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CONTENTS

<i>Notes and News</i>	217
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Articles

DANIELLE CELERMAJER and JOANNA KIDMAN <i>Embedding the Apology in the Nation's Identity</i>	219
ALBERT DAVLETSKIN <i>Numerals and Phonetic Complements in the Kohau Rongorongo Script of Easter Island</i>	243
SETH J. QUINTUS and JEFFREY T. CLARK <i>Between Chaos and Control: Spatial Perception of Domestic, Political, and Ritual Organisation in Prehistoric Samoa</i>	275

Reviews

Dunsford, Deborah, Julie Park, Judith Littleton, Ward Friesen, Phyllis Herda, Patricia Neuwelt, Jennifer Hand, Philippa Blackmore, Sagaa Malua, Jessica Grant, Robin Kearns, Lynda Bryder, and Yvonne Underhill-Sem: <i>Better Lives The Struggle for Health of Transnational Pacific Peoples in New Zealand, 1950-2000.</i> PETER DAVIS	303
Thode-Arora, Hilke: <i>Weavers of Men and Women: Niuean Weaving and its Social Implications.</i> SAFUA AKELI	305
York, Robert and Gigi York: <i>Slings and Slingstones: The Forgotten Weapons of Oceania and the Americas.</i> CALLAN ROSS-SHEPPARD	307

Younger, Stephen M.: <i>Calculating Chiefs: Simulating Leadership, Violence, and Warfare in Oceania</i> . TIMOTHY EARLE	309
<i>Publications Received</i>	312
<i>Minutes of 121st Annual General Meeting</i>	313
<i>Publications of the Polynesian Society</i>	316

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121st AGM Decision

A resolution was passed at the July 2012 Annual General Meeting: “That Council institute the two-tier subscription from 2013.” The following elaborates on this succinct statement.

Increasingly people (both Polynesian Society members and others) can access the contents of the *JPS* online, through both online providers and the *JPS Online* site. This has affected the Society’s subscription base (in the form of members’ dues) that finances the production of the *Journal*. Council has discussed this conundrum at length and determined that the best resolution is to (i) make the *JPS* available to members in either electronic form only or both electronically and in hardcopy (“two tier” refers to these two options), and (ii) to embargo access to the *Journal* through other online

sites for three years. In other words, people who are members of the Society will have immediate access to its contents upon publication, and those who opt to receive hardcopy will continue to receive a posted printed copy as well. However, the latter will pay marginally higher dues of NZ\$70 to cover the additional cost of printing and postage while the dues for electronic access only will remain at NZ\$50.

To provide restricted online electronic access has called for the creation of a dedicated website (www.thepolynesiansociety.org) with a section restricted to members via a username and password. Members will be able to use the website to pay their dues electronically which will make it more convenient to remain a member and others will find it easier to become members.

Traditional methods of paying annual dues will remain available to new and existing members.

EMBEDDING THE APOLOGY IN THE NATION'S IDENTITY

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In the postcolonial context, political apologies to indigenous peoples are often intended as a way of addressing past injustices. At the same time, apologies and the narratives of wrongdoing in which they are embedded, also touch on questions about national identity and the emotional fabric of a nation—its pride, shame and sense of itself. As Fraser and Honneth (2003) have argued, apologies are not simply about justice as a redistribution of rights or land, but also about *recognition*, and as such they speak to the way that peoples within a nation recognise each other and how those acts of recognition shape the nation's identity. In Australia and New Zealand, these apologies have become part of a social narrative that attempts to repair fractures in the nation's collective memory as well as assuage deep-seated public anxieties about the cultural and political encounters of the past. In this respect, they are central to the national memory-making process—a means of constructing new narratives about healing and reconciliation that frame a national identity that has made peace with history and can, accordingly, move into a “resettled” future.

The act of apologising as a practice of repair does not, however, guarantee its efficacy. As we know from the many apologies that have been proffered, but have had no transformative effect, the success of apology as a transformative speech act demands that it meets a number of conditions, including who apologises, the form of words, the extent of the acknowledgment, the timing and, importantly, the social and political processes in which the apology is embedded (Celermajer 2009). In this article we pick up on this latter criterion for success, arguing that if apologies are to be transformative, they need to engage the nation in its social dimensions and not only through its formal institutions.

Powerful claims for the recognition of indigenous rights and reparation for wrongs have been mounted by indigenous peoples in New Zealand and Australia in recent years.¹ In both countries, there have been a series of responses, including apologies. Nevertheless, the trajectories of these responses have been markedly different, particularly with respect to the relative role that formal institutional recognition and social movements have played. In light of this, we consider the ways in which social movements have, or have not, engaged apologies in Australia and New Zealand and compare how apologies

have been embedded in social movements and formal institutions. We argue that the institutionalisation of Crown apologies to New Zealand Māori has led to a certain alienation of these apologies from broader Pākehā society, whereas the failure to institutionalise recognition of Aboriginal and Torres Strait Islander rights in Australia has led to a deeper social engagement with questions of national identity but has not culminated in reparations or substantive changes in the political or economic circumstances of Aboriginal peoples.

MAPPING THE NATION-BUILDING NARRATIVE

As Benedict Anderson (1983) and Eric Hobsbawm (1984) have argued, the modern nation state is largely constituted through the construction of unifying narratives which do not simply overlay common identities, histories or loyalties, but underpin them. In particular, shared cultural memories play a crucial role in the nation-building project. They form the basis of narratives about national identity that serve to mobilise and unite diverse social groups in times of crisis or hardship. In this respect, common memories act as aggregating devices that promote social cohesion while, conversely, the disruption of those memories with alternative versions of the past heightens awareness about the fragility of national narratives. According to Ní Aoláin and Campbell (2005: 176) these competing versions of national history become especially vexing for ruling elites in societies where deep-seated divisions in the body politic have resulted in, or threatened, political violence.

In settler nations, the construction of national narratives rests on a series of competing frames of reference that disrupt beliefs about uniformly harmonious race relations. The existence of these conflicting historical memories underscores tensions in the present, particularly when marginalised groups generate a high degree of visibility around their experiences in ways that expose contradictions and inconsistencies in canonical national histories (see, for example, Eidson 2000, Moreno Luzón 2007). When these counter-memories are publicly articulated, the orthodoxies of power and collective identity that lie at the heart of postcolonial democracies are unsettled and the notion of a common historical enterprise is directly challenged.

In Australia and New Zealand, early colonial identity narratives were derived, in part, from the act of mapping the land—a new geography of place and possibility where belonging and identity were yet to be incorporated into the story of the nation. The landscape was a physical presence—a challenging, difficult and alien environment that was not yet “home”, but it was also a trope for a nascent national identity and, in this respect, early colonial narratives centred on the idea of the land as a *tabula rasa* or, in the case of Australia, *terra nullius*—a blank slate upon which meaning could be inscribed. Later, these narratives shifted as it became clear that, far from being devoid of

meaning, the landscape within which the settlers found themselves was a world that was already richly detailed and storied by those who had come before them. As Richard White (1991) noted, the 17th century French settlers who traversed the *pays d'en haut*, the lands upriver from Montreal, originally believed they were exploring and discovering new worlds but in fact they were doing considerably more than this—rather, they were “cocreators of a world in the making” (White 1991: 1).

Similarly, many of the early settlers in Australia and New Zealand began their travels in the new land with the expectation that their mapping of “place”, the very act of naming and narration through their stories of exploration and discovery, would call it into being in ways that would provide them with a topography of belonging and, ultimately, a collective sense of nationhood. In Australian discourse, this framing of their movement into and across the landscape is evident in contemporary descriptions of, for example, the “first” settlers, “first” explorers to cross overland, early “pioneers” and so on. In naming the land through the narrative conventions of their own cultural mores, the settlers were effectively re-mapping a world that had been mapped before, because sitting beneath their own cartographies were the land narratives of indigenous peoples and those too, spoke of place, belonging and identity. In this respect, the persistence of indigenous collective memories has always represented the potential for disrupting and unsettling settler narratives in ways that can fragment the nation’s sense of its historical identity.

These indigenous maps, narratives, sovereignties or patterns of meaning were in existence long before first contact, and indigenous peoples’ later efforts to bring them into the official discourses of the nation challenged the dominant narratives that had rendered them invisible. In the latter part of the 20th century, in the context of new social movements, self-determination movements, the international indigenous movement, and the new global turn to what Olick (2007) has called “the politics of regret”, indigenous claims took on an unprecedented salience. As competing indigenous and colonial historical interests entered the public domain, they were often the subject of bitter and protracted debate. In these situations, it became apparent that the nation-building project was founded on powerful and at times highly oppositional narratives of dispossession and dislocation. When these kinds of historical memories intrude upon one another and civil order is threatened, political elites mobilise to contain potential violence or social discord. This can happen in a variety of ways—through the concealment or creation of silences around the injustices of the past, as was the case in parts of German society after the Second World War (Langenbacher 2003) and in Spain in the post-Franco period (Davis 2005), or by selectively shaping national memories that speak to the *preferred* narratives of the past (Assman 2008: 55).

Indigenous peoples in New Zealand and Australia have actively challenged these political silences with respect to their own experiences of historical injustice and in doing so they have opened up new spaces for political engagement. In some cases, political apologies have subsequently been incorporated into the national conversation. Consequently, for some groups, the purpose of these dialogues is to negotiate the past so that a common memory can be established and the work of nation-building can continue in a spirit of reconciliation. Gooder and Jacobs (2000) have been critical of such reconciliation narratives which they saw as seeking to paste over the contentious politics that provide the only possibility for the claims of indigenous peoples to remain alive and thus for them to achieve some type of justice. Negotiating a space between those who look to reconciliation strategies as solutions to legacies of injustice and those who condemn them for avoiding the confrontation with injustice, Boraine (2006: 22) argued that reconciliation in divided societies is made possible by the creation of common memories that are acknowledged by those who “implemented the unjust system, those who fought against it, and the many more who were in the middle who claimed not to know what was happening in their country”. Indeed many commentators have remarked upon the need for wrong-doing to be acknowledged before reconciliation can take place and new forms of nationhood can be forged (see, for example, Boraine 2006, Karn 2006, Laplante and Theidon 2007, Webster 2007). In this sense, the question of justice has implications for issues of distribution, for example, the return of properties stolen or the redistribution of political authority—but it also has implications in terms of recognition and identity formation.

Precisely because of this two dimensional quality of justice, the mechanisms that postcolonial democracies developed in the latter part of the 20th century (including trials, reparation, truth commissions and apologies) must do more than simply re-balance the ledger. In particular, the acknowledgement of historical injustices and the delivery of apologies by political elites and state representatives in and of themselves do not lead to a reconciled set of cultural and political relationships from which the process of national identity-building automatically ensues. If apologies are to transform relationships and the dynamics of a nation comprised of groups with radically different experiences of the nation's history, then the process in which the apology is embedded is as important as the final speech act itself. In Australia and New Zealand the social and political movements that have coalesced around the demand for state apologies and reparations for historical injustices have their origins in very different historical experiences and have resulted in different outcomes. We consider each of these cases in turn.

NEW ZEALAND

Crown apologies to Māori peoples for breaches of the Treaty of Waitangi and a range of related historical injustices have become an increasingly common component of the Treaty settlement process in New Zealand. Generally speaking, it is accepted that a formal apology must be made if a settlement is to take effect, and guidelines for the resolution of historical claims subsequently have been developed that govern the Crown's handling of grievances, including the explicit acknowledgement of historical injustices and a statement of contrition (Office of Treaty Settlements 2002).

Contemporary Crown apologies are usually incorporated into the formal Deeds of Settlement that are signed by claimants and the Crown at the conclusion of the claims process. To this end, the Crown makes a formal, written acknowledgement of wrong-doing and specifies exactly what is being apologised for ("the acknowledgement"). The acknowledgement is a summary of wrongs drawn from an historical account which has been previously negotiated by both parties to the settlement.² This acknowledgement is followed by the apology which usually includes the phrase, "the Crown profoundly regrets and unreservedly apologises."³ The apology ends with a variation on the words: "Accordingly, with this apology the Crown seeks to atone for its past wrongs, begin the process of healing and make a significant step towards rebuilding a lasting relationship based on mutual trust and cooperation" (see, the Ngāti Apa (North Island) Claims Settlement Bill 2009 and the *Affiliate Te Arawa Iwi and Hapū Claims Settlement Act 2008*). These acknowledgements and apologies are then passed into legislation. In one instance, a statement of forgiveness by the Treaty partner, Taranaki Whānui ki Te Upoko o Te Ika, has been included in the Deed of Settlement.⁴ The Deed of Settlement is signed in public and a verbal apology is delivered by a representative of the Crown in a public forum, for example, on a *marae* or in Parliament, including, most notably, an apology to the Waikato-Tainui people in 1995 which was personally delivered by Queen Elizabeth II.

However apologies have not always been included in Treaty settlements in New Zealand (for example they were entirely absent from a series of proto-settlements signed in the 1940s), and it is likely that the recent inclusion of Crown apologies has been spurred by international human rights developments elsewhere and the recognition of indigenous rights in several United Nations fora (Coxhead 2002), as well as in response to growing calls from Māoridom for the Crown, as part of the reparation process, to express remorse for historical wrong-doing. Certainly, Māori protest has been pivotal in shaping the Crown's willingness to negotiate with affected groups. Indeed, the Waitangi Tribunal itself, as the state-sanctioned mechanism for the resolution of grievances between Māori and the Crown, was established during a period

of widespread Māori activism against Crown injustices and in this respect, the willingness to extend apologies can be seen as originating from the Crown's desire to circumvent social discord and protest. Yet, while the language of apologies is future-focused and accentuates the need for "healing", the Treaty settlement process has been largely one that emphasises the role of the Crown, its political representatives, and groups of Crown-mandated Māori *hapū* and *iwi* claimants, and in this respect the narratives of reconciliation have not, by and large, been taken up by the wider New Zealand public.

Indeed, many conservative politicians have had some success in rallying sections of the New Zealand public behind the argument that Treaty claims have divided the nation and impeded the nation-building project.⁵ For example, in 2004, the leader of the National Party, Don Brash, delivered a controversial speech on nationhood to the Orewa Rotary Club. The speech (known as "The Orewa Speech") received considerable media attention and the National Party's popularity in public opinion polls surged (*The Press* 2004). Brash argued that the Treaty of Waitangi, as the founding document of the nation, had in the past 20 years been "wrenched out of its 1840s context and become the plaything of those who would divide New Zealanders from one another, not unite us" (*Scoop Independent News* 2004). In effect, Brash was playing to public anxieties about Māori and Pākehā race relations. Thus, the trajectory of apologies to indigenous peoples in New Zealand has been part of a fraught process involving protest and dissent among groups with widely divergent views about nationhood and social justice. It is in this light that the origins and establishment of the Waitangi Tribunal as a state mechanism for mediating historical injustices under conditions of what has been, at times, intense intercultural tension, needs to be explored.

Māori Protest and the Establishment of the Waitangi Tribunal.

On 10 October 1975 the Treaty of Waitangi Act was passed by the New Zealand Parliament. It provided for the establishment of a Waitangi Tribunal to investigate Māori grievances. But the Tribunal was empowered solely to make non-binding recommendations to the government, and proposals for the new body to be granted jurisdiction to investigate historical Māori grievances dating back to the signing of the Treaty of Waitangi in 1840 were also dropped from the final legislation. The Tribunal was therefore only able to investigate contemporary grievances, greatly limiting its initial appeal to Māori, many of whom had been dispossessed of most of their lands and other resources in the 19th century.

Three days after the passage of the Act, on 13 October, an estimated 5000 Māori converged on Parliament as the 1975 Land March arrived in Wellington after a month-long trek from Te Hapua in the Far North. The Land March

was the culmination of long-term Māori dissatisfaction and anger about the Crown “land grab” or alienation of Māori land. Throughout the 1970s, Māori land rights campaigns had gathered in strength and numbers, and occupations at Bastion Point and Raglan served to mobilise a new generation of Māori. As Harris (2004: 70) noted: “By 1975 the many specific land issues taking shape around the country were weaving together.” Other protest groups and their activities such as the Māori Student’s Association and the Māori Organisation on Human Rights (MOOHR) and the *Te Hokioi* newsletter also gained considerable ground during this period, but it was Ngā Tamatoa, a Māori activist organisation, which provided a platform for Māori protest that has endured into the 21st century. Harris (2004: 42) noted:

Ngā Tamatoa was the progenitor of a Māori movement that would eventually comprise a potent collection of Māori protest groups and individuals; politically conscious, radical and unwaveringly committed to the pursuit of tino rangatiratanga.

As Māori protest became increasingly vocal during the 1960s and 1970s, many government ministers were alarmed by the prospect of widespread civil unrest, and the Waitangi Tribunal was established at a period when these fears were at their height. Belgrave (2005: 80) has suggested that the Waitangi Tribunal came about as a response to “requests” from Māori leaders across the political spectrum to provide a mechanism to bring the Treaty of Waitangi into the legal system, rather than as a response to “strident” Māori protest. However, given the anxieties about race relations that were expressed by many government ministers and Crown representatives at the time, it seems likely that Māori protest movements had a significant impact on the decision to create this new mechanism for resolving Treaty claims (Coxhead 2002). The anxieties of government representatives continued well beyond 1975 and evidence of their ongoing concern can be found, for example, in a letter written in 1977 by the Chief Judge of the Māori Land Court, K. Gillanders Scott, to the Secretary of the Department of Māori Affairs when delays in making the Tribunal operational were causing friction between Māori and the Crown. Scott wrote,

My concern is that the Tribunal can be seen as functioning and as being effective. ... The Treaty of Waitangi Act 1975 came into force on 11 October 1975. Irrespective of what may or may not be said as to the extent of its jurisdiction, it seems a likely safety-valve for pent-up feelings, emotions and grievances.⁶

In 1979, the Ngāi Tahu Māori Trust Board advised the House of Representatives that outstanding grievances would limit the potential for future peace and prosperity in the South Island region. It was noted by the Trust Board that,

In our view... we have less than two decades to conclude the remaining land matters. We see it as a political and cultural imperative for the harmonious development of our people and our region that the old sores must be healed over in a generous spirit of reconciliation. The old sores must not be permitted to continue unheeded and unhealed into another century. We are led to this view by our appreciation of the general situation in New Zealand, as well as by our perception of the changing Māori context of our own region. To remove the land grievance is to remove the root of the underlying resentment which feeds the increasing tensions. (Petition of the Ngaitahu Māori Trust Board on behalf of Ngaitahu elders and people of Otakou: Presented in House of Representatives, 7 December 1979, Submissions to Māori Affairs Select Committee 20 March 1980, cited in Belgrave 2005: 198)

Although the Waitangi Tribunal established after 1975 had gradually grown in stature among many Māori following a series of favourable decisions, mostly on environmental issues, its inability to hear historical claims was a source of ongoing dissatisfaction. Responding to growing agitation on this issue, in 1988 the 4th Labour Government finally passed amending legislation empowering the Tribunal to investigate historical Māori grievances dating back to 1840. The floodgates were effectively opened, and consequently the number of claims filed with the Tribunal rapidly escalated.

Many politicians admitted that a primary motive for allowing retrospective claims to be heard was the fear of Māori political unrest. Whetu Tirikatene-Sullivan, the Member of Parliament for Southern Māori, noted the potential for increased racial tension if the Crown refused to acknowledge Māori Treaty rights. In a debate in the House of Parliament in 1988, as the Treaty of Waitangi Act was in the process of being amended she said,

Now we must have effective, equal participation in the rights and responsibilities of citizenship as described in the third article of the Treaty and I dedicate myself to that end. I compliment the Minister on his continuing raft of Bills that recognise that need. If that need is not recognised in our time and age, I am afraid that there will be an explosion in race relations. This Bill, others that have preceded it, and those that are being introduced in tandem with it and being discussed in the House today, will ally that explosive potential. If they do not, I am afraid that not even logic will contain it. (New Zealand Parliamentary Debates [NZPD], 5 May 1988)

Noel Scott, the Member for Tongariro made similar statements on the Treaty of Waitangi Amendment Bill: “[t]o leave the issues unresolved,” he said, “is to leave the nation in constant turmoil” (NZPD, 15 September 1988). In light of this, the establishment of the Waitangi Tribunal at a time when relations between Māori and the Crown were at particularly low ebb prompted a state-initiated engagement with the peace process that prevented the situation

from deteriorating further (Hamer 2004: 6). Māori protest movements created a powerful counter-narrative which disrupted the myth of peaceful, harmonious race relations that lay at the heart of the nation-building project. But aside from government fears that unresolved land grievances would spark widespread civil unrest, these protest movements also triggered deep-seated anxieties about New Zealand's national identity by raising questions about the nation's founding stories. The establishment of the Waitangi Tribunal can therefore be seen as a response to the deeply fractured relationship between Māori and the Crown which threatened to accelerate into wider civil disorder if land grievances were not formally acknowledged and officially addressed. At the time, it was apparent that reconciliation could only be possible if state mechanisms were created to resolve breaches of the Treaty of Waitangi and associated land grievances.

These processes have, however, been largely Crown-driven responses to the fear of civil disorder and outside the state-sanctioned framework there has been little input from the majority of non-Māori New Zealanders. In recent years, the disconnection of apologies from wider public concerns is, in part, because of the way that political apologies have been incorporated into the Treaty settlement process. In Australia, the apology to indigenous peoples was a national event, whereas in New Zealand, Crown apologies are offered to individual *hapū* 'Māori kinship-based groupings' and *iwi* 'tribal groups' for specific wrongs committed against them. In this respect they are smaller, more regionalised, local affairs and little connection is made at a national level between the apology and its potential significance for creating new kinds of national identity narratives. Moreover, in recent years, Crown policy has been to cluster together Treaty claims within a geographical area and deal with them as part of what is referred to as "large, natural groupings". The problem here is that there are often many competing claims among different tribal groups within a particular region and as a result local tribal histories can, at some stages of the process, sometimes be subsumed by more generic claims (Birdling 2004: 279). In light of this, the absence of any effective efforts to inform the general public about the background to such settlements and apologies have provided fertile grounds for Pākehā discontent, seen most vividly in the extraordinary outpouring of support for Don Brash in the wake of his Orewa speech. Ironically, to the extent that Pākehā comprehend the process at all, it has been argued that this is largely in real estate terms—one-off arrangements aimed at eliminating the "Māori problem" through the return of land and assets unfairly expropriated; whereas the aspiration of many Māori remains the establishment of a mutually beneficial and ongoing partnership with non-Māori (O'Malley 1999: 140). Significant issues concerning future power-sharing and constitutional arrangements consistent with the Treaty have therefore hardly even begun to be considered.

Yet if the institutionalisation of historical grievances and the incorporation of Crown apologies to Māori groups as a component of the settlement process have failed to engage the wider New Zealand public, the Australian experience of official apologies to Aboriginal peoples has been very different. The refusal of successive Australian governments to proffer state recognition of historical wrongs has culminated in the formation of a broad social movement that captured the attention of Indigenous and settler Australians alike. When this recognition was finally given by the Australian Prime Minister in 2008, it came in response to an increasingly vocal public dissatisfaction with the official narrative of race relations that sat at the heart of Australian memory regimes about national identity and Indigenous peoples.

AUSTRALIA

Before "Bringing Them Home": Political resistance and creation of a social movement.

In 2008, as the first speech act of the new Parliament, Australian Prime Minister Kevin Rudd delivered an official apology for the forced removal of Aboriginal and Torres Strait Islander children from their families (Rudd 2008). This act was however, the culmination of ten years of social activism and viewed more broadly a prolonged history of advocacy in the face of systematic failures to recognise the rights of Indigenous Australians dating back to colonisation (Moore 1995). For the purposes of setting the apology against this contextual frame, we begin by recalling what might be termed as the period of modern activism, beginning with those movements that underpinned the 1967 Referendum. While there are a number of ways of tracing this history of activism, the dimension we wish to highlight here concerns the long dialectic between social movements and social mobilisation on one hand, and institutional resistance on the other.

