-driven" hotspot (Dickinson 2007; Hart *et al.* 2004). Excavations completed as part of the archaeological program on Manono have confirmed the progressive tilting of the northwestern part of 'Upolu, at a rate of about 1.1–1.2 mm/yr (Sand *et al.* 2016). At first settlement about 2,700 years ago, Manono was a peninsula of 'Upolu, before the process of submergence progressively sank most of the coastal plains. As a consequence, a number of ceramic sites are today located under water. This drastic change in the landscape, with the disappearance of most of the coastal flats over time, forced the inhabitants to progressively intensify their use of the hillsides of the island. Only a few ceramic sherds have been uncovered in the back-coast areas during the survey and excavations, indicating that this part of the island was not frequently used during the roughly first millennium of settlement.

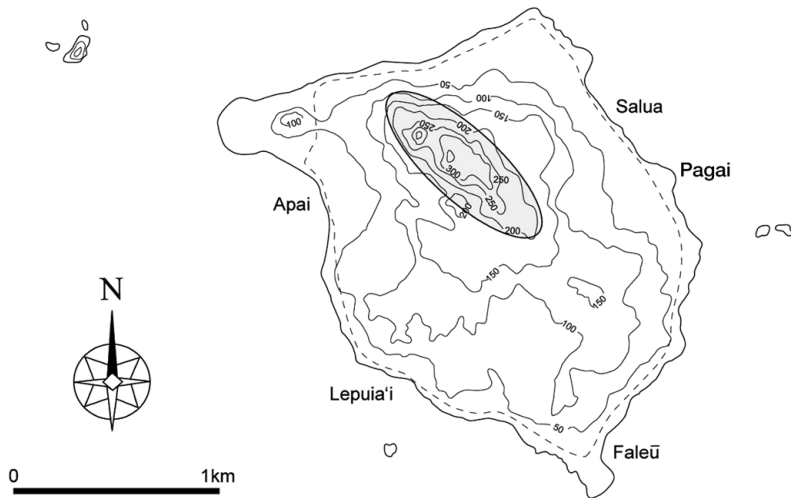


Figure 2. The island of Manono, showing the location of the central fortification (true north, altitude in feet).

Population increase, combined with the natural process of land shrinking, must have led to the progressive occupation of all the coastal areas during the second part of the first millennium BC, potentially fostering land divisions. The first demonstrable use of marked stone boundaries between compounds can be dated to about 2,000 years ago, indicating a change in the patterning of Manono's landscape, possibly linked to tensions about landownership between groups (Sand *et al.* 2015). As is also observable on nearby 'Upolu (e.g., Jennings and Holmer 1980), the tradition of enclosing compounds may have led in the succeeding millennia to the progressive building of multiple walled enclosures on the hillside slopes, starting at the foot of the hill cliff and reaching the seashore. These enclosures are of high diversity in shapes as well as sizes, and their setting is partly related to the natural topography.

Our project mapped around Salua Village alone, a total of about 100 enclosures on the northern side of Manono's hillslope down to the seashore, corresponding to an area of about 30 ha. The associated mounds, present in a number of the enclosures, can be of large size, in some instances with surfaces in excess of 300 m². No star mound was identified during the survey in any of the enclosures of the slopes below the hillfort at the top of island, but mapping identified a number of pathways leading from the seashore to the different access gates of the hillfort, winding between sections of enclosures. None of the higher points of the slopes appear to have had a clear defensive purpose, but some might have been used as observation posts. Although some of the enclosure walls have been reworked recently, as part of the modern use of the slopes for agriculture and cattle grazing, the main pattern is clearly linked to the pre-Christian use of the slopes. Dating of shells collected in different structures of the hillside, as well as excavations in some of the platforms, have dated this archaeological landscape to the second millennium AD (Sand *et al.* 2013, 2015).

THE HILLFORT OF MANONO

The hilltop of Manono (Figs 2 and 3) is located in the centre of the northern half of the island and covers an area of ~9 ha. The ground surface is fairly uneven and can be subdivided into three main parts. The archaeological settings and features of each will be described in turn.

The Western Side of the Hillfort

The highest area is located on the west of the hill and corresponds to an old crater, with an 85 m flattened top of a roughly rounded shape. Its centre has a round artificial mound about 23 m in diameter and up to 2 m high, partly surrounded by a ditch and having an access ramp on its southeastern side

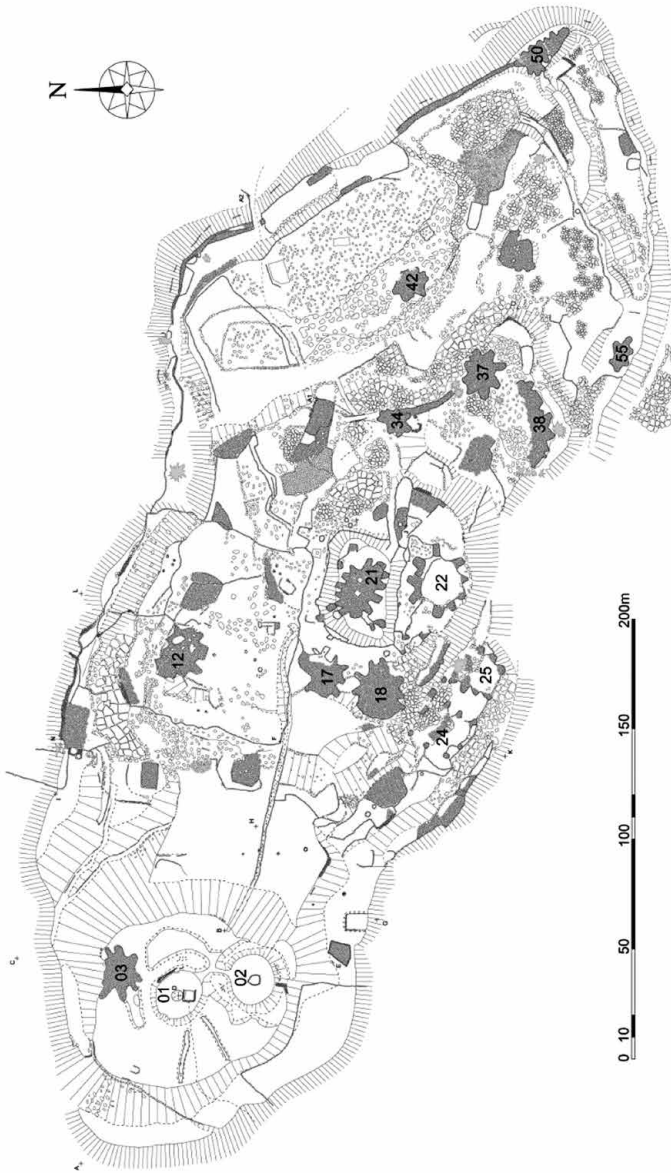


Figure 3. The hillfort of Manono, with individual location and numbering of each star mound (magnetic north). Also note the two rounded Tongan-style *sia heu lupe* mounds (01 and 02).

(ST.01). The centre of the mound has a depression within it. To the south of this structure lies a second, more oval-shaped mound (ST.02), about 23×20 m wide, surrounded by a ditch with an access ramp located to its north. Its northern side is about 1 m high, but on its southern flank, facing downhill, the base of the slope lies 3.5 m below the main central surface (Sand *et al.* 2012). Typologically, the two mounds have all the features of Tongan *sia heu lupe* or ceremonial pigeon-snaring mounds: a high flattened platform with a central depression and an access ramp surrounded by a ditch (Burley 1996; Kirch 1988). To our knowledge, these are the first clearly identified such features in Sāmoa (but see Golson 1969: 15). Excavations of different portions of the slopes of ST.02 show that the sides of the mound had been faced with a wall of small-to-medium-sized stones. A depression is also present in the centre of this mound, defined by an alignment of vertical slabs forming a 5 m large polygon (Fig. 4). The dating of samples from the excavation of different parts of this central platform puts its construction and use in the 18th century (Sand *et al.* 2018). To the north of the two structures lies a low star mound (ST.03), and on a lower elevation a narrow platform closes the ridge to the west and south, without any stone retaining walls being apparent along the cliff.