Commencing with the formation of the Australian Aborigines League in 1934 and its successor, the Aboriginal Advancement League formed in 1957, Aboriginal Australians have long formed civil society organisations that sought to establish positive recognition of their distinct rights and to alleviate the negative discrimination they experienced as a result of the systematic discrimination that characterised Australian law and policy well into the late 20th century (Attwood and Markus 1999). Reaching a national climax in terms of national public recognition in 1967 with the referendum on the status of Aboriginal Australians within the Commonwealth, the 30-odd years in the middle of the 20th century represented the efforts of indigenous and a small number of non-indigenous activists to bring the largely invisible issue of the place of Indigenous Australians in the Australian polity onto the national agenda. The Referendum received an unprecedented Yes vote of 91

percent, promising enormous changes not only to the constitutional but also to the political, civil and socio-economic status of Indigenous Australians. When, however, the discrimination against and conditions of Indigenous Australians remained largely unchanged, indigenous activism took a new and more assertive turn.⁷

This was most graphically embodied in the creation of an Aboriginal “Tent Embassy” on the lawns of the Federal Parliament House, a performance of protest not simply at the failure to achieve the equality that had, so the campaign implied, motivated 91 percent of Australians to vote “Yes” in 1967, but also the failure to recognise the political dimension of the rights violations. With clear evidence that constitutional accommodation or inclusion had amounted to concealing the issue back behind the curtains, the demand now turned to a more radical call for recognition of Indigenous Australians’ status as members of political entities with some type of sovereign status, equivalent to the other nation states with whom modern Australia understood it was required to negotiate in a context of sovereign equality. Certainly, the performative gesture of the Tent Embassy was not backed up by a serious threat of secession, but it did represent a form of contentious politics indicative of the frustration over the disparity between rhetorical recognition and actual changes to law and policy commensurate with addressing, in concrete terms, the discrimination and disadvantage that communities continued to experience. A similar frustration underlay the formation of the Deaths in Custody Watch Committees in the early 1980s, largely comprising families of the disproportionate number of indigenous men who had died in custody and who, seeking to address the circumstances of those deaths, had hit the brick wall of unresponsive criminal justice systems that failed in any way to acknowledge the structural racism underpinning those deaths (Tatz 2001). These indigenous groups led mobilisations similar to those evident in the struggles for land rights, legal representation and healthcare, but were different in their particular programmes and organisational tactics. These mobilisations were characterised by the attempt to link particular patterns of discrimination in imprisonment, health care, land rights and so on with the broader features of structural discrimination and non-recognition that underpinned and linked each dimension of violation.

The Royal Commission Into Aboriginal Deaths In Custody (RCIADIC) was announced in 1987. In 1991 when the Commission produced its final report (Johnson 1991), comprising five national volumes, 99 reports for each of the deaths investigated and separate reports for the states, Australian indigenous policy entered a new phase that might be characterised as the period of reporting and institutional acknowledgment. Consistent with the structural analysis that had characterised previous activism, the report represented an

unprecedented achievement in terms of documenting and analysing the web of interconnected historical and contemporary social, economic and political structures that undermined Aboriginal and Torres Strait Islanders' ability to enjoy their rights alongside their settler co-citizens. Thus, in the wake of the RCIADIC, Australia saw the formation of the Council for Aboriginal Reconciliation, mandated "to improve the relationships between Aboriginal and Torres Strait Islander peoples and the wider Australian community", and the appointment of the Aboriginal and Torres Strait Islander Social Justice Commissioner to the Human Rights and Equal Opportunity Commission, mandated to monitor the enjoyment of human rights by Indigenous Australians and to ensure that Australia fulfilled its international human rights obligations with respect to indigenous peoples. Both offices produced extensive, detailed and broadly researched reports on the status of Indigenous Australians across a range of socio-economic, civil, political and cultural rights, and established a body of documentation on what nevertheless continued to be, despite this plethora of reporting, an apparently entrenched pattern of disadvantage.

This is not to say that the work of those offices was without effect, at least in the sense that it did raise white Australians' consciousness of the broad disadvantage that their indigenous co-citizens continued to experience. Yet, this period of intensive institutional scrutiny by statutory authorities and their accompanying non-government organisations was not matched by altered policies and certainly did not translate into substantive changes in the socio-economic status of Indigenous Australians. Even the landmark *Mabo* decision of 1992, which inscribed into Australian Common Law a recognition of the prior and ongoing land rights of Indigenous Australians met with what we might call a similar "translation deficit". That is, when the import of the judicial decision (that Aboriginal and Torres Strait Islanders retained native title rights) was translated into legislation (the *Native Title Act [1993]*), the possibilities that had opened up for rights recognition were significantly constrained. This was even more pronounced when the *Wik* decisions met with the conservative Howard Government's "Wik principles", explicitly designed to contain the claims of indigenous peoples might make. A pattern seemed to be emerging that institutions empowered to oversee the situation of Indigenous Australians, be they Royal Commissions, Statutory authorities, or courts, recognised the structural complexities of systematic discrimination but there remained major impediments to implementation.

Indeed, this period was marked by an increasing gap between the changing consciousness in the Australian public and changes in law and policy. The Council for Aboriginal Reconciliation had, for example, created listening circles across the country in which indigenous and non-indigenous people spoke about their shared but disparate histories, and non-indigenous people

came face to face, many for the first time, with the reality of a history that had, as Stanner (1969) once put it, been carefully omitted from the official view. Similarly, the judgment in *Mabo* poignantly transcended the context of legal technicalities to call Australians to account for a past and a contemporary policy stance that, as Chief Justice Brennan pronounced: "... has no place in the contemporary law of this country."⁸ Dodson, the inaugural Social Justice Commissioner, picked up this rhetorical gesture to effect when he wrote in his first "State of the Nation" report:

The deepest significance of the judgment is its potential to hold a mirror to the face of contemporary Australia. In the background is the history of this country. In the foreground is a nation with a choice. There is no possibility to look away. The recognition of native title is not merely a recognition of rights at law. It is a recognition of basic human rights and realities about the origins of this nation: the values which informed its past and the values which will inform its future. (Australian Human Rights Commission 1993: 12)

If, following a social constructivist understanding of political change, one understands norms and social expectations as key determinants of major shifts in law and policy, one could conclude that during this period of Australian public life, the key sphere of impact was not that of hard law and policy, but rather the soft underpinnings of social norms (Keck and Sikkink 1998). This is not to deny the resistance to these conscience calls that remained evident in many quarters of the Australian public, as was evident from the vitriolic advertising campaign that the National Farmers Federation and the Mining Lobby launched in the wake of *Mabo* and *Wik*.⁹ Nevertheless, as the formation of Australians for Native Title and Reconciliation (ANTAR) in 1997 made evident, the burden of advocacy that had been carried by indigenous activists and communities and a small number of non-indigenous allies had, to a significant extent, been assumed by large numbers of ordinary settler Australians. Armed with the incontrovertible evidence of historical and ongoing discrimination, marginalisation and structural racism, and unwilling to continue to uphold the national myth of peaceful settlement of an empty country, ANTAR became a large and well-organised social movement giving voice to the new normative environment.

After "Bringing Them Home"

By the time the *Report of the National Inquiry into the Forced Removal of Aboriginal and Torres Strait Islander Children from their Families (Bringing Them Home)* (Wilson 1997) was released in 1997, an exhaustive litany of the violations suffered by Indigenous Australians had been placed on the public agenda. None of these official reports, however, prepared other

Australians for the shock of reading or hearing the first person testimonies of Aboriginal Australians, often their contemporaries, who had been taken from their families and placed in institutions or in foster or adoptive homes. Unlike other reports, penned by policy analysts or lawyers, *Bringing Them Home* was largely a direct transcription of the words that Aboriginal people themselves had used when they spoke to the Commission about what had happened to them. Stripped of all mediation, they spoke nakedly and directly about the loss of parents and siblings, the disconnection from country and culture, the systematic humiliation and denigration of their identities, the physical, psychological and sexual abuse, and of the desolation they had subsequently experienced.

Of the 54 recommendations that the report made, it is worth reflecting on why it was that the two recommendations concerning an apology were those that received the most public attention. On one level, the answer might seem obvious insofar as the other recommendations demanded action from government and not civil society, but in fact the apology recommendations were also directed towards parliaments and relevant agencies, yet it was civil society that took up the act of apologising. A better explanation is that although the intention of the apology was to provide some form of recognition or reparation for the wrongs suffered by Indigenous Australians, in the context of the normative environment into which it landed, it spoke powerfully to existing concerns about the legitimacy of contemporary postcolonial Australia. One might, as Goeder and Jacobs (2000) have argued, see this concern as a type of bad faith, a melancholic nostalgia for the lost object of postcolonial innocence; or, interpreting it outside a hermeneutics of suspicion, one might see the response of other Australians as an authentic gesture towards recognition, albeit one insufficiently connected to the levers of *realpolitik* that might have made a more substantial difference to law and policy. Drawing on Nancy Fraser's (1997) matrix of justice as both distribution and recognition, settler Australians were clearly impressed by the failures of recognition and sought mechanisms whereby the field in which the meanings of Indigenous and settler identities were made could be reconstituted.

Indeed, not since the anti-Vietnam demonstrations had Australia seen anything like the social movement that developed around the apology in terms of breadth and depth with apologies written, spoken, artistically represented and even sung across the social and political landscape. First, those bodies that had been explicitly named in the recommendations, including all Australian parliaments (with the notable absence of the Commonwealth) staged apologies in their ceremonial chambers.¹⁰ During these performative rituals, Aboriginal people were invited to recount their histories and individual parliamentarians of all political colours responded in similarly personal terms.¹¹ Similarly,

apologies were given by chief magistrates, state police forces and various governmental agencies implicated in the removal process. The official organs of a number of churches apologised, including not only those that had borne some direct responsibility in removal, but also those that felt called upon to recognise the wrong.¹²

The richest swell of the apology movement occurred, however, in social spheres beyond those explicitly nominated in the report: apologies emanating from welfare agencies, trade unions, professional associations, civic clubs and associations, schools, parents' and citizens' associations, and ethnic communities. For those who belonged to no particular civil society organisation, but who nevertheless wished to join the movement "Sorry Books", open for any Australian to sign, circulated the country.¹³ For those who preferred virtual participation, an apology website was created where they could register their names. More dramatically, in October 1997, the first "Sea of Hands" in which individual Australians planted oversized red, white, green, yellow, blue or black hands into the ground, thereby creating a living sculpture, was formed on the lawns of Parliament House in Canberra. So popular was this act of popular expression that similar "Seas" were created over the following years at a range of iconic public sites such as Bondi Beach, Uluru (the symbolic heart of Aboriginal Australia) and the Sydney Harbour Bridge.¹⁴

One year after the release of the report (26 May 1997), the inaugural *National Sorry Day*, overseen by a National Sorry Day Committee, was marked by events across the country that were organised by schools, churches and local councils. On this inaugural *Sorry Day* Aboriginal people were invited to publicly recount their personal stories after which apologies were offered. The "Sorry Books" were ceremonially handed over to Aboriginal representatives.

In Sydney, a *Welcome Home* ceremony was held, during which Aboriginal elders welcomed back the (now adult) stolen children with traditional smoking, dance and song before hundreds of Australians—Aboriginal and all others.¹⁵ In Melbourne, thousands attended a service at the Anglican Cathedral and then marched to City Hall where—in a remarkably literal act of political repatriation—the mayor handed over the keys to the city to representatives of the Stolen Generation. In Queensland, every prison (and, ironically, its disproportionate number of Indigenous inmates) observed a minute's silence.

The following year, "Sorry Day" was renamed "Journey of Healing" perhaps reflecting a concern that it be conciliatory rather than divisive, but the activities were continuous with those already set in train. At Uluru, traditional owners handed members of the Stolen Generation ten pairs of music sticks, bearing the symbols of shackles, teardrops above the Aboriginal flag and a boomerang, for them to take back to ceremonies being held in

each of the capital cities (see Jopson 1999).¹⁶ In Adelaide, 1000 people walked to places important in the story of removal, but largely forgotten in contemporary Australia, such as the site of Piltawodli, a school serving the Kaurna people in South Australia, opened by German missionaries in 1839. There, school children sang in the traditional language, perhaps for the first time since 1845 when troops demolished the buildings and the children living there were moved to an English-language school that banned their language. Again on 26 May 2000, an estimated one million people across Australia took part in coordinated reconciliation marches, 250,000 alone crossing the Sydney Harbour Bridge. For the 2002 ceremony, Goanna, one of Australia's legendary bands reunited to perform *Sorry*, a song paying tribute to the Stolen Generation and their families on the lawn in front of Parliament House.¹⁷

No doubt this social movement was fuelled in part by the steadfast refusal of the Conservative Prime Minister, John Howard, to offer an apology on behalf of the nation. Indeed, at a certain point, the movement, by then embroiled in the very public battles that historians were having about the "truth" of Australia's past, became as much about contesting Howard's stance as about the apology itself. In other words, the institutional resistance to acting on the recommendations of *Bringing them Home*, the last of countless reports that had so characterised Australian politics over the previous two decades, stood in a dialectical opposition to a social movement increasingly embedded in Australian civil society. Indeed, it has been the failure of institutionalisation that has been the engine of the social movement.

TOWARDS A NARRATIVE OF RECONCILIATION?

Narratives of national identity in post-settler nations are frequently characterised by conflicting claims to physical, social and historical territories. As contemporary postcolonial nations contemplate the prospect for a "just future", they must therefore attend to the various dimensions of this dissent over the nature of the land—its meaning, its ownership and its history. As Treaty processes in New Zealand and Native Title negotiations in Australia have made clear, questions about land ownership and sovereignty are central to the attempt to construct a just nation, but beyond this, the work of reconciliation between indigenous and non-indigenous peoples lies in the capacity to offer the hope that those identity narratives can move into a new, common future. Thus, when apologies for historical wrongdoing are made to groups of indigenous peoples, a political space is opened where new possibilities come into play.

It is through the origins and social processes in which political apologies are embedded that the movement towards reconciliation becomes most visible. The urge to construct a common memory built upon a mutually

comprehensible past is a way of mending national histories that have been fractured by the experience of dislocation and loss. It is a means of bringing coherence, and perhaps cohesion, into the nation's story of itself. Thus, government apologies to indigenous peoples for historical wrongs, and the public rituals and trappings of those expressions of contrition, are central to the way that nations perceive and present themselves, and project these newly established national memories into the future. At the same time, it is when apologies emerge from civil society activism and are evidently a performance of societal recognition of the wrongs committed against indigenous peoples and their rightful place in civil society, that the weaving of the common societal future can take place.

In this respect, they are a necessary component in the construction of a new cultural logic. To return to Richard White's notion of the middle ground, new alliances forged between peoples are predicated on interests that are generated within their own cultures and societies. Far from being elaborate cultural fictions, these alliances and the attendant ceremonies and rituals are the medium through which national identities and narratives are recreated. Drawing on his examination of the construction of a shared geopolitical domain in the early contact period between the French and Algonquin people, White (1991: 93) suggested that "[t]hese rituals and ceremonials were not the decorative covering of the alliance; they were its sinews. They helped to bind together a common world". We suggest that it is through the rituals of apologies that these complex alliances take shape and open up possibilities for change. They make feasible the creation of new forms of national identity at the same time as delimiting some of the anxieties that are associated with a disrupted and unsettled past.

As we have shown in the two cases examined in this article, however, apologies may take different forms, with the relative role of state and society being one dimension along which they may differ. Thus, at one end apologies might be characterised by a high degree of "institutional capture" and at the other end by the state resisting any institutional expression of the apology. In the latter instance apologies may be characterised as performances by social movements seeking to challenge existing state practices and institutional arrangements. While a successful social movement advocating apology (through performing apology at a societal level, as in the Australian case) may eventually result in a state apology, these two processes are not necessarily contiguous and may even run in different directions.

We would argue that to begin the work of weaving a transformed national narrative, apologies must be embedded in the social narratives and lived experiences of the people of the nation. Certainly, their status as speech acts of the State are critical to their legitimacy, but unless apologies speak from,

of and to the people, there is a danger that they will remain enclosed in the formal narratives of law. In this sense, the representative power of the State apology and the degree to which an institutionalised apology is indicative of a broader social movement (and indeed crystallises and legitimises a broader social recognition) is critical to its success in achieving these broader objectives. This can be seen in the starkly contrasting origins and political outcomes associated with the apology movements of New Zealand and Australia. In Australia, the apology that was finally delivered was the fruit of many years of socially embedded debate and advocacy—a social movement that finally coalesced around the demand for an expression of contrition from the Crown. The ensuing apology was a national event that signalled the creation of a new memory regime—one that recognised the way that injustices against Indigenous Australians had fractured the nation's account of itself and acknowledged the need for new storylines of nationhood to emerge. In this sense, it was, in many respects, a redemptive narrative. At the same time the engine of this deep social significance was, to a large extent, the resistance on the part of the state to encode the demands of social movements in structural recognition of the political and land rights of Aboriginal peoples.

By contrast, Crown apologies in New Zealand had their beginnings in the government's desire to curb Māori political dissent at a time when it threatened to spill over into widespread civil disorder. In this respect, the New Zealand Crown apology incorporates elements of the redemptive narrative but can be read, in part, as a narrative of containment—a way of limiting further civil disharmony. At the same time, the New Zealand Crown has gone much further than Australia in encoding the political and land rights of Māori. Yet, the subsequent institutionalisation of the Treaty claims process has created an environment whereby Crown apologies are localised insofar as contrition is expressed to specific tribal groups in different regions, and a degree of disconnection from the nation as a whole has been the result. These disconnections have tended to increase rather than assuage public anxieties and have, thus far, failed to have much impact on the development of new memory regimes that incorporate Māori narratives of dispossession into the nation's memory of itself.

In this regard, our observations about the ways in which demands for the recognition of indigenous rights have or have not been taken up as social movements are consistent with the more complex understanding of the dynamic relationship between social movements and political opportunity structures that has emerged from the literature.¹⁸ That is, in the same way as Kitschelt (1986) read his comparative study of ecological movements as indicating that a more open political system (Sweden) may lead to the institutional assimilation of ecological movements, we have observed how

in the New Zealand case, the State's willingness to provide (at least partial) institutional recognition of the demands from well organised and resourced Māori movements stemmed the growth of broader social movements that were embraced by broader Pākehā society. Correlatively, just as the more closed system (France) led to the growth of ecological social movements in that nation and their adoption of more confrontational strategies and moves, here we have observed that the long term refusal to institutionalise demands for Indigenous recognition in the Australian case somewhat ironically provided the opportunity structure for the growth of a far broader social movement around Indigenous rights. Our observations are thus consistent with Eisinger's suggestion (1973: 15) that the relationship between the strength of a social movement and the openness or closure of opportunities embedded in institutional structures is curvilinear. Indeed, the fact that the Indigenous Reconciliation movement that coalesced around the demand for an apology in Australia has subsequently dwindled, despite the ongoing failure to deliver on a range of right related demands, is indicative of both this curvilinear relationship and the dynamic nature of such opportunity structures.¹⁹

Where the object of a social movement is to gain institutional (state) recognition or assimilation of a set of demands or form of recognition, the negative impact of such institutionalisation on the social movement itself is of course nothing but a sign of its success. In the more complex case of reforming national narratives and the lived experience of race relations in postcolonial contexts, however, such apparent successes may undercut that very process. The danger is further heightened where numerous actors, including the state, have strong incentives to reach a place of putative closure where the reparations afforded are framed as final acts in a narrative that can now be placed in the sealed past. The impact of such closure is not only that it diverts attention from the unaddressed violations of the past and the ongoing failures of justice, understood as specific acts or inequalities, but also that it renders invisible the fabric of fractured relations that continue to characterise postcolonial societies. These fractures then only come into view when conversations about identity and justice take place between living members of those societies. This is of course not to deny the importance of institutional recognition, especially where it involves symbolic and material dimensions of reparation. It is rather to remind us of the ways in which issues of indigenous rights and national identity span the many dimensions of that amorphous object, "the nation-state".

Beyond these differences, what remains true in both cases is that irrespective of the ability of reconciliation processes to effectively weave a new national narrative, for many indigenous peoples, they carry with them a particular sorrow that involves a partial and highly conditional acceptance of irretrievable loss since there can never be full compensation for the injury

to land and lives. While it is a crucially important aspect of the process, the public spectacle of the Crown apology is also, for many indigenous groups, a profound and deep-seated memory of loss. Thus understood, the reparation afforded would also, as a true form of recognition, encode the irreparable, the incomplete and the impossibility of an institutional solution that would, or should, close a national conversation.

NOTES

1. Throughout this article, we use the term Indigenous when speaking either of both Aboriginal and Torres Strait Islander peoples in the Australian case, or both Indigenous Australians and Māori. For the New Zealand case we use the common term Pākehā and for Australia we have used other Australians or settler Australians rather than the term Non-Indigenous Australians to avoid identifying a diverse category of persons in purely negative terms.
2. For example, see New Zealand Parliament, *Affiliate Te Arawa Iwi and Hapū Claims Settlement Act 2008*. (29 September 2008).
3. For example, see New Zealand Parliament. Ngāti Apa (North Island) Claims Settlement Bill 2009. *Bills Digests 1714*. (25 August 2009).
4. For example, see New Zealand Parliamentary Debates (NZPD), *Port Nicholson Block (Taranaki Whānui ki Te Upoko o Te Ika) Claims Settlement Bill—In Committee*, (22 July 2009).
5. See, for example, ACT politician Rodney Hide's speech on Waitangi Day 2005, arguing that "[w]e need to put the Treaty grievance industry behind us for all our sakes. We must ensure that proper process prevails and that violent protest and intimidation don't pay off." *Scoop Independent News*, 7 February 2005. Waitangi Day—New Zealand's Birthday. (Rodney Hide) Act Press Releases.
6. K. Gillanders Scott (Chief Judge, Māori Land Court) to Mr. Apperley (Secretary, Department of Maori Affairs), 7 March 1977, AAMK – 869 – W3074- 1592a-19/14/1, Archives NZ.
7. The 1967 Referendum, often misremembered as the Referendum to give Aboriginal people the vote was in fact on the question of whether Aboriginal people would have constitutional power to legislate in respect of Aboriginal people. Nevertheless, it was presented, in the popular imagination, as a vote for equality and the eradication of the appalling conditions suffered by Indigenous Australians (Attwood and Markus 1997).
8. '*Mabo*', (1992) 175 CLR 1, 42 (Brennan J).
9. One of the original television advertisements can be viewed at: <http://www.mabonativetitle.com/info/NFF2.htm>
10. See, *Content of Apologies By State and Territory Parliaments* available at: http://www.humanrights.gov.au/social_justice/bth_report/apologies_states.html

11. South Australia: 28 May 1997, Western Australia: 28 May 1997, Queensland: 3 June 1997, ACT: 17 June 1997, New South Wales: 18 June 1997, Tasmania: 13 August 1997 and Victoria: 17 September 1997. The Northern Territory Government has not made a statement of apology.
12. A number of church apologies can be found on the Reconciliation and Social Justice Online Library at <http://www.austlii.edu.au/au/special/rsjproject/rsjlibrary/hreoc/stolen/stolen31.html#Heading112>
13. Many of the “Sorry Books” are now being held at the Australian Institute of Aboriginal and Torres Strait Islander Studies.
14. A history and images can be found at http://www.antar.org.au/sea_of_hands
15. Smoking, a ritual form of spirit cleansing, involves burning plants and leaves in the space to be cleansed.
16. The connection between repentance and return, which is so much part of the drama around removal, is strongly resonant of the meaning of *teshuvah* as ‘return’, not simply ‘repentance’.
17. There was even a “reconcilioke”—a karaoke event dedicated to reconciliation and apology. Details about the activities can be found at the official Apology website: <http://apology.west.net.au/index.html> and links.
18. An authoritative definition of a political opportunity structure is: “... the consistent—but not necessarily permanent, formal or national—signals to social or political actors which either discourage or encourage them to use their internal resources to form social movements” (Tarrow 1996: 54).
19. Indeed, one might add that the swell of the apology movement in the late Howard years, even seven to ten years after the original report, can be partially explained by what Tilly calls the instability of political alignments and the availabilities of allies in an alternative political power arrangement. With an election on the horizon and the goals of the movement being publicly embraced as part of the election platform of the then opposition, the political opportunities fueling the movement were heightened (see Tilly 2008: 91-92).

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ABSTRACT

Both Australia and New Zealand have been marked by powerful claims for reparation for wrongs committed against indigenous peoples, with the responses to these claims including apologies. The trajectories of these responses have differed, however, particularly with respect to the relative role of formal institutional recognition and social movements. This paper argues that the institutionalisation of Crown apologies to New Zealand Māori has led to a certain alienation of these apologies from broader Pākehā society, whereas the failure to institutionalise recognition of Aboriginal and Torres Strait Islander rights in Australia has more deeply engaged questions of national identity for Australia as a whole. This comparative finding is consistent with a complex understanding of the relationship between political opportunity structures and social movements, whereby “a mix of open and closed structures” (Eisinger 1983: 15) is most conducive to social movements.

Keywords: indigenous rights, apology, reconciliation, social movements, transitional justice

NUMERALS AND PHONETIC COMPLEMENTS IN THE *KOHAU RONGORONGO* SCRIPT OF EASTER ISLAND

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E ho 'oulu ana i ke kini o ke akua, ka lehu o ke akua, ka mano o ke akua.

Invoke we now the 40,000 gods, the 400,000 gods, the 4,000 gods!

Opening and closing formula of Old Hawaiian prayers (Beckwith 1940: 79)

A large number of specialist works have been dedicated to the study of indigenous Easter Island script, called *kohau rongorongo*. Nonetheless, it remains undeciphered, though the total length of the texts, around 11,300 glyphs,¹ implies that it can be. Historiographic analysis is beyond of the scope of this article (but see Fischer 1997) and I believe that such a work should be written after some satisfactory results in decipherment have been achieved. In my opinion, the following works, in chronological order, made considerable contributions to the development of our understanding of the *kohau rongorongo* script: Harrison 1874, Janssen 1893, Piotrowski 1925, Ross 1940, Métraux 1940: 389-411, Kudrjajtsev 1949, Olderogge 1949, Butinov and Knorozov 1956, Barthel 1958, Guy 1982, Pozdniakov 1996, and Horley 2007 and 2009. Today various published drawings, rubbings and photographs are available for every single inscription (see for example, Piotrowski 1925; Ross 1940; Olderogge 1949; Barthel 1958; Fischer 1997; Horley 2009, 2010, 2011a). Consequently, the documentation of *kohau rongorongo* inscriptions may now be considered adequate even as it is being further improved by the joint efforts of scholars.

Three points are worthy of note, however. First, to date there are no efficient sign catalogues based on a thorough analysis of contexts, and moreover such a catalogue cannot be done until we look for typological parallels and have greater understanding of the script's mechanics and the social purposes for which the extant texts were conceived—that is, until we achieve a better understanding of their content. Second, bilingual texts in the strict sense of the word are unknown and artificial bilingual texts are few. By the term “artificial bilingual texts” I mean cases where either a particular structure of a text, or contexts of an inscription, permit us to compare it with either extant alphabetic texts or examples of spoken speech in a particular language and at least partially recognise its content. Put another way, artificially bilingual is a content interpretation of a text based on external data. Third, the majority of works on the script lack consistency from a typological point of view and

from the perspective of the history of decipherment; for example, no sign types have yet been defined, no phonetic complements have been either found or searched for, no persuasive grammatical analysis of the texts has been suggested (for attempts see Fedorova 1982, Kondratov 1969) and sometimes grammatical markers are considered under-represented or totally omitted in the texts (Barthel 1958: 316; Butinov and Knorozov 1956, Fedorova 1982, Kondratov 1969, 1976). No “name-tags”, i.e., culturally widespread texts denoting the ownership of inscribed objects and making reference to the objects on which they are inscribed, have been looked for (see Houston, Stuart and Taube 1989, Mathews 1979). Statistical methods, based on the idea of simple counts of signs without taking into account the contexts where they are attested, remain popular in the field (Harris 2010; Horley 2005, 2007; Kondratov 1969; Melka 2009a; Pozdniakov 1996; Pozdniakov and Pozdniakov 2007). I believe that this situation is attributable to the peculiar nature of the surviving *kohau rongorongo* texts; we are forced to deal with a limited number of lengthy texts written with an intricate graphic system and without word-dividers of any kind. This graphic system makes extensive use of complicated ligatures consisting of several individual signs with no clear reading order. By the term “ligatures” I mean connected writing of several independent signs without blank spaces between them. It should be noted that it is sometimes difficult and even impossible to dissect a ligature into individual signs owing to the lack of parallel passages where the signs in question are found disconnected.

THEORETICAL FRAMEWORK

The theoretical framework used in this article is the typological approach; all the known hieroglyphic scripts are recognised as logosyllabic writing systems. Hence, all known logosyllabic writing systems in the world share many traits and devices for writing speech in natural languages. Some features that are typologically infrequent and even ones unattested in the known writing systems might have a place in the script of Easter Island. However, it is rather unlikely. We can search for examples of typologically common features and devices in the *rongorongo* script and explain them by analogy with well understood logosyllabic scripts if the proposed analogical explanations fit the context. All the well-known logosyllabic writing systems possess at least two functional types of signs: phonetic signs (those that indicate abstract sequences of sounds) and word-signs (signs that spell a word and indicate its meaning). These systems use the former as terminal phonetic complements in order to clarify the reading of the latter, indicating and at least partially reiterating the reading of word-signs (see Gelb 1963). In the logosyllabic writing systems phonetic signs are syllabic and never alphabetical; in many

logosyllabic scripts all the phonetic signs are of CV shape only, where C stands for a consonant and V for a vowel. In this article I use the traditional system of sign transliteration and follow conventions shared by Assyriologists, Mayanists and others (see Caplice 2002, Fox and Justeson 1984, Kettunen and Helmke 2010; and also Payne 2010), in which transliterated signs are printed in bold case, word-signs are given in capitals and phonetic signs in small letters. Specifically, a stylised image of the jaguar head in Mayan inscriptions has the value **B' AHLAM** JAGUAR and frequently, though not always, it appears accompanied by a phonetic sign **ma**, in which case both signs are used to spell the word *b'ahlam* 'jaguar'. A few examples of the word written with phonetic signs only are attested in the script: **b'a-la-ma** *b'ahlam* 'jaguar'. Semantic determinatives, that is, signs used to indicate the semantic class to which a spelled word belongs, are attested in many but not all hieroglyphic scripts. Initial phonetic complements are uncommon and even absent in many logosyllabic writing systems (see, for example, Grube 2010). Recognition of different functional types of signs and rules of their combination has been a very important achievement in decipherments. Thus, it makes sense to look for word-signs, phonetic signs and phonetic complements in the script of Easter Island. The traditional transliteration system facilitates the kind of analysis applied throughout this article.

From a technical point of view, the notion of internal data of text is crucial here; every single sign and every single text have their inherent combinatorial properties which, at least partially, can be revealed by analysing the behaviour of independent signs and their combinations, without resorting to evidence external to the analysed text (see Knorozov 1982). Combinatorial properties of an individual sign, if the data are sufficient, should allow us to understand its functional loads: for example, in showing the particular functional type the sign belongs to and to finding its complete and partial equivalencies with other signs. The inherent properties of a text, that is to say, the combinatorial properties of certain signs in a given text, are what I shall call "text structure". A retrieved text structure can be searched for comparison with external data, *par excellence*, traditional texts written with alphabetic characters in the Rapanui language. In the case of a successful comparison with external data, inherent properties of a text will provide us with an artificial bilingual—the most valued cornerstone in deciphering.

While describing the combinatorial properties of signs in logosyllabic scripts, the method of sign substitution has shown to be beneficial (Knorozov 1952: 116, Lounsbury 1984, Stuart 1987). The method consists of examining changes in the writing of the "presumed" same unit of script in identical contexts, where identical surroundings implicate the same meaning or, better said, the same value of the signs in question. The method has been useful

for revealing phonetic complements and establishing equivalences between signs. The equivalences can be of two types: equivalencies between two visually different signs or two graphic variants of the same sign that possess the same reading value (allographs); and equivalencies between a sign and a sign group, when a word-sign, a combination of phonetic signs, and a combination of a word-sign and phonetic complements to the word-sign, are used to spell the same word. Patterns of substitution based on unique cases and, including some additional changes in the signs occurring both before and after the sign in question, should not be considered substitutions because they might result in erroneous interpretations. It is important to distinguish complete and incomplete substitutions; incomplete substitutions are those which show interchange between two signs not in all contexts, but only in some particular ones. If not explained by the idiosyncrasy of a scribe or a scribal school, an incomplete substitution does not imply identical, but rather similar, reading values of two signs or two sign groups.

Fortunately, the surviving *kohau rongorongo* texts provide us with many different testing areas for the study of substitutions. These include: (i) two lengthy parallel texts, one consisting of three examples—the Great St Petersburg Tablet, the Small St Petersburg Tablet and the Great Santiago Tablet (Kudrjajtsev 1949) and another one of two examples—the London Tablet and the Small Santiago Tablet, Recto (Butinov and Knorozov 1956), as well as (ii) several attested lists (Barthel 1958, Butinov and Knorozov 1956) (iii), recurrent sign-groups shared by various texts (Butinov and Knorozov 1956, Horley 2007, Pozdniakov 1996) (iv) and highly structured text fragments (Guy 1982).

I consider both currently available sign catalogues for the *kohau rongorongo* script (Barthel 1958, Pozdniakov and Pozdniakov 2007) unsatisfactory and misleading when analysing texts, even though they provide many interesting insights. Therefore I will use descriptive nicknames such as, for example, “Turtle”, and ask the reader to consult the figures and discussion of graphic variation attested for a particular sign in the article. While this method of rendering signs may seem superfluous and awkward for a reader who knows the mentioned catalogues by heart, it allows me to deal with graphic designs directly and protects against overgeneralisations in graphic analysis. It is important to emphasise that the specific nickname “Turtle” does not mean that the sign should be read “turtle” or that it depicts one. Rather it simply means that the sign looks like one. However, to the extent possible, I am inclined to apply descriptive nicknames consistent with iconographic analysis of the signs in question. For the sake of clarity, I append a list of the signs discussed with their nicknames and the numbers that refer to the generally accepted system of graphic transcription (Barthel 1958). In transliterations I will use the plus

sign (+), if signs are written in ligatures, that is to say, connected, and I will use the minus sign (–), if they are separated by blank space in written form. The multiplier sign (x) is used to render intersections, that is to say, parallel fragments of text attested on various tablets, as for example Bv02 x Cb13 x Hv10 x Pv11, where capital letters refer to Thomas Barthel’s designations of the *kohau rongorongo* surviving texts.

When used, Bodo Spranz’ drawings (published in Barthel 1958) were compared with Steven Fischer’s (1997) and with published photographs (Heyerdahl 1975; Orliac and Orliac 1995, 2008; Ramírez and Huber 2000; Van Hoorebeek 1979) and my own photographs taken in the British Museum, London, and in the Peter the Great Museum of Anthropology and Ethnography, St Petersburg.

Finally, a remark about ligatures: I find it conceivable that many *rongorongo* ligatures are insignificant and might be explained by graphic reasons. For example, some signs (“Fishing Line”, “Leaved Vine”, etc.) when written appear attached to other signs because of their peculiar shape (Davletshin 2012: Fig. 5).

RECONSIDERING THE SO-CALLED “LUNAR CALENDAR”

In his seminal work on Easter Island script Barthel (1958: 242-47) suggested that a highly structured fragment of the text on the Mamari Tablet represents a record of an ancient Rapanui lunar calendar. This interpretation has gained wide acceptance in the literature and a number of works have been dedicated to its elaboration (Berthin and Berthin 2006, Guy 1990, Horley 2011b, Krupa 1971, Pozdniakov 2011, Wiczorek 2011). Some of them assert that it is the only secure content interpretation ever offered for *kohau rongorongo* texts (Melka 2009b: 111, Pozdniakov and Pozdniakov 2007: 7). In my opinion, there are only two convincing content interpretations suggested: the genealogical sequence on the Small Santiago Tablet (Butinov and Knorozov 1956) and interpretation of the text on the Santiago Staff as a name list (Yuri Knorozov pers. comm. cited in Fedorova 1997).

Let us turn to the calendric interpretation as it was set out by Barthel. At the beginning Barthel (1958: 242) asserted that in Easter Island script the moon is represented by a crescent, in the majority of cases as the waxing moon.² This particular iconographic interpretation, as well as other interpretations of signs in Chapter 5 “The celestial bodies”, was based on Metoro Tauara’s readings collected by Florentin Étienne Jaussen (1893). Barthel went on to comment on a particular text passage on the Mamari, lines Ca6-9, characterised by a stereotyped sequence of signs, a sequence that is repeated eight times. The whole passage contains a total of 30 lunar signs (Fig. 1). He equates the number of lunar signs in the passage with the number of nights in the synodic

A

Ca5 𐄀𐄁𐄂𐄃 𐄄𐄅𐄆𐄇 𐄈𐄉𐄊𐄋 | 𐄌𐄍𐄎𐄏𐄐𐄑
 𐄒
 𐄓𐄔𐄕𐄖

Ca5-6 𐄗 𐄘 𐄙 𐄚 𐄛𐄜𐄝𐄞 𐄟
 𐄠𐄡𐄢 𐄣𐄤𐄥𐄦𐄧𐄨𐄩 𐄪

α

I	𐄫𐄬)𐄭𐄮𐄯𐄰	𐄱 (𐄲
Ca6-7 II	𐄫𐄬)𐄭 𐄮	((((((
III	𐄫𐄬)𐄭𐄮𐄯	(𐄰 𐄱 ² 𐄲 ³
IV	𐄫𐄬)𐄭𐄮𐄯	𐄳 ((𐄴
Ca7-8 V	𐄫𐄬)𐄭𐄮𐄯	(((((
VI	𐄫𐄬)𐄭𐄮𐄯	((𐄲
VII	𐄫𐄬)𐄭𐄮𐄯 𐄰	(((((
Ca8-9 VIII	𐄫𐄬)𐄭𐄮𐄯 𐄱𐄲𐄳	

β

Ca9 ((𐄷𐄸 𐄹𐄺 𐄻𐄼 𐄽𐄾) 𐄿𐀀𐀁𐀂

Figure 1. The so-called “calendric” passage on the Mamari Tablet, Recto.
 A. Structural analysis of the passage.

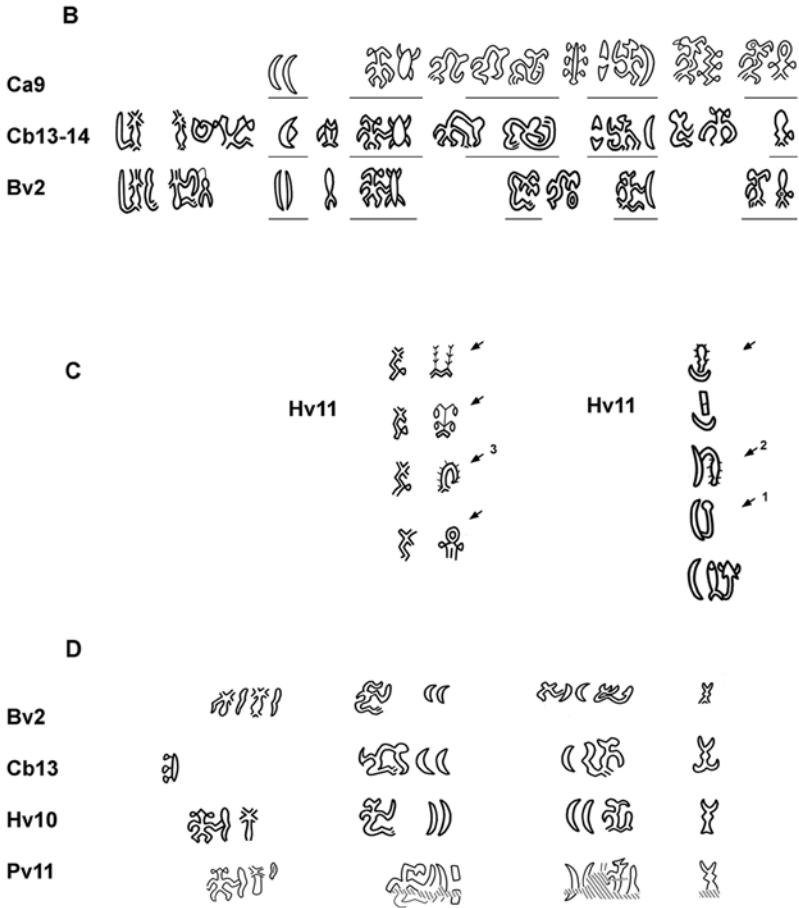


Figure 1. B. Ca09 x Cb14 x Bv02. C. Two lists of plants from the Great Santiago Tablet, Verso, Line 11. D. Bv02 x Cb13 x Hv10 x Pv11. B, C (after Paul Horley's drawings by his courtesy), H (after drawings by Bodo Spranz in Barthel 1958), P (drawing by the author). Arrows indicate inserted plants depicting signs, numbers by arrows indicate corresponding signs in the two lists of plants.

period of the moon (1958: 242). Once this specific text portion is compared with known ethnographic records of the Easter Island lunar calendar, he suggested that a sign in the middle of the passage is the sign for the Full Moon depicting a “Man on the Moon” (1958: 245).

I question this interpretation for three reasons. First, there are no writing systems where signs function in such a “pictographic” manner: that is where a crescent is used for writing “one moon night”, three crescents for writing “three moon nights” and five crescents for writing “five moon nights”. Pictorial signs, that is to say, signs that depict humans, objects and actions abound in logosyllabic writing systems, and in many cases a depicted object or action is clearly connected with the meaning of word spelled by the sign, but they never depict phrases and sentences—in other words, they never depict situations, as do, for example, children’s drawings and Orthodox icons. Second, the total number of crescents and their combining together are still unintelligible (for different opinions, see Guy 1990 and Horley 2011b). Third, as Konstantin Pozdniakov (2011) has astutely pointed out, Polynesia lunar calendars were very important for fishing, planting and measuring of time, but the social purposes of writing down a lunar calendar, in particular, in the middle of the long text on the Mamari Tablet are difficult to ascertain. While a solution to the last two objections might still be found in the future, in my opinion the first one is definitive and makes me profoundly sceptical about the widely accepted interpretation of the passage in question. Bearing this observation in mind, we can look for another possible interpretation of the passage.

PASSAGE FROM THE MAMARI TABLET, LINES Ca6-9

Let us have a closer look at the passage on the Mamari Tablet, Lines Ca6-9 (Fig. 1a). I present its structure in the following way.

There is a repetitive sequence of signs that defines the structure of the passage—Sequence α . It is attested eight times α I-VIII. The passage begins with Sequence α I as is suggested by four items of a list terminating in the sign ligature “Stick + Arm”. The passage ends with Sequence α VIII where it suggests a combination of signs “Turtle – Sitting Creature – Sitting Creature” (β) also attested in Ca05. This sign combination follows a sequence of signs (Fig. 1b) attested on the other tablets, if we assume that the omission of the “Upright Fish” sign on the Mamari Tablet is content-free or insignificant (for another proposal, see Horley 2011b: 22). It is easy to see that the examined structure looks circular starting and terminating with the same α sequence and thus it is incomplete. This fact makes the analysis problematic because implies a kind of distortion in the structure. The inserted signs, indicated with arrows on Fig. 1a, disturb the rigorous structure of the passage as well.

There are isolated examples and multiple sequences of “Crescent” signs between Sequence α I and Sequence α VIII: A, AA, AAA?, AAAAA, AAAAAA. Five times different signs depicting plants appear to be inserted after “Crescent” signs (α I, α III, α VI): “Sprout”, “Two Leaved Vines Down”, “Hanging Fruit”, “Fern” and “Leaved Vine”. Three of these signs also appear in two lists of signs depicting plants attested on the Great Santiago Tablet, Verso, Line 11 (Fig. 1c): one list is introduced with the “Twig” sign and another one with the “Crescent” sign. In my opinion, these lists represent the best evidence for the existence of word-signs in the *kohau rongorongo* script, as it is impossible to imagine such a structured sequence of signs depicting homogeneous objects occurring purely by chance. Two other signs or, perhaps better said, two ligatures appear inserted before Sequence α V. One of them may include a ligature version of the “Crescent” sign (see below). Another one represents the aforementioned “Man on the Moon”. A “Bird” sign appears to be inserted after Sequence α VII.

The α sequence can be described in the following way: “Paunchy Bird + Crescent – Arm + Raised Wing + Sitting Man – Crescent – Long Beak – Star + Pendant + Fishing Line”.

It should be noted that in fact the ligature “Paunchy Bird + Crescent” might be a composite sign, say “Paunchy Bird holding a Digging? Stick”, because “Paunchy Bird” and “Crescent” in this sign combination are always written connected in the passage and significant variations in writing of either “Paunchy Bird” or “Crescent” are absent. Probably, a slightly different head of “Paunchy Bird” in Sequence α V is not a ligature with “Bird”, but just a scribal variant of the sign. The same seems to be true about “Left-Facing Long Beak” attested one time instead of “Right-Facing Long Beak” (α V), and “Uppercase Crescent” attested twice instead of “Full-sized Crescent” (α IV, α VI). Because of this, I suggest nicknames for them without additional specification: “Paunchy Bird”, “Long Beak” and “Crescent”.

Another case is “Fishing Line with an Up Looking Fish”, which is found in contrast distribution with “Fishing Line with a Down Looking Fish”. Jacques Guy (1990: 140-41) was the first to notice that in the first half of the passage the sign is always written as “Up Looking Fish” (α I- α IV), while in the second half as “Down Looking Fish” (α V- α VIII). According to the definitions above, it is an incomplete substitution. “Fishing Line with an Up Looking Fish” is a frequent sign, but it is never replaced with “Fishing Line with a Down Looking Fish” in parallel texts. The five examples of “Fishing Line with a Down Looking Fish” discussed are the only examples of the sign attested in the texts. Such a distribution is a strong indication that two signs have different but somehow related reading values. It is an example of incomplete substitution. Their contrasting iconic images and distribution

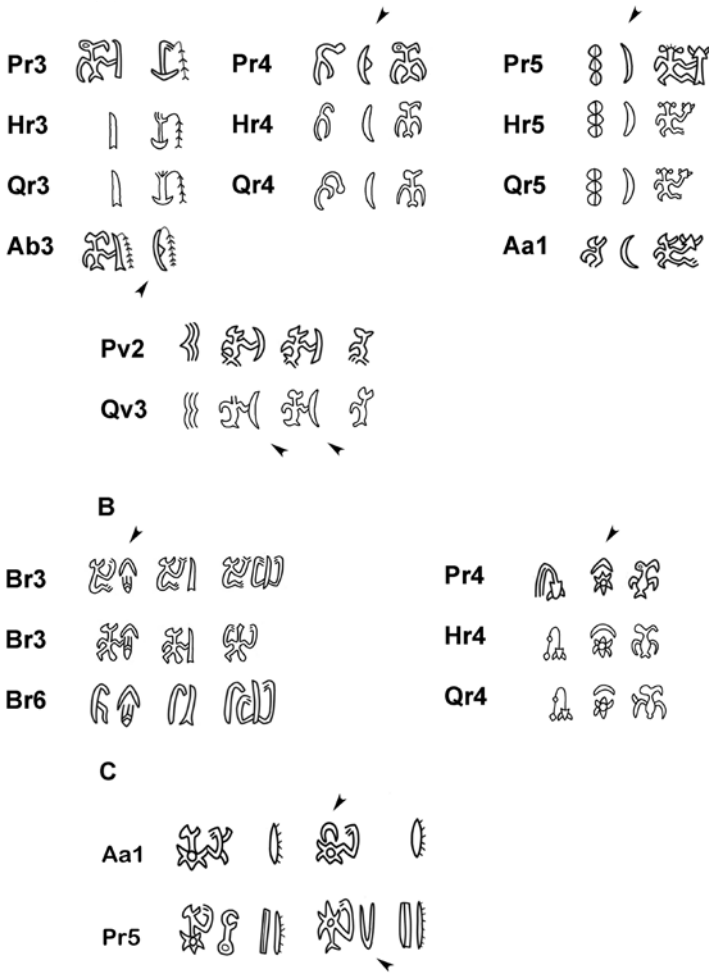


Figure 2. “Crescent” sign and its allographs.

A. Variants of the “Crescent” sign according to the parallel text attested on the Great St Petersburg Tablet, the Small St Petersburg Tablet, and the Great Santiago Tablet. See also Fig. 1d, 5 and 8b. B. Examples of the “Above Arc” sign. C. Variants of the “Arc” sign. A, B and P (after Paul Horley’s drawings by his courtesy), H and Q (after drawings by Roger Fischer 1997). Arrows indicate the signs under discussion.

suggest that they are word-signs with opposite meanings like, for example, “above/below”, “up/down”, “ascend/descend”, “put in/pull out”, etc. It should be noted that the sign in Sequence α II is written on the very edge of the Tablet and because of this its reconstruction in the drawing is problematic (see Barthel 1958 and Fischer 1997). Gills, lateral line, number of fins and missing head are optional elements of various signs depicting fishes in the *rongorongong* script. Thus, these variations are probably insignificant.

An intricate substitution may be seen in Sequence α I, where the common sequence “Arm + Raised Wing + Sitting Man” is written as “Arm + Raised Wing + Sitting Man + Standing Man”, or alternatively “Arm + Raised Wing + Standing Man”. It is worthwhile to compare this sign combination with one attested in the intersection Bv02 x Cb13 x Hv10 x Pv11, where the “Arm” sign is always missing (Fig. 1d): “Raised Wing + Sitting Man”, “Raised Wing + Long Beak + Sitting Man”, “Raised Wing + Long Neck”, where the “Long Beak” bird sign and the “Long Neck” man sign seem to be allographs, that is to say, two different signs that have the same value.

In analysing the structure of the passage on the Mamari Tablet, Lines Ca6-9, graphic variants of the Crescent sign warrant discussion. Paul Horley (2011b) and Pozdniakov (2011) both referred to Barthel who considered the “Left-Facing Crescent” and “Right-Facing Crescent” to be different signs. These graphic designs do have different number codes in Barthel’s catalogue, though his text hints at the opposite point of view. Comparison of the three parallel texts (Fig. 2a) indicates that “Left-Facing Crescent”, “Right-Facing Crescent” and “Up-Facing Crescent”, and “Left-Facing Boat” and “Right-Facing Boat” are different ways of writing the same sign. By contrast, “Down-Facing Crescent” situated above other signs appears in only two contexts with three examples attested for each context and thus it should be considered as an independent sign (Fig. 2b). I propose the nickname “Above Arc” for the sign in question in order to distinguish it from different variants of the “Crescent” sign. Once “Above Arc” is replaced by “Below Arc” (Fig. 2c) in the well-known parallel sequence Aa01 x Pr05 (Guy 1985).³ Thus, “Above Arc” and “Below Arc” are two graphic variants of the same sign “Arc”. When compared with the Mamari Tablet Line b13 (Fig. 1d) the sign appearing after Sequence α IV suggests that the “Crescent on Stem” is a rare ligature variant of the “Crescent” sign. “Right-Facing Crescent” is much more frequent than “Left-Facing Crescent” (159 examples versus 54 in the corpus according to Barthel’s transcriptions), hinting at a different meaning. In fact, this divergence may be explained by the universal phenomenon of preference for right orientation in human cognition, to put it in a simpler way, by the fact that scribes are mostly right-handed.