Figure 4. View of the central depression marked by standing slabs of the *sia heu lupe* mound ST.02 at the end of the excavation. Photo by C. Sand, 2015.

The Central Area of the Hillfort

A sharp limit with another crater area is apparent, creating the central part of the hilltop, linked to the western area by a “raised road” (as characterised in Buist 1969: 38–39) (Sand *et al.* 2012). This stepped area, called Le Mauga, is the most densely structured portion of the hilltop, with no less than 17 platforms of different sizes and a total of seven star mounds, mostly concentrated in the southern half of Le Mauga. A number of walls divide the area into different compounds. The central feature and the highest structure of the site is a high quadrangular stone platform called Tafavalu, about 50×35 m at its base and 40×25 m at its summit, reaching about 6 m in height, without counting the star mound (ST.21) which tops it. Its total volume can be estimated at $8,000 \text{ m}^3$. A set of charcoal and shell samples from excavations at the foot of the platform have returned dates restricted to the first half of the second millennium AD (Sand *et al.* 2018), placing construction close to the date identified for the monumental Pulemelei platform in nearby Savai'i Island (cf. Martinsson-Wallin 2007). It is on this structure that the largest star mound recorded to date on Manono, ST.21, was later constructed, a feature that was archaeologically first recorded in the 1960s (Davidson 1974: 227–28). To the west of the central area, a large platform looking towards 'Upolu was built on a natural high outcrop reaching 3 m in height, allowing a complete outlook towards the whole southern half of the island and beyond. The northern and southern cliffs have been fortified by stone retaining walls, reaching 6 m high in some areas, with a number of compounds added on the top of the slopes, probably for defensive purposes.

The Eastern Point of the Hillfort

The ground surface of the eastern part of the hill is formed by a lava flow with numerous boulders and basalt cliffs, cut in its middle by a deep natural gorge. The amount of large natural boulders on the surface, as well as the rough terrain, have prevented the building of numerous square platforms, which number only six in total. A total of six star mounds have also been identified in this area. The whole eastern part of the hill is protected by a stone retaining wall, which reaches on its northern cliff a height of over 7.5 m. The most developed defensive feature is located on the southeastern point of the hill, where the natural gorge widens towards the eastern lower plateau leading to Faleu Village. This would in the past have been the weakest defence zone of the hill. To prevent access as much as possible, the occupants of the fort constructed three parallel defensive walls to close this potential weakness. The highest is the outer wall (ST.51), reaching up to 6 m, and of a total volume of at least $5,000 \text{ m}^3$, followed by the central wall (ST.52), which reaches 4 m high and is of a total volume of over $1,500 \text{ m}^3$, and the inner wall (ST.45–46), positioned on the plateau, being only 3 m at its highest point.

CHARACTERISTICS OF MANONO'S STAR MOUNDS

A total of 14 clearly shaped star mounds, characterised by the presence of arms/branches/rays, have been recorded inside the hillfort of Manono (Fig. 5). The Sāmoan name for this distinctive archipelago-wide platform tradition is confusing. Buck (1930: 321–22) did not refer specifically to star mounds when he termed pigeon-catching mounds *tia seu lupe*, while Herdrich (1991; see also Herdrich and Clark 1993) referred to star mound structures as *tia 'ave*. For this paper the English term star mound will be used.

The 14 star mounds show a diversity of forms and sizes, with significant differences between individual structures (Table 1), as has already been observed in other syntheses on the topic (e.g., Herdrich 1991). All structures are bound by stone retaining walls, built with volcanic blocs of different sizes. The inner fill is mostly made of earth and pebbles. The only exceptions are ST.12, an older house foundation, and ST.21, built on top of Tafavalu Mound, both of which have mainly stone fill. Excavation in one of the branches of star mound ST.18 (Fig. 6) has revealed that the basal fill included large volcanic blocs, reaching a diameter of 50 cm. The maximum length of the built structures ranges from 16 m to 30 m and the number of arms from only 6 to up to 12. The height of the arms often varies for each platform and each

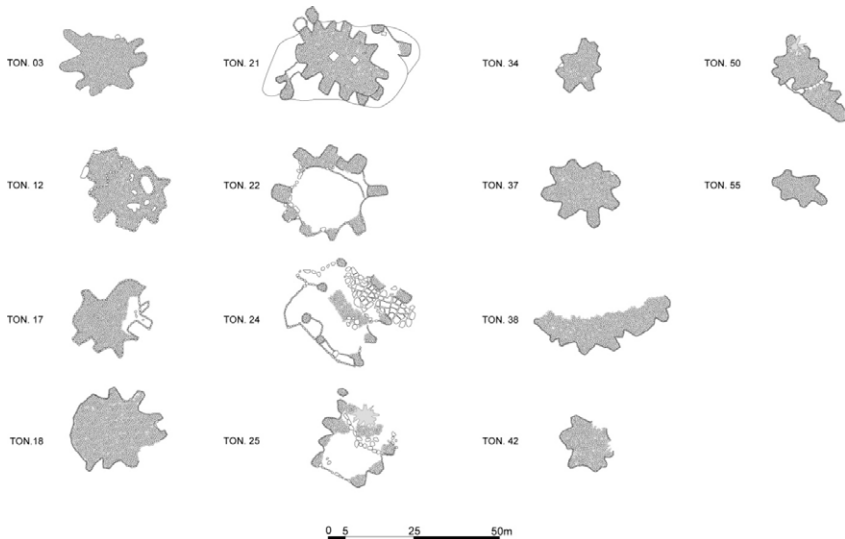


Figure 5. Form of the 14 star mounds mapped on the hillfort of Manono.

Table 1. Details of the Manono star mounds.

Structure	Length	Width	Height	Arms
ST.03	25 m	18 m	30 – 100 cm	7
ST.12	26 m	20 m	70 – 110 cm	9
ST.17	25 m	21 m	80 – 140 cm	8
ST.18	25 m	23 m	90 – 200 cm	8
ST.21	30 m	20 m	150 – 220 cm	12
ST.22	30 m	20 m	40 – 130 cm	9
ST.24	27 m	22 m	50 – 70 cm	9
ST.25	23 m	23 m	80 – 130 cm	7
ST.34	16 m	12 m	60 – 120 cm	8
ST.37	23 m	20 m	50 – 200 cm	8
ST.38	40 m	10 m	70 – 180 cm	6
ST.42	17 m	15 m	100 – 150 cm	7
ST.50	30 m	13 m	100 – 180 cm	11
ST.55	17 m	9.5 m	50 – 130 cm	6



Figure 6. Branches of the northern side of star mound ST.18, where the archaeological test-pit excavation was carried out. Photo by C. Sand, 2015.

arm on each feature, ranging from a mere 30 cm to over 200 cm in some instances. One unique feature type is defined by the presence of only the arms, with the central part of the star mound being void of any earth or stone fill (ST.22, ST.24 and ST.25) (Fig. 7).

A tentative chronological positioning of the star mounds was achieved through different means. A layer below the construction of ST.18 was dated by unidentified charcoal to 368 ± 20 BP (Wk-43789), calibrated at 2 sigma with OxCal v4.2.4 to 500–420 (60.7% probability) and 380–320 (34.7% probability) cal BP, indicating that this star mound was built after the 16th century. Some of the branches of ST.03 have been constructed over the ditch that served to raise the *sia heu lupe* mound ST.01. ST.01 was probably erected at the same time as nearby mound ST.02, dated from the 18th century (Sand *et al.* 2018), indicating that ST.03 dates to a later time. A former large house mound (ST.12) associated with the fort's original structure was reshaped into a star mound by adding nine arms. Finally, the construction of the large star mound ST.21, built on top of the high platform called Tafavalu, dates to the second half of the second millennium AD based on dates from Tafavalu.