If “Left-Facing Crescent” and “Right-Facing Crescent” are variants of the same sign, a question arises that should be explicitly stated and possibly answered. Why are all the examples of the “Crescent” sign in the α sequence right-facing, while all the other examples of the “Crescent” sign in the passage are left-facing? Moreover, why are all the examples of the “Crescent” sign after “Paunchy Bird” connected with this sign as a ligature “Paunchy Bird + Crescent”? As a Mayanist, I am ready to say that this odd behaviour of the sign can be explained by graphic reasons, suggesting that while the scribe writes, he selects different variants and tries to accommodate them according to their shape. Taking a closer look, one should admit that there are no reasons for preferring “Left-Facing Crescent” for the α sequence, nor for writing it connected with “Paunchy Bird”. There is another explanation. The AAAA and ABAB sign combinations of *kohau rongorongo* are supposed to spell reduplicated words with syllabic signs (Davletshin 2012, see also below). Sometimes, the AA and AB sign combinations which form part of these sequences as well as isolated AA combinations are written in such a way that two asymmetrical signs either look at each other or look in different directions resulting in mirroring images. Probably, AB combinations of ABAB sequences and A signs of AA combinations refer to single lexical units of Rapanui language.

Sadly, comparison of parallel texts shows that mirroring is not obligatory. Moreover, the same phenomenon can be seen in the ABCABC sequences of signs implying that the meaningful unit of mirroring is more than a lexical morpheme. I suggest that mirroring is used in the *kohau rongorongo* script for indicating syntactic words in the same way as hieroglyphic blocks are used in Maya writing (Davletshin 2003, 2005; on hieroglyphic blocks in Maya writing see Kettunen and Helmke 2010, Zender 1999). Reversed orientation of signs can be also used to show that two signs belong to two different meaningful units. In his recent paper Pozdniakov (2011) has arrived at a similar conclusion. Examples of both uses are seen in the adduced figures (for example Fig. 1c). Thus, in the passage on the Mamari Tablet “Crescent” signs of the α sequence are contrasted with “Crescent” signs forming successive sequences.

SIGNS WITH UNEXPECTED COMBINATORIAL PROPERTIES: A CHALLENGE

In a 2002 paper I argued that there are two different types of signs in *kohau rongorongo* texts according to their combinatorial properties. Signs of the first type form sequences of the kind ABAB, AAAA and AAA in combination with other signs of the same type. Signs of the second type are unable to enter into the mentioned combinations, even if frequently attested in the script. In all likelihood, these combinations correspond to the completely and partially reduplicated forms typical of Polynesian languages, as in the following

Rapanui forms: *tea-tea* ‘white’, *te-tea* ‘whitish’, cf. *tea* ‘early dawn’, or *te-tere* ‘to run away (plural subject)’, cf. *tere* ‘to run away’ (singular), or *mo-more* ‘to cut (plural object)’, cf. *more* ‘to cut (singular)’, ‘o-’o’*otu* ‘to burn very much’, ‘o’*otu* ‘to burn’, *hatu-hatu* ‘to fold’, cf. *hatu* ‘to weave’ (Du Feu 1996: 191). I have also argued that the ability of a sign to form sequences ABAB and AAAA indicates that the sign has a syllabic (phonetic) value, because such word combinations as, for example, “fish fish fish fish” do not make sense in any human language. Conformably, frequent signs unable to form these combinations are likely to be word-signs.

It is easy to see that combinations of the “Crescent” sign in *kohau rongorongo* texts offer a challenge for interpretation, as the sign is attested in the following combinations: A, AA, AAA, AAAA?, AAAAA, AAAAAA (Fig. 3).⁴ Neither a word, nor a syllable makes sense if repeated six times in succession. Let us imagine that “Crescent” is a syllabic sign with a C_1V_1 reading value, where C stands for a consonant and V for a vowel. There is no such syllable in Rapanui which is attested as part of the following meaningful units C_1V_1 , $C_1V_1C_1V_1$, $C_1V_1C_1V_1C_1V_1$, $C_1V_1C_1V_1C_1V_1C_1V_1$ and $C_1V_1C_1V_1C_1V_1C_1V_1C_1V_1C_1V_1$ (see Englert 1978). Moreover, such a syllable

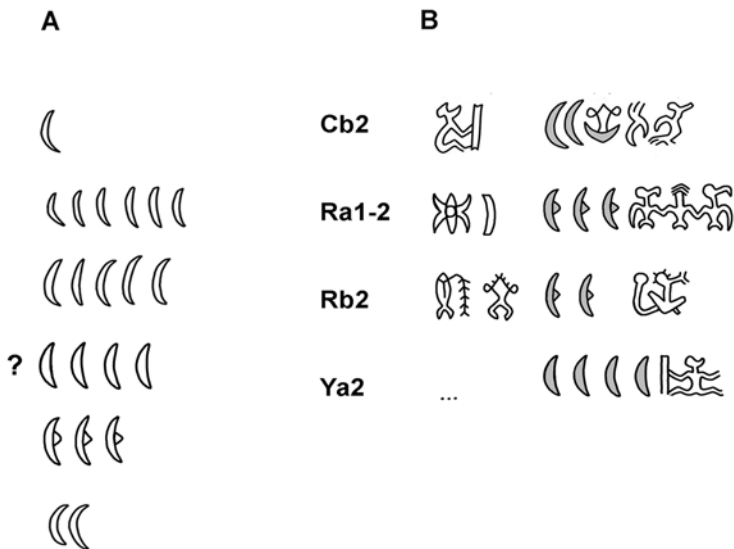
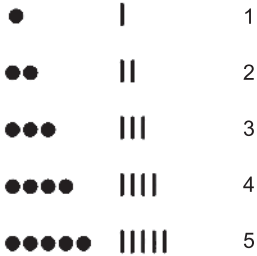
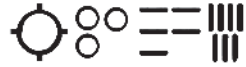


Figure 3. Successive sequences of the “Crescent” sign in *kohau rongorongo* texts. R, Y (after drawings by Roger Fischer 1997).

AZTEC NUMERALS:



LINEAR B NUMERALS:



1357 = 1000 + 300 + 50 + 7

OLD PERSIAN NUMERALS:

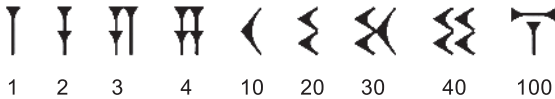


Figure 4. Numerals in various logosyllabic writing systems: do they follow the same pattern? (Images after Ancientscripts.com n.d.)

is unlikely to be found in any language anywhere in the world because of universal phonetic constraints on the morpheme structure.

A typological perspective on the world’s writing systems offers a solution for this case. Probably, all known logosyllabic writing systems use dots, bars, semicircles and their combinations for writing numerals (e.g., Daniels and Bright 1996, Gregg 1989). I have chosen some revealing examples in order to illustrate this universal phenomenon (Fig. 4). Alphabetical and syllabic writings systems are different in this respect; many of them, for example Latin script, use non-iconic signs for writing numerals. Possibly this difference is owing to the lack of iconicity that is inherent to signs of alphabetical and purely syllabic scripts. Based on this observation, it is possible to suggest that “Crescent” and its combinations are word-signs for writing numbers in the script of Easter Island.

ARGUMENTS IN FAVOUR OF THE INTERPRETATION OFFERED

Various arguments support this proposal. First, different combinations of the crescent sign substitute for one another in two contexts: in the passage on the Mamari Tablet, Lines Ca6-9, where the combinations AAAAAA, AAAAA, AAA?, AA and A follow the sign group α (Fig. 1a), and in the intersection of

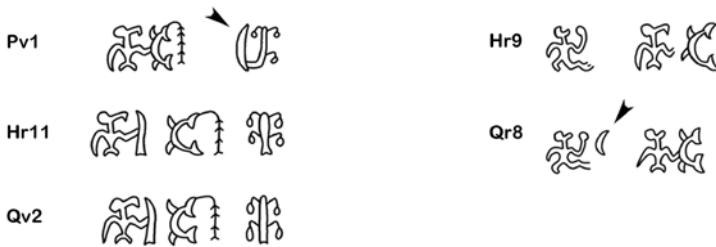


Figure 5. “Crescent” sign as a grammatical marker (after drawings by Roger Fischer 1997).

Ca09 x Cb14 x Bv02, where AA and A are attested in the same context (Fig. 1b). Looking at the long parallel text recorded on three tablets (Kudrjavtsev 1949) on the Great St Petersburg Tablet “Crescent” is attested 19 times: 18 times it is substituted with different variants of the sign and once it is deleted (absent?) in the parallel texts. This simple analysis shows that the substitution between “Crescent” and its combinations is dependent on the context, that is to say, it is an example of incomplete substitution. And it is exactly what we expect to find for numerals, which possess similar, but not identical meanings.

The examples, where “Crescent” is substituted with zero, in other words with nothing (Fig. 5), is of particular interest for the suggested interpretation. Generally in Polynesian languages including Rapanui, the number ‘one’ (*e tahi*) is used as indefinite article in the position before or after a noun (e.g., Du Feu 1996: 80). At the same time, various grammatical morphemes in the shape of zero are important in the grammar of the language and the so-called zero article is among them (e.g., Du Feu 1996: 136). It means that alternations with zero in parallel passages and paraphrases might be used for detection of grammatical markers in the *kohau rongorongo* script. Thus, it is possible to suggest that the sign is used as a grammatical marker and it is an expected property for the number ONE.

Another argument in support of the interpretation offered might be seen in the list of plants discussed above (Fig. 2c), where a “Crescent” sign is found in the front of different signs depicting “plants”, introducing items of enumeration. A rough interpretation of the passage as “one such-and-such plant, one such-and-such plant, etc.” seems plausible, particularly if we recall the possible “indefinite article” reading of the numeral “one”: “a such-and-such plant, a such-and-such plant, etc.” Enumerations introduced by the numeral one are found in Rapanui traditional narratives. I would like

to adduce an example from Manuscript E (69-69 [*sic*], Barthel 1974: 359-60). The translation is mine; I make use of brackets for clarifying ambiguous and problematic places.

1 *he hauhau.*
 1 *he mahute.*
 1 *he ngaatu* *a Oti.*
 1 *he tavari* *a Oti.*
 1 *he riku* *a Oti.*
 [23 items of enumeration in total.]

one [piece of] *hauhau* tree
 one [piece of] *mahute* tree
 one [piece of] Oti's *ngaatu* reed
 one [piece of] Oti's *tavari* plant
 one [piece of] Oti's *riku* plant(?)
 [23 items of enumeration in total.]

ARGUMENTS AGAINST THE INTERPRETATION OFFERED AND THEIR SOLUTION

From a methodological point of view I deem it important to intentionally look for and explicitly discuss evidence against the suggested interpretations, because this practice has the potential of dismissing suggestions and of finding new solutions and explanations. There are two examples in *kohau rongorongo* texts, where proposed numerals written with “Crescents” appear separated by inserted signs in parallel passages. One of them is mentioned above when discussing allographs of the “Crescent” sign (Fig. 1d), while the other is attested on the Keiti Tablet, Recto (Fig. 6). Of course, it is impossible to imagine “two” being written as “one-something-one” in a parallel text and “four” as “two-something-two”.

It is useful to take a closer look at the Keiti Tablet, Recto (Fig. 6), a highly structured text that has received a lot of attention from scholars of the *kohau rongorongo* script (Horley 2010, Melka 2008, Pozdniakov 2011, Wiczorek 2011). For the purposes of this article I present its structure in the following way. First, there is a repetitive sequence of signs—Sequence γ —presented in its two main versions: a complete one γ' and an abbreviated one γ'' (Fig. 6). The textual structure on the Keiti Tablet, Recto, can be described by means of the Sequence γ , the “Standing Man” sign and the “Adze” sign; the last one gives rise to many intricate ligatures and conflated glyphs in the text. The text starts with a γ'' sequence ($\gamma'I$) followed by a varying fragment of text δI , then nine γ' sequences ($\gamma'II-X$) accompanied by a varying fragment of following text ($\delta II-X$). There is a sign combination “Standing Man + (Arm) +

	$\overbrace{\quad\quad\quad}^{V'}$ $\overbrace{\quad\quad\quad}^{V''}$	δ		$\overbrace{\quad\quad\quad}^{V'}$ $\overbrace{\quad\quad\quad}^{V''}$			
I			𐎔𐎕	...	XI	𐎔𐎕	...
II*	(𐎔𐎕) 𐎔	𐎔𐎕	𐎔𐎕	...	XII	𐎔𐎕	...
III*	(𐎔𐎕) 𐎔𐎕	𐎔𐎕	𐎔𐎕	...	XIII	𐎔𐎕	...
IV*	((	𐎔𐎕	𐎔𐎕	...	XIV*	((𐎔𐎕 𐎔𐎕)	...
V*	) 𐎔𐎕	𐎔𐎕	𐎔𐎕	...	XV	𐎔𐎕	...
VI*	(𐎔𐎕)	𐎔𐎕	𐎔𐎕	...	XVI	𐎔𐎕	...
VII*	((	𐎔𐎕	𐎔𐎕	...	XVII	𐎔𐎕	...
VIII*	)	𐎔𐎕	𐎔𐎕	...	XVIII	𐎔𐎕	...
IX*	)	𐎔𐎕	𐎔𐎕	...	XIX	𐎔𐎕	...
X*	(𐎔𐎕)	𐎔𐎕	𐎔𐎕	...	XX	𐎔𐎕	...

Figure 6. Repeated sequence of sign—Sequence γ —on the Keiti Tablet, Recto.
 (Drawings by the author after photos published in Horley 2010, note: γ' sequences are marked with asterisk.)

Adze” after Sequences γ II-IX and the varying text between Sequences γ I and γ X (i.e., δ I-IX) represent lists specified by the “Adze” sign, in δ V and δ VI lists specified by the “Standing Man + (Arm) + Adze” combination, where brackets indicate that the sign in question can be omitted. It should be noted that Sequences δ I-IX are of more or less equal length. This highly structured fragment of text is followed by a varying text with ten γ sequences (γ XI-XX), and only one of them is not γ ”, but γ ’ (γ XIV). Various structured sequences of signs, as for example lists ABACADADA EAFAG, ABCDABCD, ABAB, ABA, AA, appear in the text between γ X and γ XX. The last γ sequence is followed by a long sequence of signs ending on the obverse of the Keiti Tablet (Er09-Ev01); it is also attested on other tablets (Ca01 x Hr01 x Pr01 x Na05 x Ra05-06 x Sa07). This sequence of signs was first retrieved by Pozdniakov (1996: Fig. 7c). It appears in the beginning of three texts (Cr01, Hr01, Pr01). I believe that the cited sign-sequence indicates the beginning of a new text and the end of the old one. The sequence in question can be called “introductory sign sequence” and functionally it can be defined as an opening sentence of *kohau rongorongo* texts. The text begins with a γ ” sequence and ends with a γ ’ sequence. Thus, the structure of the text is circular and incomplete, implying some kind of distortion in the structure, because it starts and ends with the same phrase.

The structure of the longer version of the γ sequence, that is to say, γ ’, can be described in the following way: “Crescent – (Standing Man) – Crescent – (Standing Man) – Man holding a Shield – Knife with a Nestling – Sitting Man holding a Tablet”, where brackets indicate that the sign in question can be omitted. Correspondingly, the shorter version, that is to say, γ ”, is “Knife with a Nestling – Sitting Man holding a Tablet”.

The last three signs of the sequence are problematic. Two stand-alone “Shield” signs are attested though in different contexts (Br05, Ca12). Moreover, these two examples of “Shield” show a notch not at the top, but at the bottom, though both variants are found under the same number (28) in Barthel’s catalogue. Because of this, it might be better to consider “Man holding a Shield” as a ligature of two signs “Standing Man” and “Shield”. I refrain from analysing “Knife with a Nestling” as a combination of two independent signs “Knife” and “Nestling”, because “Nestling” attested in other contexts does not show this wide range of variation in writing, though it can be attributed to the scribal hand that carved the Keiti Tablet. “Knife with a Nestling” is written as “Knife” (γ VII) once, and three times “Sitting Man holding a Tablet” is written as “Tablet” (γ IV, γ VII, γ X). In these cases if “Knife with a Nestling” and “Sitting Man holding a Tablet” are not ligatures, but independent signs, “Knife” and “Tablet” are abbreviated or, in other words, incomplete forms of composite signs. A similar graphic phenomenon

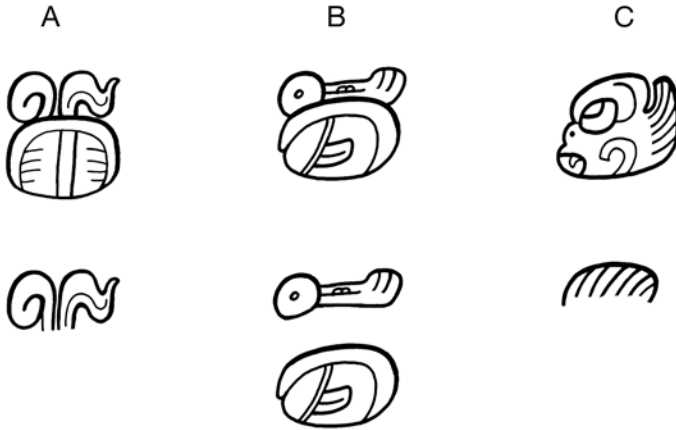


Figure 7. Complete and incomplete forms of signs in Maya writing.
 A. **K'ahk'** FIRE. B. **TE** TREE, WOOD. C. **ka**.
 (Drawings by the author.)

is known in the Maya hieroglyphic script (Fig. 7) (see for example, Kettunen and Helmke 2010, Stuart 1995: 37, Zender 1999). If “Knife with a Nestling” and “Sitting Man holding a Tablet” are ligatures, syllabic signs “Nestling” and “Sitting Man” should be used as phonetic complements for word-signs “Knife” and “Tablet”. However, “Knife” appears in combinations ABAB indicating that it has a syllabic (phonetic) value and consequently it cannot be complemented with other phonetic signs. The “Tablet” sign is different from the “Tuber” sign, though both of them are under the same number (22) in Barthel’s catalogue. The only difference between the two is that “Tuber” has “roots” added. “Tablet” and “Tuber” are never substitutes for each other. While “Tuber” is probably a phonetic sign (for AAA see Hv10 x Pv11), “Tablet” is a word-sign, because it is not attested in AAAA and AAA combinations and only once is it found as part of a sequence ABAB (Br07). To the ABAB sequence in question (Br07) there corresponds one example of AB combination (Gv08), so we may deal with a stylistic repetition here. Stylistic repetitions of this kind are frequently found in Rapanui traditional narratives.

Returning to the two “Crescent” signs in the beginning of the γ' sequence. A “Standing Man” optionally appears after the first “Crescent” sign or after the second one, or after both (Fig. 8a). This behaviour when a sign is optionally found in the position after another one in substitutions is typical for syllabic signs used as phonetic complements. Another example of the sequence “Crescent – Standing Man” being replaced with “Crescent” can be

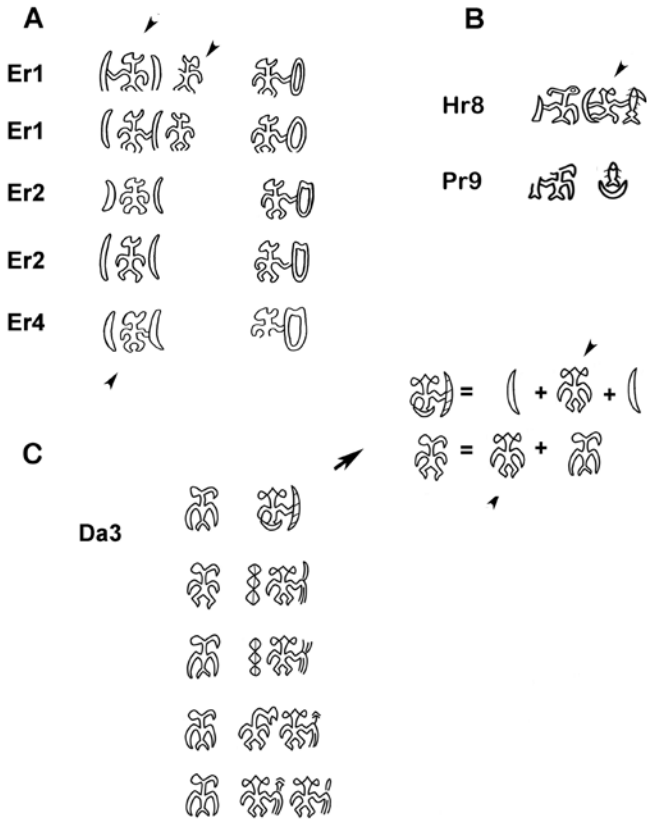


Figure 8. Phonetic complements for the “Crescent” sign?
 A. Keiti Tablet, Recto. B. Intersection of the Great St Petersburg Tablet, Great Santiago Tablet and Small St Petersburg Tablet. C. Échancrée Tablet Line a3. Text D, H and P (after Paul Horley’s drawings by his courtesy). Text E (drawings by the author after photographs from Horley 2010). Arrows indicate probable phonetic complements.

found if we look at the long parallel text at Pr08 x Hr08 x Qr08 (Fig. 8b) and we admit that “Man with Its Right Leg Stretched-out” is one of the ligature versions of the sign “Standing Man”, but not the “Running Man” sign. A similar sequence of signs “Crescent + Standing Man + Crescent – Standing Man + Bird” is found on the Échancrée Tablet (Fig. 8c). If the sign for



Figure 9. Probable phonetic complements on the Keiti Tablet, Recto.

A. “Man holding a Shield” written as “Man holding a Shield + Leaved Vine?”. B. “Adze + Suspended Poker”. E (drawings by the author after photographs in Horley 2010). B (after Paul Horley’s drawings by his courtesy). Arrows indicate probable phonetic complements.

number “one” is used on the Keiti Tablet for writing a homophonic word, it is possible to understand why the sign is frequently complemented there: it might be used in order to clarify the phonetic reading of the sign and thus to avoid confusion between a “Two Crescents” sign for “two” and an identically looking sign combination of “Crescent – Crescent” intended to be read “one” and “one”. Possibly, mirroring of the “Crescent” signs is used for the same purpose here. No phonetic complements have been suggested hitherto by *kohau rongorongo* scholars, but I will argue that even on the Keiti Tablet, Recto, it is possible to find two more indicative examples of this universal feature of logosyllabic writing systems. One of them is a “Leaved Vine” sign that appears after a “Man holding a Shield” in Sequence γ IX (Fig. 9a).

Although the sign in question is indicated by Steven R. Fischer in his drawing of the tablet (1997), it does not appear in Barthel's (1958) and Horley's (2010) drawings, but it can be seen on the published photo (Horley 2010: Fig. 4). The "Leaved Vine" sign is attested in its atypical version, possibly the result of being squeezed owing to the lack of space, so its precise identification remains problematic; it also resembles a "Threaded Berries" sign. Another example of substitution includes a sign undocumented in Barthel's catalogue and transcriptions—"Suspended Poker". It appears twice in combination with the "Adze" sign on the Keiti Tablet (Fig. 9b). The same sign is frequently attested in the same position on the Aruku Kurenga Tablet. The "Suspended Poker" sign is optionally used after the "Adze" sign in strict substitutions (Br03 x Br03 x Br06, Br05 x Br05 on Fig. 9b), which makes this case a clear example of phonetic complementation.

The word for 'one' in Rapanui language is *tahi*. If the above suggestion is correct, the reading of the first word in the Sequence γ' is *tahi-tahi* and the "Standing Man" sign is a syllabic sign either with the value **hi** or **i**.⁵ In fact, the sign seems to be a syllabic one, because it is attested in the ABAB sign combinations. Rapanui *tahi-tahi* means 'raspar con cuchillo/to scrape with knife' (Englert 1978). The word is securely reconstructed after the proto-Polynesian **tasi* 'to scrape, to shave' (Biggs and Clark n.d.). Such a word makes sense in the contexts of the *kohau rongorongo* tablets if we understand it as a term for 'manufacturing of tablets' or 'carving of signs'. Moreover, the "Adze" sign frequently attested on the Keiti Tablet, Recto seems to support this interpretation. "Adze" is a word-sign as its combinatory properties, probable phonetic complements and lists marked with "Adze" signs suggest. Comparison with the "Adze" rock-art motif of Easter Island (Lee 1992: 42) implies that the sign depicts an adze or a similar tool that might be used to cut and square wood for tablets. Taking into account imagery of the signs in the α sequence and the standard Rapanui syntax, it is possible to suggest the following interpretation of the γ' sequence: [a] *tanata ma 'ori* ("Man" holding a "Shield") *tahitahi* cuts (Crescent-Crescent), [a] *kohau* ("Sitting Man" holding a "Tablet") gets fluted/carved *motu?* ("Knife" with a "Nestling") with the adze ("Standing Man" + "Arm" + "Adze"). *Tanata ma 'ori* is a native term referring to experts of the *kohau rongorongo* script (Englert 1978: 191); the term *motu* means 'cortar, grabar (letras o figuras en piedra o madera)/to cut, incise (characters in stone or wood)', see also *kohau motu = kohau royororojo* 'madera con inscripciones/inscribed wood', *kohau 'palo, tableta/stick, tablet'* (see Englert 1978). Thus the interpretation of the γ' sequence is: *kohau* ("Sitting Man" holding a "Tablet") *motu* ("Knife" with a "Nestling"), giving 'tablets get fluted/carved'. This interpretation is too bold to be accepted, but is worthy of mentioning because it gives an idea how matters can syntactically work in Rapanui language.