Figure 7. Example of a stone-faced arm of star mound ST.22, showing the downward profile towards the empty central space of the structure. Photo by C. Sand, 2015.

Four main size groupings of mounds and one outlier are distinguishable in the set of star mounds on Manono. The first is restricted to the two largest mounds, ST.21 and ST.50, with maximum lengths of about 30 m, a height of around 2 m and at least 12 and 11 arms, respectively. These are positioned on two distinctively high points of the hilltop. The second group is comprised of five mounds (ST.12, ST.17, ST.18, ST.37 and ST.42), about 25 m in maximum length and an average height of over 1 m. The shape of these mounds is varied, though all but ST.42 have eight or nine arms. The third group is formed by three low mounds between 16 m and 25 m in maximum length (ST.03, ST.34 and ST.55), with an average height of less than 1 m and between six and eight projections. The fourth type is also represented by three mounds (ST.22, ST.24 and ST.25) and is characterised by the absence of a central fill of the platform, the star-mound shape being identifiable only by the presence of a set of seven to nine branches surrounding a flat area about 20 m in diameter. The absence of a built central platform indicates clearly that the essential component of these star mounds was indeed the branches, even for a 30 m diameter-wide structure like ST.22. To these four main groups can be added star mound ST.38, a 40 m long elongated platform with apparent arms on its down-slope side.

DISCUSSION

In West Polynesia, traditional landscapes have been studied by archaeologists over the last few decades with a settlement pattern approach (Clark and Herdrich 1993; Clark *et al.* 2008; Davidson 1974; Green 2002a), where landscapes are associated with social, political and symbolic activities. Field studies have highlighted the distinctiveness of the Polynesian landscape structure between islands and island groups, depending on the geographical configuration as well as the sociopolitical historical dynamics identifiable at the local level (e.g., Best 1993; Kirch 1988; Sand 1998). In some cases, regional political influences appear to have dramatically impacted the way people have organised their settlement patterns at key historical periods. One classic example was the spread of the Tongan Maritime Chiefdom from Tongatapu Island throughout parts of the Fiji–West Polynesian region in the middle of the second millennium AD (Clark *et al.* 2008). This led in the central and northern parts of the Tongan Archipelago (Ha‘apai, Vava‘u and Niuatoputapu), as well as on ‘Uvea (Wallis Island), to the sudden appearance of a number of new built features, such as raised elite burial mounds enclosing vaults and high-status pigeon-snaring mounds, in conjunction with new sociopolitical rules and a Tongic linguistic influence (Burley 1996; Kirch 1988; Sand 1998, 2008). In oral traditions these late pre-contact Tongan influences in the region appear to have eclipsed the significant influence of the Sāmoan Archipelago over much of the central Pacific in the preceding

centuries, with some networks reaching up to the Melanesian arc. The former Sāmoan influence can, for example, be deduced from the extent of Sāmoan-derived adzes found in the Western Pacific (Clark 2002), as well as the essentially Sāmoic classification of the Polynesian languages spoken in the numerous Polynesian Outliers scattered throughout the Melanesian archipelagos and in Eastern Polynesia.