The same kind of reasoning might be applied for the above mentioned case where “four” in parallel texts is written as “two-something-two” (Fig. 1c). However, I am not satisfied with this interpretation. First, possible meanings of the word do not seem to be promising. *Rua* is the word for ‘two’ in Rapanui, but *rua* also means (i) ‘vomitar/to vomit’ and (ii) ‘fosa, hueco/hole’ (Englert 1978). Words like “vomiting, to vomit a lot” and “holed, perforated” would not be expected to appear on the tablets. However the Nuclear Polynesian **rua* ‘to accompany, be coupled with’ and Māori *ruarua* ‘several’ (Biggs and Clark n.d.) might fit better. Second, the inserted signs, which may be used as phonetic complements, are abstruse. In order for the suggestion to hold, we should consider the “Screaming Creature” sign (Bv2) and the “Notched Stick?”/“Falling Squares?” sign (Pv11) to be phonetic and allographs, that is to say, to have the same syllabic reading value. Unfortunately, both signs are unique and moreover both examples of the “Falling Squares?” sign on the St Petersburg Tablet are nearly obliterated and hinder their comparison with other signs. It is still possible that both signs represent rare allographs of an unknown common sign that has the syllabic value **a**, and this one is frequently attested in the script. Alternatively, we can suggest that the second “Falling Squares?” sign, which is heavily weathered, is another sign having nothing to do with “Falling Squares?”. Then, “Screaming Creature” and “Falling Squares?” are not allographs, and “Falling Squares?” can be a **ru** syllabic sign used as a phonetic complement for **RU A TWO**. Yet another possible solution is to suggest that the sequence “two + (something) + two + (something)” is one of the stylistic repetitions frequently found in the *kohau rongorongo* texts and “something” corresponds to postverbal grammatical markers that can be omitted and can substitute for one another in parallel texts.

To sum up, it has been useful to discuss two cases which seem to contradict the interpretation I have offered. One of them (Fig. 6) happens to be a clear case of phonetic complementation. Its detailed examination allows me to offer a promising tentative reading *tahi-tahi* ‘cut (wood)/ manufacture (tablets)’. Thus, this counterexample supports the interpretation. Three plausible explanations are suggested for the second case (Fig. 1c). It is impossible to decide between them or dismiss them owing to the lack of combinatory data available, but it means that it cannot be considered as a counterexample to the interpretation offered.

IMPLICATIONS: NUMERALS OF HIGHER ORDERS

The proposed identification of the signs for ONE, TWO, THREE, FOUR?, FIVE and SIX implies how the signs for SEVEN, EIGHT and NINE should look. We can assume that they represent multiplied “Crescent” signs, because, first, numerals of Rapanui and other Polynesian languages represent counting systems which have ten as their base (Lemaître 1985) and, second, it is common

for logosyllabic writing systems to use special signs for numbers of different orders (Daniels and Bright 1996). The only exception I know of is the Modern Chinese Script, where a corresponding number of “bars” is used for writing three first numbers only and numerals from four on are written with unrelated signs, but we can consider the case negligible to a preliminary approximation.

The proposal automatically raises a question about the numerals of higher orders that should be found in association with the first nine numerals. It is tempting to suggest that the ligature of three signs attested before number TWO in the intersection Bv02 x Cb13 x Hv10 x Pv11 and before number ONE in the so-called calendric passage on the Mamari Tablet represent a numeral of a higher order TEN? phonetically spelled. If this is the case, the sign or a ligature of signs attested at the beginning of the α sequence on the Mamari Tablet and followed by number ONE can be a numeral of an even higher order HUNDRED? It might give an attractive solution of TWENTY TWO for the complicated issue related to the passage Bv02 x Cb13 x Hv10 x Pv11 discussed above. Moreover, the probable reading of the passage on the St Petersburg Tablet Pv11 “Crescent – Falling Squares? – Two Crescents – Falling Squares?” favours such an interpretation. Unfortunately, I would reject this suggestion, because in Rapanui and other Polynesian languages the numeral qualifying a counting base of higher order always precedes the base, as for example, *e-tahi te piere e-rima te rau e-há te kauatu ma-toru mamoe* ‘1543 sheep’ [1 x 1000, 5 x 100, 4 x 10 plus 3 sheep] (Englert 1978: 59). Another suggestive numeral of higher order might be the “Turtle” sign on the Mamari Tablet Ca09. In his article of 1962 Barthel mentions that his Rapanui informant in discussing the Mamari Tablet indicated that the word *honu* ‘turtle’ also meant ‘thirty’ in the old times. This interpretation is attractive to some extent, because the number of Crescent signs 28? in the passage on the Mamari, with the exception of those in the α sequences, is close to the resulting meaning of “thirty” as if the scribe were summing up the total. Two lacking “Crescents” appear two signs later, after the Turtle sign, implying something like “thirty in total if we add two”. This suggestion also makes the structure of the passage more regular, and therefore more understandable, as every α sequence of the Mamari Tablet is followed by a numeral or by a series of presumed numerals. Nevertheless, I hesitate to accept this suggestion for two reasons. As far as I can judge from Barthel’s article (1962: 3), his questions to the informant were too coercive and the received responses too ambiguous, and no one else has recorded the word *honu* for ‘thirty’ on Easter Island. He also did not explain that the expression *tini honu* ‘when somebody five times continuously wins in a card game’, can be literally translated as ‘full, i.e., complete, multitude’ (see proto-Polynesian **fonu* in Biggs and Clark n.d.). In addition, numerals based on names for animals and objects are not attested

elsewhere in Polynesia (Lemaître 1985, Bender and Beller 2007, Gregg 1989). It is also tempting to consider the “Boat” version of the “Crescent” sign to be a number of a higher order TEN?, but the analysis of parallel texts offered above implies that it is just a variant of “Crescent”.

The interpretation of numerals set forth in this article implies a tally, a list of the contents or a register as an explanation for the so-called calendric passage attested on the Mamari, Lines Ca6-9. Let us imagine a possible interpretation of the passage: “an official? in a certain district? gathered tribute – one measure, such-a-such plant – one measure, such-a-such plant (α I); an official? in a certain district? gathered tribute – six measures (α II); etc. ... the tally? is complete (β)”. It is easy to see that inserted signs lacking “Crescents” receive a plausible(?) interpretation as items unspecified by numerals. It should be stressed that numerals are always used as modifiers for counted objects in languages and scripts. One can assume that a calendric interpretation of the passage is also possible in a similar way. However, in such a case it is unclear where the sign for “Moon/Night” is to be found. The signs depicting plants that appear to be inserted between the “Crescent” signs in the passage also make a calendric interpretation problematic.

Surprisingly, the combination of signs “Turtle – Sitting Creature – Sitting Creature” attested in Ca05 also appears after a list marked with a plant sign Ca04-05 as if it was a concluding part of the list. I am dissatisfied with the assumption that the sign depicting ‘turtle’ *honu* (Englert 1978) is used to write a word *honu* ‘full’, because word-signs are infrequently used to spell homonymous words with different meanings, though they do so in all known logosyllabic writing systems. Neither I am content with the fact that the widespread word in Polynesian languages **fonu* ‘full, be full’ is not attested in Rapanui dictionaries (however, see *tini honu* in Barthel 1963: 2).

It should also be noted that enumerations and, in particular, lists with numerals is one of the stylistic devices frequently found in traditional folklore texts of Polynesia and, in particular, in Rapanui traditional historical narratives (see, for example, Manuscript E: 1, 2, 24, 38-42, 62-64, 65-66, 67-72, 78-80 in Barthel 1974). Interestingly, some of enumerations in the Manuscript E are counted lists of plants. I would like to present an example from the text; the translation is mine (Manuscript E: 71, Barthel 1974: 361; also see Fedorova 1988: 69).

*he ki hokoou a Hotu.kia Teke.e hakarite te tangata.ana too koe ki runga ki te
miro.peira tokoa te manu vae ehā.te kekepu.tokoa.te moa tokoa.
he oho.a Teke.anake ko toona titiro.he too mai i te manu vae ehā.ko te tamaroa
ko te tamahine.erima te kauatu te manu eva eha.
50 manu vae ehā.
he too mai anake te huru o te manu ko te tamaa(-)*

roa ko te tamahahine tokoa

100 *kekepu.*

500 *he moa*

5 *erima taha o te takaure.*

Hotu says to Teke again: “Make equal parts of the humans (men and women?), when you are going to take them on the boat, as well as of quadrupeds (sheep? pigs?), also *kekepu* (turtles? pigs? seals?), also chickens!”

Teke goes with his followers. They take quadrupeds (sheep?), males and females (rams and ewes?), 50 quadrupeds (sheep?).

50 quadrupeds (sheep?).

they take every kind of animals, males and also females

100 *kekepu* (turtles? pigs? seals?).

500 chickens

5 five bottles of flies.

A word of caution should be voiced concerning every reading value proposed in this article; promising as each seems to be, they are only tentative until confirmed by cross-readings. I regard the proposed reading values well grounded, but a reading value can be considered established only in cases when it is shown to be working in different contexts. Until that happens, any readings should be considered provisional. We need to collect as much contextually grounded content interpretations and phonetic readings based on these content interpretations as possible; then we will be able to check probable phonetic values in independent contexts.

* * *

The typological approach to the study of the *kohau rongorongo* script and the method of sign substitution applied in this article have resulted in new observations and promising interpretations. The most interesting proposals are the identification of basic numerals and final phonetic complements in the script. The hypothesis of numerals has allowed me to explain anomalous repetitions of identical signs; the hypothesis of phonetic complements has allowed me to explain anomalous behaviour of two signs in many examples of substitution in different contexts. Numerals and phonetic complements allow me to offer a provisional reading *tahi-tahi* ‘cut/manufacture (tablets for writing?)’.

It has been shown that the widely accepted interpretation of the passage on the Mamari Tablet, Lines Ca6-9 as a record of the lunar calendar is problematic from various points of view. I believe that an inventory, a content-list and a register, used as a rhetorical device in the text, is a more promising content interpretation. Such an interpretation finds its structural parallels in traditional Rapanui historical narratives.

APPENDIX: LIST OF THE SIGNS DISCUSSED AND THEIR NUMBERS
ACCORDING TO THOMAS BARTHEL'S CATALOGUE (1958):

Above Arc, variant of Arc: 43	Pendant: 78
Adze: 63	Raised Wing: ?
Arc: 27, 43	Right-Facing Boat, variant of Crescent: 40b
Arm: 6	Right-Facing Crescent, variant of Crescent: 40a
Below Arc, variant of Arc: 27b	Running Man: 320
Bird: 600	Screaming Creature: ? cf. 445
Boat, variant of Crescent: 40b, 41b	Shield: 28
Crescent: 40, 41, 42	Sitting Creature: 382
Crescent on Stem: ?	Sitting Man: 380
Falling Squares: 16	Sitting Man holding a Tablet: 20a+380
Fern: 59	Sprout: 10a
Fishing Line: 711	Standing Man: 200, 300
Hanging Fruit: 74	Star: 8
Knife: 4	Stick: 1a
Knife with a Nestling: 4+430?	Suspended Poker: ?
Leaved Vine: 3	Tablet: 22a-b
Left-Facing Boat, variant of Crescent: 41b	Threaded Berries: 37
Left-Facing Crescent, variant of Crescent: 41a	Tuber: 22c-d
Long Beak: 670, see Long Neck	Turtle: 280
Long Neck, variant of Long Beak: 460	Twig: 68
Man holding a Shield: 300+28	Two Leaved Vines Down: 30a
Nestling: 430?	Up-Facing Crescent, variant of Crescent: 42
Notched Stick: 11	Upright Fish: 700
Paunchy Bird: 390	Uppercase of Crescent, variant of Crescent: ?

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NOTES

1. There is no consensus on how to count *kohau rongorongo* signs. The given number is obtained by counting writing units separated by blank spaces according to the transcriptions published by Barthel in 1958. Many such units represent ligatures of single signs, but this is the only impartial way to evaluate the size of the corpus available, at least while our understanding of the *kohau rongorongo* graphics is so incomplete. Documentation has been improved since 1958, so the total length of the corpus is a little bit bigger. For example, a new text, the Paris Snuffbox, has been found (Barthel 1963: 373, Fischer 1997, Pozdniakov 1996). The total corpus according to Barthel (1958: 15-33) is 14,312-14,337 signs and according to Steven R. Fischer (1997: 409-507) 14,787 signs. The reader should add up numbers given by the authors for individual texts.
2. It is either an erratum or a misunderstanding about the form of the waxing moon by Barthel.
3. I would like to thank Evgenia Korovina (pers. comm. 2011) who reminded me about this substitution at the right moment.
4. The suggestion was originally presented in a paper: “*Kohau rongorongo* script of Easter Island as a logosyllabic writing system” read at 11th International Conference on Austronesian Linguistics, Aussois, France (22-26 June 2009).
5. This suggestion implies that the sign for ONE can possess related but different reading values as **TAHI** and **E-TAHI**. The conjecture, doubtful as it seems to be, agrees with a phenomenon widely attested in many writing systems, e.g., English “1” is read as both ‘one’ and ‘first’.

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ABSTRACT

Typological considerations and combinatory properties of the “Crescent” sign suggest that “Crescent” and its multiplied combinations represent numerals in the *kohau rongorongo* script of Easter Island. Probable phonetic complements for the “Crescent” sign identified by means of the substitution method reinforce this interpretation. As a result, some phonetic readings and an alternative content interpretation of the so-called calendric passage on the Mamari Tablet are proposed.

Keywords: *kohau rongorongo* script of Easter Island, logosyllabic writing systems, numerical signs, phonetic complements, substitution method

BETWEEN CHAOS AND CONTROL:
SPATIAL PERCEPTION OF DOMESTIC, POLITICAL, AND
RITUAL ORGANIZATION IN PREHISTORIC SAMOA

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Ethnographic studies in the Samoan Archipelago have identified traditional villages characterised by spatial patterning underpinned by the social perception of space in Samoan life (e.g., Mead 1969, Olson 1997, Shore 1982). These studies suggest that the patterning of village settlement mirrored patterns of individual and group social and political interaction, specifically identifying centre-periphery, landward-seaward and control-chaos distinctions. Archaeologically, however, similar spatial patterning has not been identified during large scale settlement pattern studies (see Clark 1989; Clark and Herdrich 1988, 1993; Clark and Michlovic 1996; Green 2002; Green and Davidson 1969, 1974; Hunt and Kirch 1987, 1988; Jennings and Holmer 1980; Jennings *et al.* 1976; Pearl 2004, 2006). This raises questions about the antiquity of such spatial patterning and the social perceptions of space that underlie them. Archaeological documentation of an interior settlement system on Olosega Island, Manu'a, American Samoa (Fig. 1) provides the first evidence of historic period spatial patterning in a prehistoric settlement. We argue that core spatial concepts, reflected by the spatial patterning of political, domestic and ceremonial activity areas, can be identified, which further suggests that the core social perceptions of space documented in the historic period were in place prior to European contact.

ENVIRONMENTAL AND ARCHAEOLOGICAL SETTING

The Samoan Archipelago is currently divided into two political units, the Independent State of Samoa (formerly Western Samoa) and the United States Territory of American Samoa. American Samoa is further divided into the Manu'a group in the east and the islands of Tutuila and Aunu'u in the west. The Manu'a group consists of the small islands of Ta'u, Ofu and Olosega. All islands in the group are close: Ofu and Olosega are connected by a small bridge while Ta'u is 11 km to the southeast. Extreme topography is present in many but not all areas, with small coastal plains seaward of typically near-

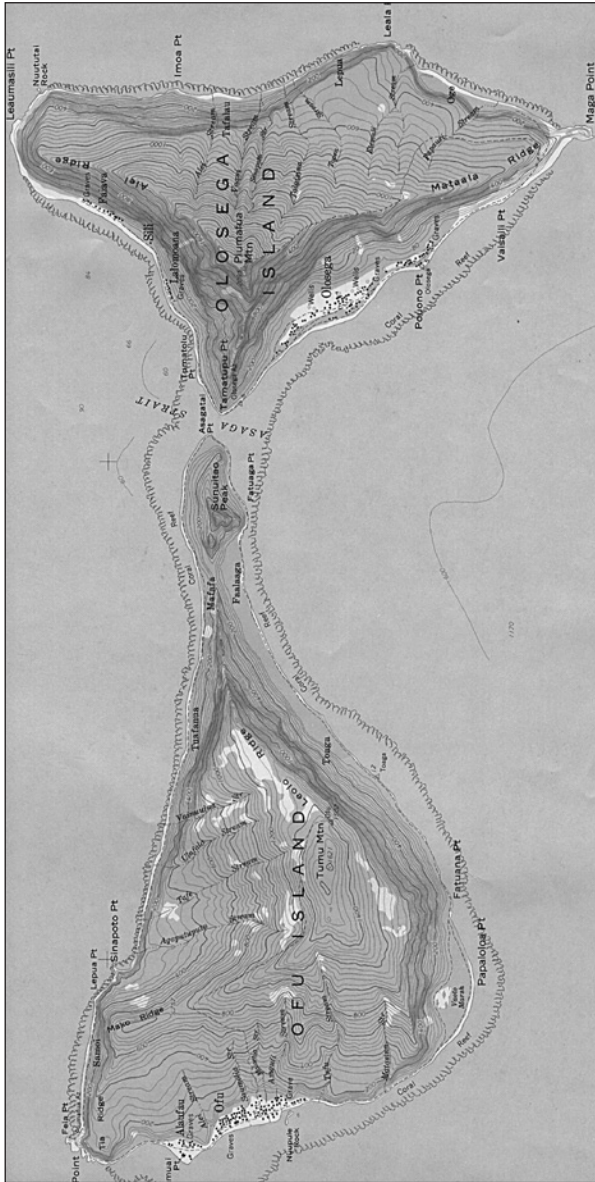


Figure 1. U.S.G.S. Quadrangle, map of Ofu and Olosega islands. The project area is the southern half of the Olosega interior above the steep cliffs and coastal plains.

vertical cliffs. Productive fringing reefs surround much of the islands, and each island has a freshwater marsh, which are still used for cultivation.

Currently, the inhabitants of Olosega Island are divided between two villages, Olosega Village on the southwest and Sili on the northwest. From Olosega Village the land rises sharply to the highest point, Piumafua Point, at 629 masl. The geology of the island is dominated by thin-bedded olivine basalts, formed by pre-caldera volcanic activity approximately 500,000 years ago (Stearns 1944: 1313). Much of the soil in the interior consists of Ofu silty-clay that is further divided by slope into a zone of 15-40 percent and a second zone of 40-70 percent (Nakamura 1984). Rainfall occurs almost daily particularly owing to orographic effects. Streams, however, are intermittent, only running after heavy downpours. Although much of the interior is steep, the southeastern side of the island features broadly sloping land leading down to the small Oge coastal plain. It is on this landscape that many of the island's few streams have formed. The island's vegetation is dense, although variable in type, with the steeper slopes covered by thick secondary growth forests and the coastal flats covered with heavily modified forests that include breadfruit (*Artocarpus altilis*), coconut (*Cocos nucifera*) and pandanus (*Pandanus tectorius*). This secondary growth zone reflects a relic forest pattern resulting from diverse agronomic practices in prehistory (Quintus 2011: 116-21, 2012).

Archaeological investigations have been sparse on Ofu and Olosega compared to Tutuila (but see Best 1992, Clark 2011, Clark, Quintus and Bonk 2012, Emory and Sinoto 1965, Kikuchi 1963, Kirch and Hunt 1993, Quintus 2011; also Addison pers. comm., 2010). Radiocarbon dates from To'aga, on the south coast of Ofu, led Kirch and Hunt (1993) to propose initial settlement of Ofu (and presumably Olosega) 3000 years ago. In the last several years, reconsiderations of the radiocarbon chronology in American Samoa have been more conservative with estimates of colonisation by perhaps 2500 BP (Addison and Asaua 2006, Rieth and Hunt 2008, Rieth, Morrison and Addison 2008), but recent dates obtained from Va'oto on the southern tip of Ofu support a date of 2700-2800 BP (Clark 2011). In Olosega and Ofu settlement was concentrated on the coast during the first several centuries or more (Clark 2011, Hunt and Kirch 1988, Kirch and Hunt 1993), eventually becoming dispersed across the landscape and spreading into the interior of the island. Late prehistoric remains are rare on both islands; only isolated features, but not distinct settlement areas in the sense identified elsewhere, have been found (Addison pers. comm. 2010, Best 1992, Kirch and Hunt 1993, Moore and Kennedy 1996, 1997, Radewagon 2006, Quintus 2011).

THE ORGANISATION OF SAMOAN VILLAGES AND POLITICAL LIFE

Previous settlement system studies in the archipelago have focused on the identification of ethnographically documented feature types, most notably the *fale tele* 'community house', *fale aitu* 'god house', and the *malae* 'communal ceremonial/political ground' (Davidson 1969, Holmer 1980). According to ethnohistorical and ethnographic evidence (see Mead 1969; Pritchard 1866; Stair 1897; Turner 1984, 1986), and largely still today, the *malae* was the central and most important feature of the Samoan village, serving as social and political meeting space. *Fale tele* were commonly the largest buildings within the village, placed in the most visible area near the *malae*, usually facing seaward and near the settlement centre (Davidson 1969: 63-65). They were used primarily as meeting places, but they also served to house guests. Little is known of *fale aitu*; they seem to have disappeared rather quickly after significant European contact (Turner 1984: 243). Stair (1897: 226) suggested that these structures were distinguished by being elevated and bounded by a fence or other barrier. Residential areas with sleeping and cooking houses were located inland from (or behind) these communal structures.

Shore's (1982) ethnographic analysis of village spatial layouts in Samoa identified two contrasting dimensions: centre:periphery and landward:seaward. The *malae* are the focal point of village life, with the rest of the settlement situated around that space (Shore 1982: 48-51). In other words, the *malae* is the core of the settlement; a place where political and social activities are conducted, a place the village inhabitants wanted visitors to see. Shore (1982: 51) argued that "a passive-aggressive stance in which boundaries separating those in center from those on the periphery are constantly challenged, tested, and reaffirmed". The inland areas, just outside the village, are associated with hard work and men's work. The bush, which is inland of villages, is seen to be the realm of the *aitu* 'ghosts' and trouble, away from the control of the chiefs and away from the human populations. Shore asserted (1982: 49): "To live in the bush was to live alone, out of reach and control of society." The bush is, then, the realm of chaos compared to the controlled world where people live.

The ethnographically documented concept of space is the end result of a number of long term processes, upon which the political structure of Samoa has had particular influence. The basic division within this system is between those men with titles (*matai*) and those without, the latter forming their own group (*'aumāga*) (see Mead 1969, Sahlins 1958). Among *matai*, a number of distinctions were drawn to highlight differences in rank and responsibilities. Talking chiefs (*tulāfale*) are differentiated from chiefs (*ali'i*) by their duties, and the rank of a given title is influenced by the degree of power and status of the holder. Differentiation of rank is readily apparent in the spatial patterning

of individuals during social events. In *fono* ‘council’ meetings, the highest ranked *matai* are seated closer to the central house posts while those of lesser rank are seated increasingly peripheral by their diminishing rank (Shore 1982:80). Attendants, who are part of the *‘aumāga*, are positioned inland of the *matai*, who are in the seaward positions (Shore 1982: 80, Fig. 5.1).

While a full understanding of long-term political development in Samoa is lacking, complex chiefdoms were well documented at and after contact (see Goldman 1970, Hiroa 1930, Krāmer 1902-03, Mead 1969, Sahlins 1958). Oral traditions suggest that each island in Manu‘a was politically autonomous to some extent, and that Ofu and Olosega were ruled as separate polities. However, the highest ranked title in Manu‘a, the Tui Manu‘a, was recognised as paramount over the entire Manu‘a group. Our study considers how these complex social relations and ethnographically recorded settlement patterns might be represented in a prehistoric context in the Manu‘a group.

THE ARCHAEOLOGY OF THE OLOSEGA ISLAND INTERIOR

Prehistoric remains were first recorded in the Olosega interior by Kikuchi (1963), who identified the site as Tamatupu Village based on informant information. A formal site number (AS-12-02) was subsequently assigned by Clark (1980: 39) to the complex. The first investigation of the Olosega interior occurred in the late 1980s, but it was only a reconnaissance survey of a very limited area (Hunt and Kirch 1988). Later, Clark and Suafo‘a (Suafo‘a 1999) surveyed the interior ridgeline and portions of the broad slopes recording multiple features, including a large number of star mounds on the ridge overlooking Olosega Village. Following up on this work, Quintus (2011) conducted an intensive and extensive settlement survey of the southern interior of the island as an extension of the ongoing North Dakota State University settlement system investigations on Ofu. While portions of the interior have not yet been surveyed, a large sample area (117 hectares) was examined (Fig. 2).

Within this interior sample area, all features were located and recorded using a Magellan GPS device with c. 10 m accuracy. Digital photographs and videos were taken for further analysis and for modelling the environmental context. Features were described in detail, and maximum and minimum dimensions were recorded for each of them. The survey identified and documented 200 terraces and 22 star mounds, as well as relocating all 23 star mounds that had been previously identified by Clark and Suafo‘a (Suafo‘a 1999) (Fig. 2). All new features were assigned a unique feature number and considered part of site complex AS-12-02, except for star mound features recorded in previous surveys. In this article, all features within site AS-12-02 will be referred to by their individual feature numbers, while star mounds will

be referred to by their individual site numbers. Spatial analysis of field data was predominantly undertaken using ArcGIS software. Different analytical techniques within the software program were used depending on the questions addressed, each of which we describe below.

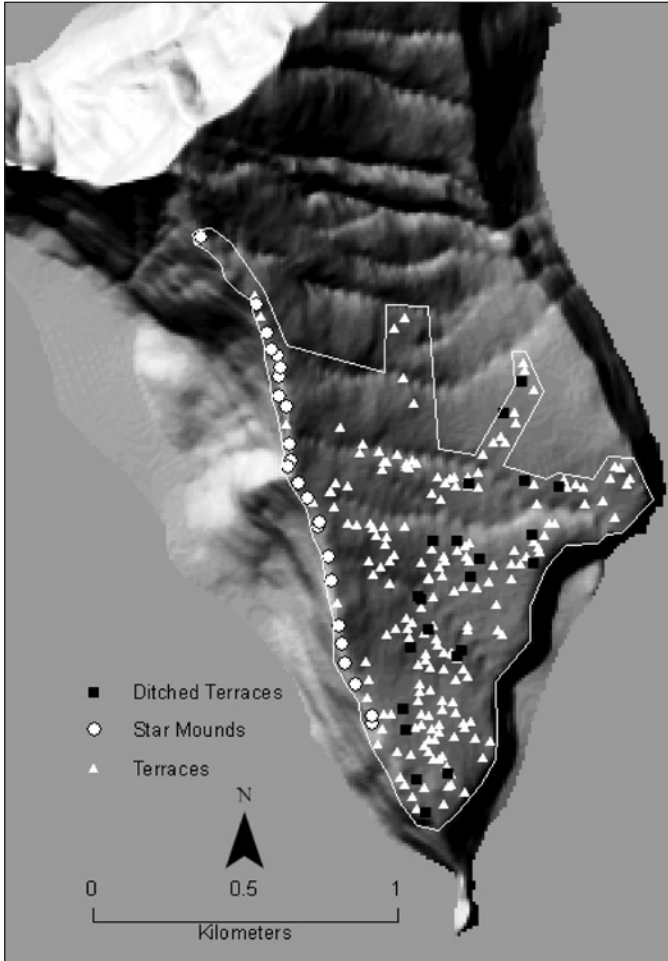


Figure 2. Extent of survey area (outlined in white) and distribution of major features.

The following discussion of archaeological remains describes only structural features (i.e., terraces, ditched terraces, star mounds, ditches, paths) still visible on the landscape. It is on these features that additional evidence of past activity (i.e., paving and alignments) was identified, which informed on the function of these architectural remains. Beyond these structures, only isolated pieces of coral or rock that appeared to have washed off structural remains were noted (see Quintus 2011 for a full discussion of land use at the site).

Star Mounds

Star mounds are characterised by the presence of a raised platform with one to eleven projections, or rays, protruding from the raised platform (Fig. 3) (Clark and Herdrich 1988, Herdrich 1991, Herdrich and Clark 1993). Platforms may be constructed entirely of stone or earth, but a combination of the two was most commonly found. If the platform is constructed of earth, the projections are typically faced with stone, occasionally with one or more pieces of coral included. The shape of the features is either elongated or round, largely dependent on the geomorphological context. The function, or functions, of star mounds remains a matter of debate and beyond the scope of this article, although a few issues are discussed below (see Clark and Herdrich 1993, Davidson 1974, Herdrich 1991).

Morphologically, the star mounds of Olosega are variable, the most recognisable differences being the number of projections, the amount of stone facing used on each projection, the overall size of features and their general shapes. These features average 25 m in length and 13 m in width, but one, AS-12-042, was 40 m long, created by cutting into the ridge and levelling off the surface. While this configuration is not common, it has been observed by Clark on Tutuila. Because of their location on the ridgetop, most of the Olosega star mounds, similar to those on Tutuila in comparable settings, are elongated in shape, constrained by the dimensions of the ridge. Two, however, are located at prominent pinnacles on the ridge, each situated between two intermittent stream banks. These are more circular in shape and exhibit projections on all sides. Again similar to the eastern Tutuila examples (Clark and Herdrich 1993), projections on the steep cliff side of the ridge top were rarely present, presumably because they have sloughed off the cliff. The number of projections ranged from three to ten, with most mounds exhibiting six or eight projections, but if projections possibly lost to cliff erosion are factored in, the mean would change slightly. Stone facing (Fig. 4) is present on the projections of all but one star mound, while some facing is present between projections in a few instances. The shape of the features along with the stacked stone facing provide distinct bounding of the structures and the area of activities with which they are associated.

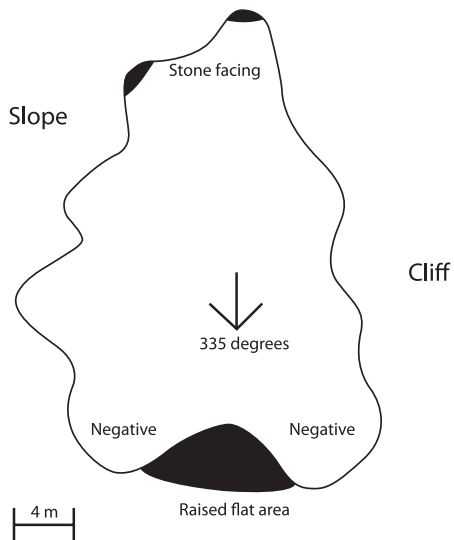


Figure 3. Plan view of a typical star mound, AS-12-30.



Figure 4. Stone facing on a projection of star mound AS-12-19.

Only a few examples of associated archaeological features were identified. The most common are terraces located upslope or downslope. All are small and exhibit little in the way of surface features, unlike terraces located within the primary settlement area, which are interpreted as residential (see below). Flat terrace-like features were sometimes found skirting or connected to the downslope ends of the mounds, which served to better define and make more visible the elevated mound area.

Ditches

Feature 38 is a ditch approximately 1.2 km long that runs across the slope (see Fig. 5), originating on the ridge between two star mounds and terminating in an intermittent stream at the northern end of the settlement area. The dimensions of the feature are variable, especially at high and low points on the landscape. At the ridge end, the ditch measures 3 m in width and 1 m in depth, while in other areas the ditch is 1 m wide and as much as 2 m deep. In some instances, the downslope bank of the ditch is lost, though the ditch is still identifiable. Where the ditch bisects streams, cuts are located in the downslope wall and measure 1-3 m in width. These would have resulted in the diversion of runoff from upslope, channelling it into the stream. In other words, the upslope bank of the ditch is present throughout its length, but cuts in the downslope bank act to drain water and sediment into streams. Often, at least in present day Samoa, these areas are highly productive cropping zones and the addition of run-off and sediment may enhance fertility. In essence, the population would have used natural streams and cuts in Feature 38 to provide irrigation (Quintus 2012).

Paths

Shallow linear depressions interpreted as paths were identified within the study area, although they were not recorded in detail because of time constraints. These well-worn, linear stretches have no paving or stone borders. Most are only a few tens of centimetres deep, but remain visible. Many of these paths appear to lead from one terrace to another, and, in some locations, seem to connect two or more terraces thereby forming a unit.

Terraces

Terraces were the most commonly recorded feature type in the survey area. We plotted 196 terraces and recorded them on the GPS, while four others were recorded but could not be plotted because of the dense vegetation cover. All are earthen and presumed to have been constructed by cutting in and flattening the slope, using natural topography when possible to reduce labour demands. Though the definition of this feature class can be a fairly broad, these were

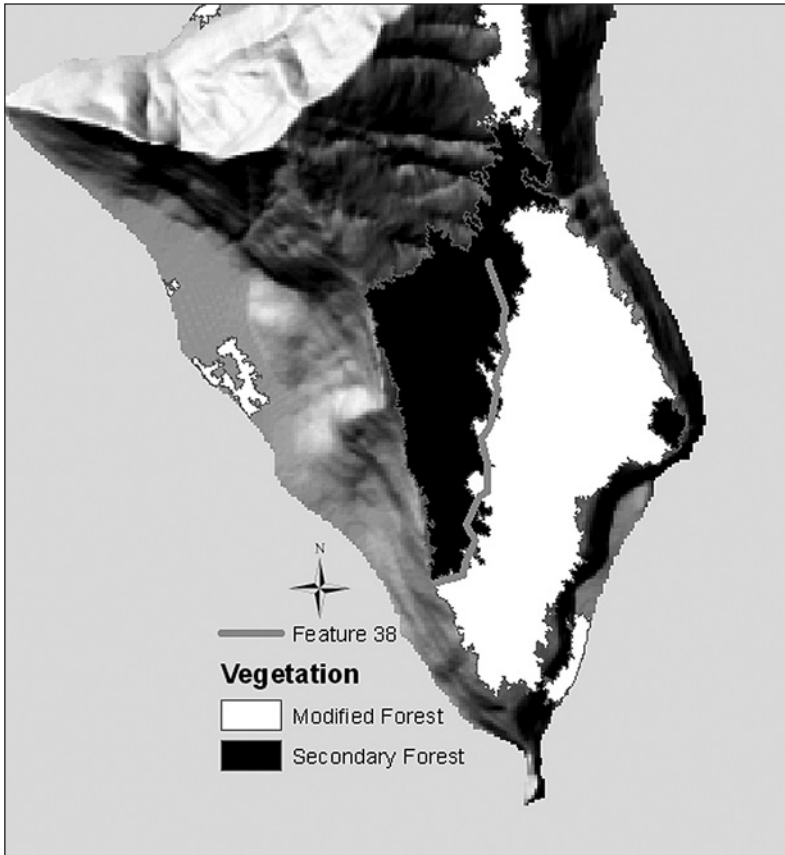


Figure 5. Feature 38, the long ditch, and associated vegetation (the latter based on Liu and Fischer 2007).

distinguished by characteristics such as flat surfaces in otherwise sloping ground, three free-standing sides, coral or stone paving on the feature, stone retaining walls and/or clear earthen borders that differentiate the feature from the surrounding slope (Fig. 6). While other feature classes, such as ditched terraces, may possess one or more of these traits they are differentiated into a distinct category on the basis of additional attributes (see below). Only two terraces, Features 86 and 138, have visible remains of retaining walls,

while erosion presumably has covered the downslope edge of other terraces. In those cases where the downslope edge has eroded away, a large earthen bank on the upslope side, along with earthen-banked sides, define the boundaries of the features. The presence of paving and stone alignments is often the basis of interpreting features as residential (i.e., *fale* or house) versus non-residential. On most terraces, at least some evidence of past habitation is present. Paving is the most common evidence, either in the form of coral rubble or rock pebbles, but stone alignments or a combination of paving and stone alignments were also observed.

Terraces varied in size, ranging in area from c. 27 m² to c. 2860 m², but most ranged between c. 200 m²- 500 m². Features 93 and 188 are morphologically similar, both measure close to 200 m in length, with earthen banks on the downslope side (Fig. 6). Feature 93 ranges in width from 8.1 m to 14.3 m. Where the width is greatest, the downslope bank disappears and 'ili'ili 'stone and coral pebble rubble' are abundant on the feature, forming a floor paving. A third large terrace, Feature 86, measures 74 m long by 24 m wide. A narrow and shallow sunken path leads upslope to two smaller platforms, thereby connecting them to the main terrace. Coral and stone paving is scattered on the main terrace but is absent on the two platforms, while a curbing alignment was also identified on the main terrace suggesting residential use.

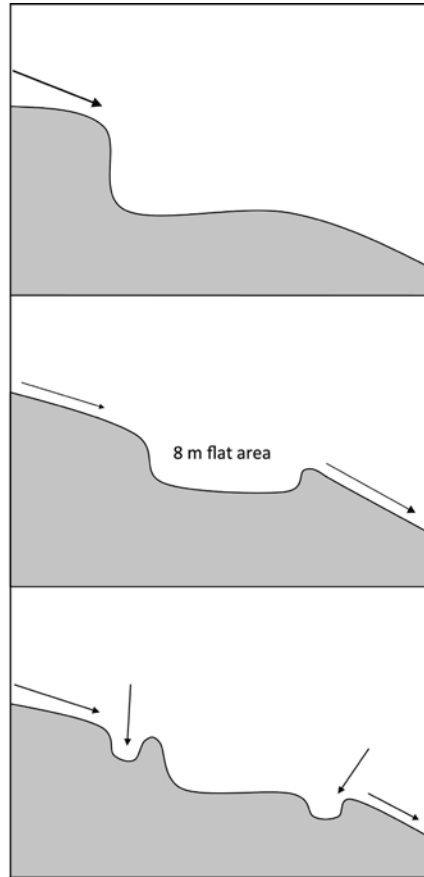


Figure 6. Profile view of a typical terrace (top), Feature 93 (middle), and a typical ditched terrace (bottom); exaggerated for clarity and not to scale (illustration by Briar Sefton).

According to Mead (1969: 210), “formerly Olosega people are said to have lived inland, where the house of Tui Olosega [had] seven *paepae* (foundation terraces)”. While Mead’s description is difficult to translate directly into the archaeology, Feature 86, with its surrounding complex, is the only feature that might approximate it. We surmise that Feature 86 may very well have been the housing complex of the Tui Olosega.

Ditched Terraces

A new feature type has been defined for the Olosega settlement; it is termed “ditched terrace” (Quintus 2011: 84-85) and represented by 22 examples. Although variation exists, all features within this class are characterised by an oval-shaped earthen terrace circumscribed by a shallow ditch (two examples lacked complete circumscription, possibly because of infilling) (Fig. 6). The widths of the ditches vary, but average 1 m on features near the centre of the settlement and 2-3 m on terraces near the peripheries. Causeways crossing the ditch were identified in a couple of instances, but the ditches were too small to warrant such structures in most cases. The areas enclosed by the ditch were split into two parts of fairly equal proportions: a flat and a sloped area. These enclosed areas ranged in size from 12 to 35 m in length and 8 to 26 m in width, yielding an average size of about 23 m by 17 m. In many cases the sloped portion is upslope of the flat portion, but the inverse was identified in one instance. Two ditched terraces, both on the periphery of the settlement, had no sloped portion, the surrounding ditches were deeper, and they exhibited four free-standing sides, illustrating a morphology better described as ditched platforms. Nevertheless, they are still similar to and grouped with the other ditched terraces as a result of presumed shared function.

Surface features were identified on all but four ditched terraces. Although the surface features were similar to those found on many residential terraces, a number of differences were noted. Coral pavements on residential terraces typically consist of water-worn coral rubble, while the pavements on ditched terraces are largely composed of larger flat coral slabs. Volcanic rock, on the latter, also is generally larger and flatter than the water-worn pebbles found on residential terraces. Curbing alignments, free-standing rows of single stones, were discovered on seven examples, one of which was the only rectangular alignment identified in the project area. Upright coral (c. 20 cm above surface) and stone were noted in three cases, one of which was a semi-circular alignment of coral with an upright basalt boulder lodged in the ground at the centre of the alignment (Fig. 7). Upright coral was not found on any terrace. Additionally, a single large *fo’aga* ‘grinding stone’ was discovered in the middle of another ditched terrace. Although these artefacts were traditionally used in stone tool manufacturing, they are also generally

referred to as kava ('ava) bowls by Samoans today. It may well be that in some instances, adze-grinding stones whose facets had become too deep for effective grinding were subsequently used as kava bowls.

These ditched features are different from normal residential terraces in both morphology and surface remains. No comparable ethnographic features have been identified in the literature and few recorded archaeological remains are similar (but see Ishisuki 1974 for a possible parallel). Characteristics of these features do suggest that they had a ritual or ceremonial function. This interpretation is suggested by the upright coral alignments and large flat coral slabs on the surface, which are only found on ditched terraces. Coral is commonly found on ceremonial features throughout Polynesia and considered ceremonial itself (Weisler *et al.* 2006: 274), even more so when they are upright (see Kahn and Kirch 2011, Kirch 1994, Wallin and Solsvik 2010). Furthermore, a number of the surface remains found on ditched terraces are also potentially ceremonial. For example, the *fo'aga*, if used as a kava bowls, coral alignments and the rectangular alignment that faces the central feature in the settlement all have potential ceremonial significance. Kava is traditionally associated with ceremony, grave markers are highly revered in Samoa and the rectangular alignment is unique in the project area. Finally, the



Figure 7. Upright coral and basalt column on ditched terrace Feature 85.

ditch serves to create a distinctly bounded and thereby differentiated space, which is not only significant in and of itself but also has been identified ethnographically in relation to *fale aitu* ‘spirit houses’, which traditionally were built with some sort of boundary device, usually a fence in Samoa’s western islands (Stair 1897: 226).

Spatial Layout

The long ditch that is Feature 38 forms a conspicuous boundary in the landscape, dividing modified forest (common economic plants) from secondary growth (non-economic plants), and residential terracing from non-residential terracing. Erosional infilling and channels suggest that water management was at least one function of the feature, although not necessarily the primary one. Beyond practical uses, the ditch as a boundary has particular importance when placed within an ethnographically identified social context. In essence, the ditch divided the residential village from the plantations and the bush (Quintus 2011). Ethnographically, Samoans viewed the bush as “trouble” (Shore 1982: 50) and unsuitable for living. Feature 38 thus potentially created a barrier between residential and unlivable.

All but three star mounds, which are arranged linearly on a ridge overlooking Olosega village, are located upslope of Feature 38. It is notable that star mounds were not constructed in the village area or on the eastern cliff edge, near the residential terraces. Herdrich (1991) has argued that star mounds are commonly found in the bush away from settlements, because of their ceremonial significance and supernatural associations. The results of our survey support that conclusion.

Terrace distribution was analysed by Inverse Weighted Distance in ArcGIS. Inverse Weighted Distance is a multivariate interpolation method used to predict values in unknown territory with multiple attributes, in this case distance and size. Though this method was not used for predictions, it was employed to identify patterns. Because the method interpolates using values from surrounding features, it illustrates the patterns created by those features. It is, therefore, possible to identify spatial patterns within existing spatial data. Two settlement units of terraces were identified; a third may be distinguished to the south, although it is not clear whether this is a true cluster or an artefact of the analysis (Fig. 8). This is because any time you have a uniquely large feature this particular technique will identify that location as distinct or a “cluster”. In this particular instance, this is the only large terrace in the area with few other signs of this being a distinct unit. In the other two areas, both this analysis and field observation suggests differentiation of settlement units. According to the analysis, larger terraces are located nearer to the centre of these units, while towards the edges there is a decrease in

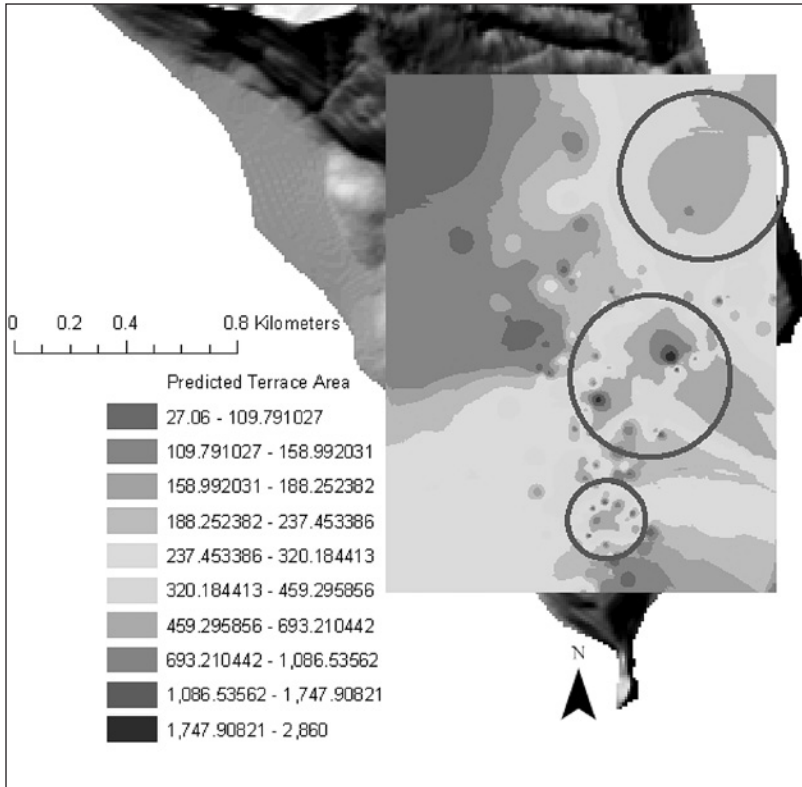


Figure 8. Results of the Inverse Geostatistical Analysis based on terrace area. Proposed clusters are indicated by circles. The northernmost cluster may be an artefact of analysis.

terrace size. The two identified settlement units cluster around Features 93 and 188, the two largest terraces. Additionally, ArcGIS Central Feature Analysis indicates that the central feature in the settlement area, regardless of clustering, is Feature 86, the large central habitation terrace that may have been the housing complex of the Tui Olosega described above.

All terraces with curbing alignments and the vast majority with coral paving are located downslope of Feature 38, while the majority of terraces with limited or no surface remains were identified upslope of Feature 38 and close to stream banks. Additionally, terraces larger than 500 m² are only found

downslope of Feature 38. While paving may be absent from some features because of taphonomic processes, the high degree of differentiation between those upslope and those downslope suggests that the difference is significant. The area upslope of Feature 38, in which a number of terraces with few modifications were identified, was likely under swidden cultivation based on relic forest in the area (Quintus 2011, 2012). Thus, these non-residential

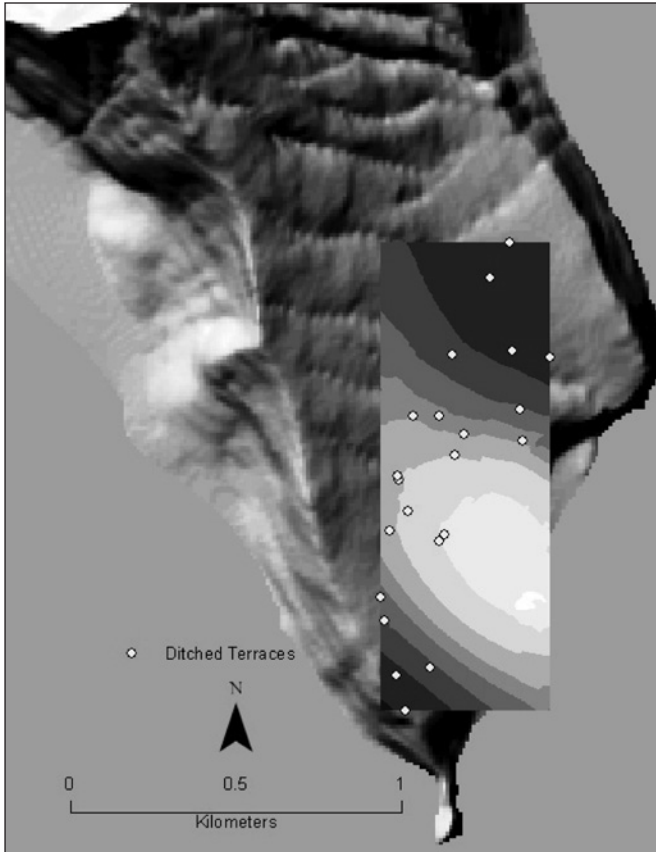


Figure 9. Distribution of ditched terraces and results of the Kriging analysis. Lighter areas (centre) indicate areas of smaller features while darker areas indicate areas of larger features (periphery). The results suggest a pattern of increasing feature size from centre to periphery.

terraces, which were smaller (less than 500 m²) than those downslope of Feature 38 (Fig. 8) may have served as workshop areas or foundations of temporary huts for individuals cultivating the surrounding slopes, similar to the situation suggested by Clark and Herdrich (1988) for eastern Tutuila. However, given the location of these terraces close to and within stream banks, they also could have functioned as cultivation areas.

All ditched terraces were found downslope of Feature 38 and interspersed among the presumed residential terraces. The distribution of these features does not correlate with any other feature class and the only spatial pattern identified was discovered using the Kriging method, an interpolation GIS technique used to predict values from known features onto unknown features. While similar to Inverse Weighted Distance, Kriging utilizes a single attribute to interpolate, instead of the two used by Inverse Weighted Distance. The analysis identified patterns in size distribution for given areas, suggesting that one is more likely to find smaller ditched terraces, which are the majority of ditched terraces, near the centre and larger ones near the peripheries of the settlement (Fig. 9).