The regional character of the hilltop fortification tradition in the central Pacific questions the idea of a unique origin for this type of setting (Best 1993; Green 2002b). Pet pigeons were also a regional cultural tradition, first documented by Europeans in nearby Futuna in AD 1616 (O'Reilly 1963). In this regional context, it is essential to highlight that the star-mound tradition appears, on the contrary, to be a local Sāmoan feature that did not spread to other archipelagos. Prior archaeological data collected on the hillfort of Manono Island, and that presented in this paper, provide a unique opportunity to analyse the chronology of these ceremonial structures. While still in use at the time of the missionaries' arrival (Ishimura 2006), their real age has been questioned by a number of archaeologists, as different field data appear to restrict most of the sites to the 18th and 19th centuries (e.g., Davidson 1974: 228; Herdrich and Clark 1993: 55; Ishimura 2006: 237; Martinsson-Wallin and Wehlin 2010). Such a chronological sequence is consistent with the data from Manono, all of which point to construction of star mounds in the late pre-Christian period. The link with the Tongan *sia heu lupe* tradition of elite pigeon-snaring remains to be better understood, but the data from Manono clearly show a time gap between one of the rounded Tongan-typology mounds (ST.01) and the nearby classic Sāmoan branch-indented mound (ST.03), the arms of which partly cover the ditch resulting from the erection of the rounded mound. Changing patterns of settlement organisation are also visible for star mound ST.21, built over the older Tafavalu platform (Fig. 8), and ST.50, erected on one of the massive defensive walls of the hillfort, which speaks to the dynamic nature of settlement in this part of Manono.

The Manono data are also consistent with propositions of Herdrich and Clark (1993) that relate to the ecological constraints linked to the use of these catching platforms. One of the main characteristics highlighted in the natural setting of star mounds is the location of the platforms in woody forest environments where pigeons live (cf. Herdrich 1991). In the Tongan counterpart of pigeon-snaring rituals, the *sia heu lupe* were often built in a setting of *vao tapu* 'sacred forests' (Guiot 1998: 195–96), adding to the ceremonial nature of the catch. This essential element is resonated in the Manono setting, as the 14 star mounds have all been exclusively built on the central plateau composing the hillfort. Compared to the massive collective effort that was represented in the building of the different fortification walls,



Figure 8. Partial view of the eastern rays of high star mound ST.21, built on top of the Tafavalu platform. Photo by C. Sand, 2015.

as well as the central Tafavalu ceremonial platform, none of the star mounds of the site are of a megalithic nature. Further, half of the platforms are of small elevation and three of the mounds appear to have been built in a rough manner, without taking the time to fill the central part of the structure, leading to an architecture where only the branches are elevated. As part of its evident use as a protective refuge and military defensive position, one of the main purposes of a hillfort is to allow a distinct view of its surroundings as well as to be viewed from far away.¹ This is something that is today not possible, as the hilltop is completely covered by a forest of high trees. The star mounds of Manono must however have been built when this tree cover was already partly in place, allowing for the nesting of wild birds. Consequently, at the time of construction/use of the different star mounds, the hilltop would have already lost its military character and occupation,² allowing, for example, a former house mound to be reshaped into a star mound (ST.12).

The shift in landscape patterning on Manono, leading to the abandonment of the hillfort as a defensive location, might have been related to the transformation of the policies of the archipelago's chiefdoms. It can be asked if the main reason for this change was the structuring of a new political

system (e.g., Herdrich and Clark 1993), known in Sāmoan oral traditions as *O le Tafa'ifa time* (Meleisea 1995). The very late development of the Sāmoan star-mound tradition in Sāmoa's cultural chronology may also have been related to the rise of the four royal titles political policy, in which Manono was an important element (Tupua Tamasese 1995). Accordingly, the star-mound rituals could have been linked to the advent of new competing elites during the 18th century, in a political context where "Samoan society was experiencing increasing differentiation and decentralisation" (Herdrich and Clark 1993: 61). This change must today be reconsidered in its wider historical context, as similar processes appear to have happened in the same period in Tonga (Clark 2017: 292–97) and Futuna (Sand 2017). How much these transformations were a consequence of an early set of epidemics linked to diseases introduced by early European contacts, destabilising the region's political equilibrium, remains to be addressed in more detail through future studies (see Cruz Berrocal and Tsang 2017).

The archaeological data recovered from Manono still remain to be fully analysed in the wider perspective of long-term Sāmoan history. This paper has contributed to this task by highlighting one of the multiple avenues of research that the island's settlement pattern encompasses, focusing on the distinctive star mounds. Awaiting possible counterclaims by future studies elsewhere in Sāmoa, Manono has today the highest concentration of these mounds on one site anywhere in the archipelago. These exhibit diversities in size, height and projections between individual mounds, with some structures being devoid of any central fill and identifiable only by the presence of arms. Archaeological analysis allows us to ascertain that their building chronology is restricted to the late pre-Christian period of Manono. Very late pre-Christian development of the star mounds in Sāmoa's cultural chronology needs today to be analysed in relation to the political changes witnessed by the western part of the archipelago from the 18th century onward, as known through oral traditions.