Chronology

Since this project was survey based, a precise chronology for features or the site as a whole cannot be determined. While it is possible that not all portions of the settlement are contemporaneous, the general layout and the degree of spatial patterning suggest that most features were in use at the same time. Importantly, Feature 38 (ditch) cuts across the landscape, but does not bisect or disturb any other feature. In fact, Feature 38 avoids nearby terraces, suggesting that the ditch feature was built after many of the residential structures were in place, but still in use.

Oral history from island residents suggests occupation of the settlement in the late prehistoric period, though the exact timing of inland expansion and subsequent abandonment is not known. No pottery was found on the surface and the lithics identified were late prehistoric in style. Based on this evidence, we suggest that the last residential use of most, if not all, structures dates to late prehistory, that is, immediately before European contact, which would be in keeping with Davidson's (1969) Samoan settlement model.

DISCUSSION

When the survey was conducted and the analysis completed, the settlement system represented by the archaeological evidence at inland Olosega appeared unique in the Manu'a group. In 2011, however, the authors conducted a reconnaissance survey of inland Ofu Island and found remains of a second settlement represented by numerous residential terraces (Clark *et al.* 2012).

The precise nature of the Ofu settlement, however, is still sketchy and the site is in need of more intensive examination before meaningful comparisons can be made with the Tamatupu settlement of Olosega. A more productive comparison is with the dispersed settlements found in the larger islands of the archipelago, where large areas of flat or slightly sloping land are found. We focus our comparative analysis on evidence bearing on political, domestic and ritual life after first describing the social perception of space as evidenced by the layout of the entire settlement. Finally, we place Tamatupu in context of Samoan prehistory and discuss its uniqueness. Our aim is to understand the continuity of practice between prehistoric and historic periods while also documenting variability across the archipelago.

Social Perception of Space

Taken as a whole, the spatial layout of the settlement is evidence of social perception of space. The patterns identified are similar to distinctions Shore (1982) has argued for historic Samoan villages, namely that of seaward-landward and centre-periphery. The agricultural-residential distinction at inland Olosega seems consistent with the seaward-landward distinction, although it may simply be a function of terrain slope and can equally be described as village-bush or front-back. Feature 38, the large ditch, divides the residential from the non-residential, and presumably, following Shore (1982: especially 48-51), the bush from the village, wild from cultured, chaos from control. At this site, the bush was primarily used for cultivation while multiple activities within the domestic, political and ceremonial realms occurred within the village. Star mounds, too, were spatially differentiated from the village, as is the pattern across the entire archipelago, even though they could have been constructed on ridges seaward of the village. This pattern is proposed to be the result of their association with the supernatural and *aitu*.

The centre-periphery distinction is, however, more visible and we argue of more importance in regards to political and ceremonial space. Small ditched terraces, which were the majority of ditched terraces, are generally found near the centre of the settlement, though exceptions exist. Feature 86, the large and imposing residential feature, is the central structure in the village. A rectangular alignment found on Feature 100 (ditched terrace) is pointed towards Feature 86 (central terrace), unlike other alignments that are commonly positioned to face seaward. Terrace size generally decreases towards the periphery of the identified units, while larger structures, potentially related to status differentiation, are located near the centre.

Political Life

Kirch (1990) has argued that monumental structures in Tonga and Hawai'i served symbolic functions as physical manifestations of growing chiefly hegemony and dominance. In Samoa, the same could be claimed of the large rock and/or earthen mounds found on 'Upolu and Savai'i, but such features are absent in American Samoa. Herdrich and Clark (1993) have made the case that star mounds, found throughout the archipelago, constitute a form of monumental architecture and represent arenas for chiefly competition (Herdrich and Clark 1993). The status of individual chiefs was linked to their *mana*, which was expressed in actions and outcomes (e.g., Shore 1989). As places for competitive pigeon catching by chiefly title holders, and therefore the demonstration of personal *mana*, star mounds reinforced the social hierarchy. They also provided an arena for enhancing or diminishing the prestige and status of individual chiefs. If the construction of monumental architecture, in this case star mounds, mirrors the development of social complexity on Olosega in a similar way to that argued by Kirch for Tonga and Hawai'i, then the density of star mounds has important implications. The number of star mounds identified on Olosega implies a degree of status rivalry, and possibly social complexity comparable to, or perhaps greater than, in the larger islands of the archipelago.

Further evidence of social differentiation is provided by the spatial patterning of the village. Feature 86, the large, imposing residential terrace, is centrally located in the settlement. Additionally, two, perhaps three, units of terraces, marked by large terrace structures, indicate a pattern of intra-village group differentiation. We suggest that this pattern is representative of a tiered leadership system. The central feature, Feature 86, suggests that an individual, group or family ('*āiga*) held at least some authority over the entire settlement. The distribution of other terraces, on the other hand, suggests that each unit consisted of multiple individual households and was an individually recognised sub-unit. Within the traditional chiefly system then, each sub-unit may have been controlled by separate title holders, while the highest ranked title would hold influence over the entire settlement. These power holdings were likely continuously negotiated through chiefly competition.

Domestic Life

The Tamatupu settlement is large and naturally bounded by topographic features, but elements of this complex are dispersed across the interior landscape. The settlement is bordered on the south, east and west sides by steep cliffs and slopes, while deep stream systems serve as the northern boundary. The location of the settlement would have allowed for seclusion and independence, and defence would have been relatively simple with little

necessity for modification to the natural landscape. Though the distance to the coast is short, the journey there and back would have been difficult, especially when carrying food or construction resources. Those journeys, however, did occur as evidenced by marine shells and abundant coral on the terraces.

Late prehistoric settlements on all islands in the archipelago are dispersed in nature (Clark and Herdrich 1993; Green 2002; Green and Davidson 1969, 1974; Holmer 1980; Jennings and Holmer 1980; Jennings *et al.* 1976; Pearl 2004) and Olosega is no different. At Mt Olo in 'Upolu (Holmer 1980) and Sapapali'i in Savai'i (Jackmond and Holmer 1980), units are clearly delineated by stone walls and paths. However, such physical delineations defining household units and wards have not been reported for other prehistoric settlements in Samoa, nor are they evident in modern coastal villages, where boundaries may be well known and based on natural features and marked trees and bushes. On Olosega, loose boulders are not common in the interior, so the rarity of wall borders is not surprising. While the lack of wall boundaries makes divisions within the landscape harder to document, we propose that a concept of a household unit is reflected in the settlement remains of inland Olosega by the shallow, well worn paths, which, at times, connect multiple features. These may, when mapped in detail, aid in the further identification of household units. Further, as identified in spatial-statistical analysis, at least two settlement units consisting of multiple household groups were identified around large features suggesting intra-village settlement differentiation. While at this point it is not clear whether these differentiations are similar to residential wards identified in 'Upolu and Savai'i (Holmer 1980), there is a degree of similarity and these may represent sub-settlement distinctions (*pitonu'u*).

Ceremonial and Ritual Life

Ritual features are uncommon in the Samoan archipelago and the rare archaeological discussions of these components of Samoan life and settlement rely heavily on the role of star mounds (but see Wallin and Martinsson-Wallin 2007). While alternative ritual spaces are described ethnohistorically, such as *fale aitu* (Hiroa 1930; Stair 1897; Turner 1984, 1986), their identification in the archaeological record has been ambiguous (see Davidson 1969, 1974; Holmer 1980). This is even more of a conundrum given the close cultural ties between West Polynesia and East Polynesia, where ritualised landscapes are common (e.g., Kahn and Kirch 2011, McCoy *et al.* 2011, Wallin and Solsvik 2010). In Olosega, however, two probable ritual features were identified: star mounds and the newly identified ditched terraces.

Even though there is marked variation among star mounds as a type of structure, a certain degree of standardisation in morphology is apparent. Such standardisation is a result of a presumed shared function as pigeon snaring

mounds, though multiple activities are argued to have occurred on the features throughout their use-life (Herdrich 1991, Herdrich and Clark 1993). We suggest that differences within the feature class, as a whole in the Samoan archipelago and not just in Tamatupu, can be ascribed to stylistic variation as part of a simple function/style dichotomy in which the general form is required while characteristics can change with individual preference (see Allen 1996a, Dunnell 1978). Style may be apparent in a number of features on star mounds, but the number of projections is one of the most likely stylistic characteristics. Though many star mounds on Olosega exhibit six or eight projections, a range from three projections to ten were identified. Given Herdrich's (1991) suggestion that each feature is associated with an *'āiga* (family group), it is not surprising to see such stylistic variation. The large number of star mounds on Olosega implies a large number of *'āiga* groups, though a single *'āiga* may have constructed multiple structures over time. Alternatively, the structures may reflect some other socio-political groupings.

As ditched terraces have only been formally identified on Olosega, little is known about their use. However, the evidence suggests that they were used, at least in part, as ritual or ceremonial spaces. Specifically, these features are circumscribed by ditches, have evidence of paved platforms, and exhibit coral and basalt uprights. Although ditched terraces may have been independent innovations in Samoa, they are in many ways reminiscent of the simpler ritual spaces in East Polynesia and Futuna.

Relevant in this regard is other evidence for inter-archipelago contact between Samoa and islands of East Polynesia, largely relating to the Samoan basalt export industry (e.g., Allen 1996b, Best *et al.* 1992, Kirch *et al.* 1995). As Terrell, Gosden and Hunt (1997) argued, two-way voyaging was likely to occur between Polynesian archipelagos, but evidence of such contact is sometimes difficult to identify since much of what was transmitted may not be preserved in the archaeological record, even though such contact may have had significant implications. Such contact may have resulted in the introduction of concepts relating to ritual space and reflected in the development of ditched terraces, either from Samoa into East Polynesia or the reverse. Certainly the ditched terraces are only similar to East Polynesian ritual architecture in very general terms relating to ideas of bounded and differentiated ritual space, but the suggestion of a connection between the two areas, however limited, invites some consideration. Equally plausible is contact and influence from Futuna, where Kirch (1994: 234-35) has documented large ceremonial spaces.

By combining interpretations of star mounds and ditched terraces, a better understanding of the use of and reasons for ritualised space on Olosega can be gained. Both feature classes are bounded, the star mounds by their elevated

form and distinctive shape and the ditched terraces by their surrounding ditches. Both suggest the separation of ritual from domestic life. Furthermore, the number of star mounds (23) and the number of ditched terraces (22) present an intriguing similarity. Building on the idea that star mounds were built by separate *āiga*, it may be possible to extend that interpretation to the ditched terraces as well. However, the distribution of ditched terraces does not support such reasoning as there appears to be a differentiation within the feature class between large ditched terraces located on the periphery and smaller ones located nearer to the centre of the settlement. An alternative possibility is that the smaller ditched terraces represent individual domestic group ritual spaces, while the larger ditched terraces, especially the two unique features on the periphery, represent community ritual spaces.

One final consideration regarding the ditched terraces relates to the two unique examples, Features 1 and 193, whose distinctive form gives a perception of greater height than the other features in this class. While these may have functioned in similar ways to other ditched terraces, their morphology suggests an added distinction. Though Holmer (1980) has suggested that large size correlates with high status, these features, given their spatial position near the periphery of the settlement, do not represent such spaces in a traditional sense of being exclusively owned or used by high status individuals. Instead, these features may have served as the boundaries of the settlement, thereby functioning as high status and recognisable features in that sense.

TAMATUPU (AS-12-02) IN SAMOAN PREHISTORY

Tamatupu is a late prehistoric settlement in the Manu‘a group. The complex consists of a range of feature types, many related to residential activities. While the settlement exhibits many similarities with late prehistoric settlements elsewhere in the Samoan archipelago, unique features are apparent. Such uniqueness is expected in a cultural area, Manu‘a, whose inhabitants considered themselves different from the rest of the Samoan archipelago (Mead 1969:51).

We have identified a number of unique features in the Olosega Tamatupu complex. First, ditched terraces have only been formally recognised on Olosega, though descriptions of features on ‘Upolu seem to bear similarities (Ishisuki 1974). The star mound density in Olosega is unmatched elsewhere in the archipelago in such a small area. Nevertheless, contrary to what has been proposed for some interior settlements on the larger islands of the group (Wallin and Martinsson-Wallin 2007), interior settlement on Olosega was not used *primarily* for ceremonial activities. This settlement represents the full range of activities including ceremonial life and domestic life. Finally, nowhere else in Samoa have the concepts of space documented during the

historic period been so clearly visible within the archaeological landscape.

Though historically documented spatial concepts are readily apparent, one important aspect, the *malae*, is missing. *Malae* are difficult features to identify archaeologically as their identification relies upon an absence of surface modifications. What would distinguish a *malae* from natural landscape is a question which is yet to be answered in an archaeological context. Within that context, a *malae* may be present within the settlement, as areas on the landscape that were left unmodified, but positive identification was not possible at this time.

The crucial questions remain: why did people move into the interior of Olosega and why was the settlement different from others in the archipelago? Few late prehistoric settlements have been found on the coast of either Olosega or Ofu Island. Such a situation suggests the possibility of a substantial population movement into the interior in prehistory. The cause of such a movement, however, is difficult to address at this time, although we present four propositions for future evaluation.

- Population movement was caused by population pressure and/or resource depression that stimulated the movement inland owing to increased competition and need for terrestrial resource production and the protection of those resources.
- A large-scale migration of new populations into the area, as proposed by Addison and Matisoo-Smith (2010), resulted in increased competition and the need for more defensible settlement locations.
- Increasing political complexity in the islands led to increasing conflicts, both within Manu‘a and with other islands, resulting in the need for more defensive settlement locations.
- The interior settlement was part of a larger network of settlements that are yet to be identified on the coast.

* * *

The settlement of Olosega displays critically important similarities with ethnographically documented spatial patterning, taking the establishment of those patterns well into prehistory. The inland Olosega settlement was imbued with meaning by divisions (particularly in terms of centre: periphery) and bounded spaces (bounded ritual space and bounded settlement space) created by both topographic and man-made features. On Olosega, primary residential areas were divided from the main food producing regions, the village was divided from the bush, and areas reflecting social control divided from chaos. Presumed status and ceremonial features are distributed in positions easily

identifiable as socially important by people within the settlement. Prehistoric settlement in interior Olosega further suggests a ritualised landscape in which both everyday ritual spaces (ditched terraces) and special purpose ritual spaces (star mounds) were distinctly bounded and geographically distinguished. All of these social, economic, political and ritual spaces were incorporated into an overall settlement system. While many elements and patterns apparent within the settlement system are similar to those identified elsewhere, other elements and patterns are, given present knowledge, unique. We would not find it surprising, however, if future research were to reveal comparable elements and patterns on other islands of Manu'a and the Samoan Archipelago.

ACKNOWLEDGEMENTS

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ABSTRACT

The spatial layout of a late prehistoric settlement is examined using comparative analysis, ethnohistorical documents and GIS analysis. The spatial organisation of the settlement is similar to the spatial layout of ethnographically documented Samoan villages, which has been posited to mirror social and political interaction. Spatial concepts developed from analysis of those historic villages are argued to be apparent within this prehistoric settlement, suggesting their origin within prehistory and not after European contact.

Keywords: social perception, ritual landscapes, socio-political systems, Samoa, Polynesia

REVIEWS

DUNSFORD, Deborah, Julie Park, Judith Littleton, Ward Friesen, Phyllis Herda, Patricia Neuwelt, Jennifer Hand, Philippa Blackmore, Sagaa Malua, Jessica Grant, Robin Kearns, Lynda Bryder, and Yvonne Underhill-Sem: *Better Lives The Struggle for Health of Transnational Pacific Peoples in New Zealand, 1950-2000*. Research in Anthropology and Linguistics, Department of Anthropology, University of Auckland, 2012. xi + 95 pp., bib., figs, maps, notes, photos, tables. NZ\$25 (paper).

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This is a potted social, demographic and health history of the Pacific community in New Zealand since the Second World War told through seven chapters and 80 pages, using tuberculosis as a starting point and something of a lens on the evolution of this community. This is a way of “telling our story” in Aotearoa as it evolves into the post-colonial multi-cultural society we know. Along the way it gives us an insight into the welfare state, the economy, and the changing social and cultural pattern as seen from the (disad)vantage point of a struggling and striving migrant group. What *Bro Town* and *Sione’s Wedding* have done in television and film story-telling with plenty of artistic licence, the academics are now following through—characteristically, of course, with more restraint and due scientific rigour and objectivity!

“Better Lives”—the short title—is the ninth in a Monograph series from Auckland’s Department of Anthropology. That series runs under the rubric of *Research in Anthropology and Linguistics* (RAL), it dates back more than a decade, and it seems to have had a largely national and regional focus. This is useful and painstaking work for the public record. This will win no academic or cinematic prizes, but it is necessary work along the lines of a social “observatory”, tracking our citizenry and telling their story. A fuller book-length social history treatment of the topic would be a worthwhile project for the future. The multi-disciplinary team drawn from anthropology, history, geography, population health, development and Pacific studies would surely be up for that.

Despite its predominantly documentary nature, there are some real insights here, some of them needing further development. One of the strong themes of the monograph is that the Pacific community needs to be seen as “transnational”. In other words, Aotearoa/New Zealand, as a nation of migrants within historical memory, is linked in to a network of human connections that span the near-Pacific. The nation state becomes a less meaningful unit of analysis in these circumstances. From a bleaker political economy perspective this can be seen as a network of transnational relationships of power and inequality. But looked at within a demographic, cultural and social framework, the concept has a more benign and human aspect, evoking a vision of multiple family and community exchanges of meaning.

A second theme is the use of a health condition—tuberculosis—as a lens or tracer for a consistent line of historical enquiry. This is a helpful and insightful approach since it provides us with a coherent story through social complexity over time, albeit from a particular perspective (the Pacific community). It is part of the social mosaic of the emerging urban New Zealand: the conditions of disadvantage, the circumstances of migration, inequality, race relations, cultural change and relations with the host society. But the concept loses its power over time as the condition—tuberculosis—no longer tells us a full story of the community as a lens or tracer, if it ever did. So the authors deploy the terminology of syndemics; with multiple conditions—diabetes and other health problems now dwarfing tuberculosis—we are entering a model with a complex and sophisticated relationship between health, biology and society. There may be a loss of human agency and too-ready a cession of ground to a disease perspective, but the emphasis on synergy and on the bigger picture of social change is a helpful corrective to a biomedical frame.

A third theme is a multi-faceted story of social history seen “from below”: the gentle and not-so-gentle decline in New Zealand’s social and economic circumstances; the hollowing out of many blue-collar occupations; the struggling welfare state; a transition from a culture of paternalism to one of greater mutual respect; the next-generation spectre of youth crime, health disability, and a potential urban underclass. It is difficult to tell this story without the risk of stereotype and fatalist futures, but it needs to be told.

There are two vignettes that exemplify these themes: the emergence of health services more oriented to the needs of Pacific peoples, and the adjustments made over time in the priorities and tenor of Pacific health research funding. If we look at the latter we can track the changing relationship between the Pacific community and the dominant scientific culture from the study of colonial exotica to an incipient migration story to the current syndemic picture of a complex and multi-cultural melange so typical of parts of New Zealand’s emerging urban landscape.

If there are elements missing in this volume they are texture, conceptualisation and a school or programme of research. I recently reviewed for the *New Zealand Journal of Sociology* an Otago University Press publication on the social history of a clutch of Dunedin suburbs that in their own way were also exemplary of an emerging social order in modern, post-colonial New Zealand. The book comes from years of teamwork involving the close analysis of secondary data and the contributions of multiple student theses and dissertations. This enterprise had texture, it had conceptualisation, and it reflected a distinct school or programme of research played over a quarter of a century of scholarship.

Our challenge is to project from the Otago model of integrated scholarship in history and the social sciences organised around one regional, pre-modern urban setting to the emerging modern, multi-cultural pattern that is contemporary urban New Zealand.

Thode-Arora, H. *Weavers of Men and Women: Niuean Weaving and its Social Implications*. Berlin, DE: Dietrich Reimer Verlag GmbH. 2009. 310 pp. + Colour Plates, appendixes, bib., figs, glossary, maps, notes, tables. €69.00 (paper).

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Weavers of Men and Women: Niuean Weaving and its Social Implications provides the most comprehensive contemporary ethnography of Niue's history, its people and material culture to date since those written by Percy Smith (1903) and Edwin Loeb (1926). Translated from German to English by the author, Thode-Arora has made accessible valuable research that encompasses museum collections, fieldwork and scholarship. From the discipline of anthropology, the author has undertaken an in-depth study of Niuean culture on the island and the diaspora in Auckland, New Zealand. The title "weavers of men and women" is part of a quote from Young Viviani, former Premier of Niue, in reference to his late wife who was a weaver. The author uses this quote as a departure point to focus on the significance of weaving within the broader context of Niuean society.

Between 2002 and 2005, Thode-Arora conducted 18 months of fieldwork in Niue and Auckland, with the support of the German Research Foundation, the Ethnological Museum of Berlin, and a Fellowship at the Women's Studies Programme and the Department of Anthropology at the University of Auckland. From the outset, the author gives a detailed outline of her methodology and the chapters to follow. Thode-Arora has drawn on a range of sources including archives, unpublished and published material, interviews and her own participant observations. This data centres on weaving and has helped to provide a broad and rich foundation for the analysis.

The book is divided into four main sections, with the larger part dedicated to sections two and three. The first section provides a short history of Niue since its human settlement and a closer look at pre-Christian Niuean society. Far from an isolated island the author emphasises (as have other authors) the movement of people particularly from Tonga and Samoa who eventually settled in Niue. Thode-Arora surveys Niue's encounter with explorers, traders, and European and indigenous missionaries in the late 18th and 19th centuries. She then moves onto describe Niue's social structure, and eventual political relationship with Great Britain (1880s-1900) and annexation by New Zealand in 1901. The politics of the New Zealand colonial administration are interrogated with a focus on Resident Commissioner Hector Larsen who was killed in 1953. From the 1960s, Niuean migration to New Zealand for employment is surveyed. However, the author emphasises that Niuean work migration actually began in the 19th century with events like the infamous Peruvian slave trade and the work of Niueans as plantation labourers in places like Samoa. This section ends with a focus on the important Niuean contribution to the First World War.

Section two delves into the central part of the study, comparing the combined contexts of Niue and Auckland, New Zealand. Here the author focuses on a range of topics relating to Niuean society, including church congregations, women's groups, and land rights. A key highlight of this section is the examination of life cycle events

such as the *huki teliga* 'ear-piercing ceremony' in which woven items play a part. Life cycles such as this are embedded in the concept of *fakaalofa* 'reciprocity', and Niueans comment on the complexities of giving and receiving. According to interviewee Maiheote Hekau, aged 62: "Our way of life is reciprocal.... A local person would accept it [a gift of food or other things] quite gracefully and say 'thank you', but then at some stage in the next six months or the next year, however long it takes, they would in turn give back" (p. 148). As Thode-Arora illustrates social relationships are nurtured and regulated through life cycles. However the cycles are not time-bound, and this gives Niueans flexibility to return the *fakaalofa* that was shown.

Section three focuses on the technical and social aspects of the art of weaving. As the author demonstrates, accounts of women in the 19th century were largely non-existent in the literature, thus here an in-depth look at the art is a good reminder of the processes undertaken and the commitment by weavers. Thode-Arora describes the plants which historically included hibiscus bast fibre and pandanus, and has now extended to New Zealand flax and plastic bread bags. The range of woven items are examined as well as their function in the social context, where for one weaver recalling the economic impact in the 1930s and 1940s, "tablemats helped Niue to survive" (p. 258).

Section four summarises in four pages, the complexities of the preceding chapters. One of the key points is that the work of women is situated in the changes in Niuean society, to the point where women are now able to take on more leadership roles in a community which was predominantly egalitarian in nature. Since the early missionary period in the 19th century, which supported weaving, the appreciation of Niuean weaving has continued and expanded to contexts like the annual Pasifika Festival held in Auckland in 2003.

Throughout the text, quotes are interspersed from the author's interviews and from the unpublished Master's thesis by anthropology student Eve Kay (1989). These quotes help illustrate the subtle changes and continuity in ideas relating to identity since the 1980s. The emphasis on the egalitarian society parallels a society that according to the author is inward looking. Thode-Arora's evaluation of societal conflict and the difficulties of migration and cross-generational differences are engaging and shed light on the intricacy of relationships between people, villages and church congregations. The author has provided excellent documentation for her research with an extensive bibliography and detailed footnotes. A table in the appendices section provides good coverage of materials used in producing woven items such as *potu* 'mats' and *kato* 'basket' with Niuean language terms. This will greatly assist future researchers interested in exploring Niue's cultural history. The images and colour plates add depth to the text. The author's research in several museum collections has enabled a rich evaluation of Niuean material culture, and provides good additional information for Te Papa's Niue collection of about 300 *taoga* 'treasures'.

As an extension of the research in New Zealand, I would have liked to see the incorporation of weaving groups outside of Auckland, such as those based in Wellington who have had a long weaving history in the local region. Perhaps re-formatting the layout to have the indigenous terms first (and without italics) and the English translation in brackets would have helped with readability, and put

indigenous categories and terms more forward in the reader's mind. Despite this short list of limitations, I would recommend this book for researchers interested in Niuean cultural history and seeking to understand contemporary Niuean society. The accessible language and empathetic tone opens the work to a range of readers from the more general to a specialist scholar. As an observer, Thode-Arora provides a quiet reading of the cultural context, leaving Niueans to play a central role. The key processes and topics that resonate throughout the text are migration, culture, change, legacy, continuity, transnational communities and relationships, all of which are interconnected with weaving. The last few lines of the book adequately summarises the research and the innovation of Niuean weavers: "the very essence of Niuean weaving seems to be in keen observation, experimenting and improving, until the end product has become a distinctive part of Niuean culture" (p. 266).

YORK, Robert and Gigi York: *Slings and Slingstones: The Forgotten Weapons of Oceania and the Americas*. Kent, Ohio: The Kent State University Press, 2011. xxiii + 196 pp., bib., figs, index, maps, tables. US\$55 (hardcover).

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Robert and Gigi York present an extensive array of archaeological evidence, ethnohistoric accounts, and observations of archaeological and museum collections to provide a wide-ranging picture of the extent and diversity of sling use in Oceania and the Americas. The volume begins with a short introduction to slings and slingstones. It is noted that as slings are usually constructed from materials that do not preserve well, there are very few slings in the archaeological record. Most of the evidence for sling use therefore, relies on the identification of sling ammunition (slingstones) and as such these artefacts provide the focus for much of the book. The authors also provide some general notes on the worldwide history of the sling and, perhaps most useful to many readers unfamiliar with these artefacts, information on identifying slingstones by form and weight. The authors then move into regional reviews of the evidence for sling use and slingstones in Oceania and the Americas, which forms the bulk of the text. The Oceanic section is divided into chapters on Micronesia, Melanesia and Polynesia (the Polynesian section also contains a small section on Madagascar), while the Americas section is divided into a chapter on South and Mesoamerica including the Caribbean, and a chapter on North America. Each of these chapters is comprised of highly detailed sections on specific island groups in the case of Oceania, and on larger geographic units for the Americas. These sections provide information on archaeologically and historically known sling and slingstone forms, historic accounts of sling use, osteological evidence of sling inflicted injuries and treatments for these injuries (notably trepanation), details of actual preserved slings and suggestions of artefact types that may be slingstones, but are not currently interpreted as such. Finally each larger regional section ends with a concluding chapter presenting themes, issues and specific questions regarding slingstone research in the areas.

The overall level of detail for the regional sections is high, however, the chapters are quite variable, with some areas receiving much more coverage than others. Throughout the text, the Yorks acknowledge this and assert that each regional section presents only the sum of the existing evidence for sling use and therefore differences in chapter length or the omission of a particular area, indicates only that there is currently a lack of information for that region. They also contend that this may be the result of a failure to publish the presence of possible slingstones or to identify them as such. In their conclusion to the Oceanic section, the Yorks note that “If we had relied on published syntheses of Pacific archaeology, we would barely be aware of the presence of slingstones – much less their significance” (p. 65). They also note that in some cases where there has been no published information on the existence of slingstones in a region, they have in fact been able to locate collections of such artefacts. The Yorks relate this scarcity of published information on slings and slingstones to one of their central themes: that slings and slingstones have not received sufficient study and are often not considered in archaeological interpretations. They assert that regarding the study of the prehistory of sling use there has been “... a pervasive disinterest in the subject by archaeologists since about 1960” (p. 5). The potential effect of this disinterest in biasing interpretations is made most clear in the chapter on North America, where the Yorks frequently provide arguments for the reinterpretation of numerous artefact types as slingstones.

The logical counterpoint that the Yorks provide to this, and their other central theme of the text, is that slings and slingstones should be receiving more attention from archaeologists, similar to that given to artefact types such as fishhooks and adzes in the Pacific and projectile points in the Americas. Throughout the book they issue repeated calls for archaeologists to consider slingstones in their interpretations and to pursue their study. They contend that such a consideration of slingstones opens up many possibilities for new research; “The questions that beg for answers, the issues to be pursued, seem almost endless...” (p. 145). They also suggest that research into sling related topics could provide valuable insight into several larger research areas. In the case of the Pacific, they suggest that studies of “... settlement of the Pacific, warfare, creation and retention of power, technology transfer ..., and pre-Columbian Austronesian contacts with the Americas.” (p. 65) could all benefit from more sling related research.

The Yorks also make an effort to address and highlight several of these possible avenues of research. Of particular interest is their coverage of “Tregear’s Conundrum” (p. 51, 63-65), from Edward Tregear’s article “The Polynesian Bow”, originally published in the first volume of the *JPS* in 1892. The Conundrum refers to the question of why Polynesian societies (which the Yorks widen to Austronesian speaking societies) exhibited a preference for the sling as a weapon, when there is also evidence for the use of the bow for other purposes. The Yorks, expanding on previous suggestions of the potential advantageous functional characteristics of the sling, suggest that “The truth may lie more in cultural concepts concerning manliness...” (p. 64). They note, however, that unless the call for further study into sling use is answered, such suggestions can only be speculative. Of additional interest are several avenues of research the Yorks suggest in their concluding remarks regarding proxy evidence for

sling use in areas where slingstones have not yet been identified. These include the presence of certain kinds of armour, defensive site features and trepanation.

Robert and Gigi York provide an exceptionally detailed examination of the sling and slingstones in Oceania and the Americas. It will undoubtedly serve as an invaluable reference, especially for those students who may not have heard of, nor know how to recognise a slingstone. One can only hope that the Yorks' aim, to challenge anthropologists to consider the role that the sling and slingstone played in past societies and to pursue the numerous research possibilities presented in this work, will be met in the near future.

Younger, S.M.: *Calculating Chiefs: Simulating Leadership, Violence, and Warfare in Oceania*. Saarbrücken, Germany: LAP Lambert Academic Publishing, 2012. 357 pp., appendix, bib., figs, tables. €79.00 (paper).

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Calculating Chiefs investigates the patterned variation in warfare and violence among the agricultural societies of Oceania. With a lengthy bibliography, it reviews the extensive ethnographic and historical evidence, analysing 11 ethnographic cases to compare patterns in Polynesia, the Caroline Islands and Melanesia. The book is a *tour-de-force*.

Stephen Younger is a surprising person to have written such an important book. His PhD is in Physics, he has worked in simulation and policy, and is appointed as Special Advisor to a Vice Chancellor at the University of Hawai'i. He is an outsider to Anthropology, but, almost as the model anthropologist, he comes from outside to immerse himself in the village life of his subjects, a community of fractious anthropologists. The clarity of his review is remarkable. He summarises the relevant theories of major and less major scholars and presents a comprehensive summary of case materials, providing an exceptional review of the literature on warfare and violence. Of course, some individuals, such as Patrick Kirch or Michael Kolb, deserved fuller treatment, but the evenness of Younger's coverage is laudable.

The book's organisation is a model. The clear introduction justifies both the topic (human violence within an evolutionary perspective) and the appropriateness of Oceania for analysis. He provides an overview of Oceania's geography, culture history and political organisations, a review of the existing literature on warfare and the ethnographic data, robust analyses of seven cases, a justification for the use of simulation and the construction of several simulations, concluding with an assessment of the value added by simulations. Looking systematically at the evidence, Chapter 6 draws convincing conclusions across a wide range of important topics. His scrutiny of small atoll societies is particularly significant, explaining why they should have a "participatory" (nonhierarchical) structure with little warfare. He also concludes that the frequencies of interpersonal violence and warfare are correlated, both

increasing with total population but not with population density. Although violence and warfare are also correlated with leadership and social stratification, he argues that the association is not causal as both are connected to the underlying variable of total population size. His justification for the value of simulation in anthropology is also well presented, although I found the actual simulations too simplified to make their conclusions convincing. This is a common criticism by anthropologists, not resolved by the present simulations, although the concluding chapter shows how simulation can help pick apart causal relationships.

The book stresses the importance of comparative studies in anthropology. Although formulated as a comparative discipline trying to make sense of variation in the human experience, anthropologists have pulled away from engaging with big questions, like those which Younger addresses head on (pp. 23-26). Unlike the anthropologists buried in details of their specific cases, he investigates systematically the rich description of human variation as a means to interrogate those key questions. He grounds his work in existing broad cross-cultural studies of warfare, especially those by Carol and Melvin Ember based on the ethnographic resources in HRAF (Human Relations Area Files).

Younger also stresses the importance of evolutionary studies of variability within specific cultural areas, in contrast to broad cross-cultural studies. Such specific evolution creates differing social forms from common historical backgrounds under variable local conditions of geography, productivity, isolation and community size. Oceania provides the exceptional opportunity for such work. As originally described by Marshall Sahlins, Oceania presents a laboratory for understanding specific evolution as adaptive radiation. Better than any other world region, Pacific scholars can assume that “other things are equal” because the region has a common history, technology and subsistence base. As seen in the comparative studies by Sahlins, Goldman, Feil and others, Oceania is a remarkable workshop for studying evolutionary processes. Younger continues this important tradition.

Considering the opportunity to study specific evolution, the greatest gap in Younger’s analysis is his slight consideration of Oceanic archaeology. Why does he pay so little heed to prehistory? I think that he was forced to ignore it, because archaeologists have been too reluctant to develop measures of key variables such as warfare and political leadership that can be used diachronically. When discussing warfare, we often rely on the same historical and ethnographic documentations used by Younger. Archaeology needs to work with observed diachronic variation, developing creative material measures of such significant variables. As illustrated by the work of Kirch and his collaborators, evolutionary processes can be studied systematically with diachronic data available only archaeologically.

I note the lack of Younger’s consideration of political economy. Perhaps the gap represents his commitment to an agent-based modeling, which rarely considers longterm change, or his slight consideration of archaeology. For example, Younger states “Earle (1997) divides the function of leadership into three categories: economic, military, and ideological” (p. 68). These three are not functions, but are sources of power. The ability of chiefs to control bottlenecks in the political economy allows the mobilisation of surplus to support political power strategies involving these elemental

powers. Thus, with the increasing power of chiefs, the goal of warfare shifts from community defense to political conquest seeking revenue sources. The warrior class should be conceptualised as power specialists equivalent to land managers or priests. Although Younger has read the work by Kirch, myself and our collaborators, he fails to understand our political economy perspective on warfare and related topics. Probably each reader will identify some further gaps, but this does not detract from the great scope and fine analyses of the book.

Calculating Chiefs is a classic study in comparative anthropology. Younger's analysis of the ethnographic differences in warfare and violence in Oceania is a touchstone for future work. Now we must meet Younger's challenge to increase the use of modelling, to emphasise comparative approaches, and to take the significance of Oceanic studies to a broad social science audience. We should also reconfigure our approaches to archaeology to measure such key variables as warfare and violence, and to bring in a strong political economy perspective to issues of longterm social change. I appreciate the contribution and welcome the challenge that Younger has given us.

PUBLICATIONS RECEIVED*

April 2012 – September 2012

- Dunsford, Deborah, Julie Park, Judith Littleton, Ward Friesen, Phyllis Herda, Patricia Neuwelt, Jennifer Hand, Philippa Blackmore, Sagaa Malua, Jessica Grant, Robin Kearns, Lynda Bryder, and Yvonne Underhill-Sem: *Better Lives: The Struggle for Health of Transnational Pacific Peoples in New Zealand, 1950-2000*. Research in Anthropology and Linguistics, Department of Anthropology, University of Auckland, 2012. xi + 95 pp., bib., figs, maps, notes, photos, tables. NZ\$25.00 (paper).
- Ewart, Elizabeth and Michael O’Hanlon (eds): *Body Arts and Modernity*. Wantage, UK: Sean Kingston Publishing, 2011. 185 pp., bib., index, notes, photos. US\$37.50 (hardcover).
- Gershon, Ilana: *No Family is an Island: Cultural Expertise among Samoans in Diaspora*. Ithaca, NY: Cornell University Press, 2012. 208 pp., bib., index, notes. US\$22.95 (paper).
- Hviding, Evard and Knut M. Rio (eds): *Made in Oceania: Social Movements, Cultural Heritage and the State in the Pacific*. Wantage, UK: Sean Kingston Publishing, 2011. 353 pp., index, maps, photos. US\$119.99 (hardcover).
- O’Malley, Vincent.: *The Meeting Place: Māori and Pākehā Encounters, 1642-1840*. Auckland: Auckland University Press, 2012. vii + 284 pp., bib., figs, index, notes. NZ\$45.00 (paper).
- Small, Cathy A.: *Voyages: From Tongan Villages to American Suburbs*, 2nd Edition. Ithaca, NY: Cornell University Press, 2011. 312 pp. appendix, bib., figs, index, maps, notes, tables. US\$19.95 (paper).
- Somerville, Alice T.P.: *Once Were Pacific: Māori Connections to Oceania*. Minneapolis, MN: University of Minnesota Press, 2012. xxx + 296 pp., figs, index, notes. US\$22.50 (paper).
- Thode-Arora, Hilke: *Weavers of Men and Women: Niuean Weaving and its Social Implications*. Berlin, DE: Dietrich Reimer Verlag GmbH, 2009. 310 pp. appendixes, bib., colour plates, figs, glossary, maps, notes, tables. €69.00 (paper).
- Younger, Stephen M.: *Calculating Chiefs: Simulating Leadership, Violence, and Warfare in Oceania*. Saarbrücken, Germany: LAP Lambert Academic Publishing, 2012. 357 pp., appendix, bib., figs, tables. €79.00 (paper).

* The inclusion of a publication in this list neither assumes nor precludes its subsequent review.

MINUTES OF THE 121st ANNUAL GENERAL MEETING
OF THE POLYNESIAN SOCIETY (INC.), 25 JULY 2012,
DEPARTMENT OF MĀORI STUDIES,
UNIVERSITY OF AUCKLAND.

Present: Dr Richard Benton in the chair and 9 members.

Apologies: Ann Chowning, M.Goldsmith, Peter Sheppard, Hamish Macdonald, Robin Hooper, Sean Mallon, Dame Joan Metge
Benton/Carter: “That the apologies be sustained.” Agreed.

Minutes of 2011 AGM: Park/Campbell: “That the Minutes be received as a true account of the meeting.” Carried.

Presentation and Adoption of the Council’s Report

The Hon. President presented and spoke to the Council’s Annual Report. The following Resolution was moved and carried:

Huntsman/Carter: “To approve minor modifications in the Rules of the Society as approved by Council which will relieve the Society of filing tax returns.”

- The Report showed that the membership has decreased mainly because of members’ unpaid subscriptions and cancellations by Institutional members which may be attributed to the availability of the *JPS* online. The Society relies heavily on Institutional Subscriptions to finance the *Journal*, but increases in royalties and other payment (e.g., JSTOR and Copyright Licensing Ltd) do compensate for declining subscription revenue to some extent.
- Annual accounts have been completed for 2011 and were presented for information. The Reviewers report was attached to the Annual Accounts. The Society has shown a net surplus mainly attributed to interest earned on term deposits, copyright and royalty payments, and payment of subscription arrears.
- Council reported its decision that from 2013 there will be two-tier memberships/subscriptions. All members will have access to the *JPS* electronically. Those who elect to receive the *JPS* in hardcopy as well as electronic access will see their annual dues increase by \$20 to \$70 per annum; those who elect to receive the journal through electronic access only will continue to pay \$50 per annum. The dues increase for those wishing to continue to receive hardcopy reflects the additional printing and postage costs. A motion regarding the dues increase for those preferring hardcopy was on the table.

The Council anticipates that the above arrangements will both make the *JPS* more attractive to potential members and at the same time maintain the Society's financial viability. There is a three-year embargo on free electronic access to recent issues. There are people who would actually prefer to have electronic access only and the ability to pay dues electronically should make becoming and remaining a member easier. At the same time the costs of producing and despatching *JPS* issues will be reduced and the costs of printing and posting hardcopy will be borne by those who prefer to have issues in their hands and on their bookshelves.

The Society and its members benefit from the support of the University of Auckland that allows the Society to keep costs down. Specifically, the Department of Māori Studies provides the Society with its office and storage space, as well as access to office equipment; likewise, the Anthropology Department provides for the Hon. Editor and the *JPS*. These arrangements are not only economical but also very convenient and congenial.

Benton/Campbell: "That the Report of Council be received." Carried.

Presentation and Adoption of the Annual Accounts

The Hon. Treasurer presented the Annual Accounts and Reviewers report for 2011.

Rawiri/Carter: "That the 2011 Accounts be accepted." Carried.

Honoraria

Carter/Campbell: "That the honoraria for the year 2012 be at the same rate as 2011, and that they be paid." Carried.

Presentation and Adoption of the Editor's Report

The Hon. Editor's report was presented and the following matters highlighted.

Over the past year there have been some changes in the editorial team. Lyn Carter has been joined by Siobhán Mattison in handling book reviews. Judith Macdonald has retired as an Assistant Editor, but Dorothy Brown is carrying on and Melinda Allen has undertaken assistant editor tasks in preparation for becoming a co-editor. Production arrangements with Hamish Macdonald continue to be extremely satisfactory. I thank my fellow editors for their support throughout the year. Hamish, now a member of Council, has not only continued to prepare each issue for the printer and advise on printing arrangements but also to advise and initiate in matters digital. The generous and generally anonymous referees who pass judgments and provide comments are crucial partners in maintaining the quality of our venerable publication.

JPS Online. The UoA Library managed website—JPS Online—now includes several memoirs that are no longer in print: Jeffrey Sissons, *Wiremu Wi Hongi and Pat Hohepa, Ngā Pūriri o Taiamai...* (originally titled *The Puriri Trees are Laughing...*); Elizabeth Bott with Tavi, *Tongan Society at the Time of Captain Cook's Visits: Discussions with Her Majesty Queen Sālote Tupou*; and Andrew Pawley (ed.), *Man and a Half: ... Essays in Honour of Ralph Bulmer*.

Huntsman/Campbell: "That the Hon. Editors Report be accepted." Carried.

Election of Officers

Having been duly nominated and seconded, the following were elected to hold office until the year 2013 AGM:

President: Richard Benton
Hon. Secretary: Rangimarie Rawiri
Hon. Treasurer: Rangimarie Rawiri
Hon. Co-Editors: Judith Huntsman and Melinda Allen

Election of Council Members

The following, whose nominations were duly nominated and seconded, were elected as Members of the Council for two years: Sean Mallon, Michael Goldsmith, Peter Sheppard and Ben Davies.

Election of Reviewers:

Rawiri/Carter: "That Tane & Assocs., Chartered Accountants be the elected Reviewers." Carried.

General Business

The following Resolution was moved.

Huntsman/Carter: "That Council institute the two-tier subscription from 2013". Carried.

The President Dr Richard Benton thanked the Council and members for their support during the year.

There being no more business, the President thanked members for their attendance and declared the 2012 AGM meeting closed at 6:15pm.

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PUBLICATIONS OF THE POLYNESIAN SOCIETY

The publications listed below are available to members of the Polynesian Society (at a 20 percent discount, plus postage and packing), and to non-members (at the prices listed, plus postage and packing) from the Society's office: Department of Māori Studies, University of Auckland, Private Bag 92012, Auckland. All prices are in NZ\$.

Some Memoirs are also available from: The University Press of Hawai'i, 2840 Kolowalu Street, Honolulu, Hawai'i 96822, U.S.A., who handle North American and other overseas sales to non-members. The prices given here do not apply to such sales.

MĀORI TEXTS

1. NGATA, A.T. and Pei TE HURINUI, *Ngā Mōteatea* (Part 1). New Edition of 1958 edition, 2004. xxxviii + 464 pp., two audio CDs, genealogies. 2004. Price \$69.99 (hardback).
2. NGATA, A.T. and Pei TE HURINUI, *Ngā Mōteatea* (Part 2). New Edition of 1961 edition. xxxviii + 425 pp., two audio CDs, genealogies. 2005. Price \$69.99 (hardback).
3. NGATA, A.T. and Pei TE HURINUI, *Ngā Mōteatea* (Part 3). New Edition of 1970 edition. xlii + 660 pp., audio CD, genealogies. 2006. Price \$69.99 (hardback).
4. NGATA, A.T. and Hirini Moko MEAD, *Ngā Mōteatea* (Part 4). New Edition of 1991 edition with English translation. xviii + 380 pp., two audio CDs, genealogies. 2007. Price \$69.99 (hardback).

MEMOIR SERIES

14. OLDMAN, W.O., *The Oldman Collection of Maori Artifacts*. New Edition with introductory essay by Roger Neich and Janet Davidson, and finder list. 192pp., including 104 plates. 2004. Price \$30.
15. OLDMAN, W.O., *The Oldman Collection of Polynesian Artifacts*. New Edition with introductory essay by Roger Neich and Janet Davidson, and finder list. 268pp., including 138 plates. 2004. Price \$35.
37. DE BRES, Pieter H., *Religion in Atene: Religious Associations and the Urban Maori*. 95pp. 1971. Price \$4.10.
38. MEAD, S.M., Lawrence BIRKS, Helen BIRKS, and Elizabeth SHAW, *The Lapita Pottery Style of Fiji and Its Associations*. 98pp. 1975. Price \$7.00.
39. FINNEY, Ben R. (comp.), *Pacific Navigation and Voyaging*. 148pp. 1975. Price \$8.00.

41. McLEAN, Mervyn., *An Annotated Bibliography of Oceanic Music and Dance*. 252pp. 1977, with 74pp. 1981 Supplement. Price \$12.30.
43. BLUST, Robert, *The Proto-Oceanic Palatals*. 183+x pp. 1978. Price \$12.00.
45. HOOPER, Antony and Judith HUNTSMAN (eds), *Transformations of Polynesian Culture*. 226+viii pp. 1985. Price \$35.00.
47. SIIKALA, Jukka. *Akatokamanāva. Myth, History and Society in the South Cook Islands*. 153+xi pp. 1991. Price \$29.95.
49. SORRENSON, M. P. K., *Manifest Duty: The Polynesian Society Over 100 Years*. 160pp. 1992. Price \$32.50.
50. BROWN, DOROTHY (comp.), *Centennial Index 1892-1991*. 279pp. 1993. Price \$30.00.
51. TE ARIKI TARA 'ARE, *History and Traditions of Rarotonga*. Translated by S.Percy Smith. Edited by Richard Walter and Rangi Moeka'a. 216pp., genealogies and song texts. 2000. Price \$70.00.
52. REILLY, Michael P.J., *War and Succession in Mangaia—from Mamae's Texts*. 112pp., genealogies and maps. 2003. Price \$16.00.
53. BIGGS, Bruce Grandison, *Kimihia te Mea Ngaro: Seek That Which is Lost*. 80pp. figs. 2006. Price \$30.00.
54. REILLY, Michael P.J., *Ancestral Voices from Mangaia: A History of the Ancient Gods and Chiefs*. xiv + 330 pp., maps, drawings, genealogies, index. 2009. Price \$40.00.
55. TE HURINUI, Pei, *King Pōtatau: An Account of the Life of Pōtatau Te Wherowhero the First Māori King*. 303 + xiv pp., figs, genealogies, indexes, maps. 2010. (Available to members of the Society only at \$40.00.)
56. McRAE, Jane, *Ngā Mōteatea: An Introduction / He Kupu Arataki*. Māori translation by Hēni Jacobs. 158 pp., biblio., figs, notes, song texts. 2011. (Available to members of the Society only at \$28.00.)

MISCELLANEOUS PUBLICATIONS

- TOKELAU DICTIONARY*. lii + 503 pp. Price: \$35.00.
- INCEST PROHIBITIONS IN MICRONESIA AND POLYNESIA: Special Issue*, June 1976. 155pp. Price \$12.00.
- FUTURE DIRECTIONS IN THE STUDY OF THE ARTS OF OCEANIA: from Special Issue*, June 1981. 70pp. Price \$4.00.
- BIOLOGICAL ANTHROPOLOGY IN THE PACIFIC: Special Issue*, March 1994. 108pp. Price \$12.50.

KIE HINGOA 'NAMED MATS', 'IE TŌGA 'FINE MATS' AND OTHER TREASURED TEXTILES OF SAMOA & TONGA: *Special Issue*, June 1999. 120pp. Price \$15.00.

ESSAYS ON HEAD-HUNTING IN THE WESTERN SOLOMON ISLANDS: *Special Issue*, March 2000. 144pp. Price \$15.00.

POSTCOLONIAL DILEMMAS: REAPPRAISING JUSTICE AND IDENTITY IN NEW ZEALAND AND AUSTRALIA: *Special Issue*, September 2003. 124 pp. Price \$15.00.

POLYNESIAN ART: HISTORIES AND MEANINGS IN CULTURAL CONTEXT: *Special Issue*, June 2007. 192 pp. Price \$30.00.

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BACK ISSUES OF THE JOURNAL AVAILABLE

THE SOCIETY holds copies of most issues from Volume 76 (1967) onwards. Some copies of issues from earlier volumes are available, or become available from time to time. Orders and inquiries should be directed to the Assistant Secretary, Polynesian Society, Department of Māori Studies, The University of Auckland, Private Bag 92019, Auckland, New Zealand.

Prices per issue are as follows (exclusive of the *Special Issues* above):

Vol. 116 (2007) and earlier: \$2.00 plus postage and packing

Vol. 117 (2008) onwards: \$15.00 plus postage and packing

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