* * *

The study of the archaeological landscape of the northern part of Manono Island in Sāmoa has highlighted the presence of a dense pre-Christian settlement pattern. The central ridge of the island constitutes a large hillfort, protected in some areas by walls up to 7.5 m high and dotted with numerous platforms. While the central locus of the fort must have been for a long time the monumental platform of Tafavalu, it is the density of the distinctive star mounds that are a unique characteristic of the site. The mapping and analysis of the 14 star mounds surveyed, as well as the

identification of two Tongan-type *sia heu lupe* mounds in the western part of the hillfort, have allowed the identification of variability between these structures. Archaeological data, as well as the need of tree cover for dove nesting on the abandoned fortified hilltop, reinforce the conclusion that star mounds were a feature of the last cultural period of the pre-Christian chronology in Sāmoa and allow us to hypothesise that the pigeon-catching ritual associated with these structures might have been at least partly linked to the rise of new competition between political elites. Difficult questions remain to be answered, like the significance of the number of arms in each structure (Herdrich and Clark 1993: 60) or the link between size, height and status. Surprisingly, some Manono star mounds appear to have been built in haste, by focusing exclusively on the raising of arms. With archaeological data continuing to accumulate, it appears that this late part of the Sāmoan chronology needs to be analysed and understood in more detail, as the central Pacific witnessed the first period of contacts with Europeans, whose introduced diseases soon started to disrupt the path of cultural evolution. The transformation brought about by the first set of epidemics appear to best explain the massive change in settlement patterns observable between the archaeological surveys and the missionaries' descriptions of mainly seashore settlements in the 19th century.

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This paper has been written especially in honour of our colleague and friend Jeffrey Clark. We have never succeeded in meeting in the field, in Manono or in American Samoa, but we hope that he will be interested by this archaeological data on one of the smallest inhabited islands of the Sāmoa Archipelago. *Fa'afetai*.

NOTES

- 1 To this must be added a more symbolic outcome: that of reinforcing the prestige of the local groups through monumental architecture.
- 2 Early texts mention the existence of “stone walls on Manono” during Sāmoan conflicts of the second half of the 19th century (Davidson 1974: 241), but these need not be on the hillfort itself.

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ABSTRACT

The small island of Manono, positioned between ‘Upolu and Savai’i in the Sāmoan Archipelago, is known in oral traditions of West Polynesia as having had an important political role during the immediate pre-Christian period. An archaeological programme carried out between 2012 and 2015 has mainly concentrated on the mapping of parts of the northern half of the island, around Salua Village. This has allowed us to study in detail a portion of the slope as well as the central plateau of Manono, known to preserve a star mound first mapped in the 1960s during the large-scale programme organised under the direction of R.C. Green and J.M. Davidson. Our mapping of the 9ha fortified ridge has identified another 13 star mounds of different shapes and types, representing the largest concentration of this specifically Sāmoan layout known to date in this part of the archipelago. These are associated with another two structures of distinctively Tongan typology, referred to as *sia heu lupe*. Initially we present the general settlement pattern of the northern part of Manono Island. This is followed by a review of the main characteristics of the 14 mapped star mounds and data on their chronology. The diversity of size, height and number of arms is addressed, showing significant differences in work expenditure between individual platforms. This variability is best illustrated by the identification of three star mounds that lack central fill and are only recognised as wild pigeon-snaring structures by the presence of raised branches/arms. Finally, the Manono settlement pattern data are positioned in relation to the larger study of the pre-Christian history of Sāmoa.

Keywords: Sāmoan Islands, Manono Island, Polynesian settlement patterns, hillfort, star mound, pre-Christian period

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