THE ARCHAEOLOGY OF COMMUNITY ON MABUYAG (MABUIAG)

in the Western Torres Strait, Northeastern Australia

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Abstract

This paper provides new insights into the late Holocene history of Mabuyag in western Torres Strait. It addresses a question posed by McNiven *et al.* (2006:75): 'at what point [did] Mabuyag became [sic] a residential island and a separate people (i.e. the Goemulgal) with their own identity'? Using a social model of regionalisation, 'community' is approached using the archaeology and ethnography of four recently excavated traditional villages and one ceremonial meeting place (*kod*). Community emergence and development is traced over the past 1000 years through multiple fissioning events and the development of unique (often monumental) sites. Archaeology and oral histories provide insight into community restrictions, but also the formalised removal of these in particular places or circumstances.

Introduction: The Archaeology of Community

The archaeology of social groups has emerged from over a century of theoretical discourse. Both evolutionary and cultural historical models perceived past cultures as temporally- and spatially-bound entities (e.g. Childe 1956). It was expected that regional patterns within archaeological assemblages could be used as a tool for 'identifying and characterising cultural packages' (Shennan 1989:5-14). Such 'packages' might take the form of spatially and temporally distinctive sites, material cultures and stylistic markers (Kroeber 1952; Renfrew 1977).

In the late twentieth century it became evident, however, that there was a 'potential lack of fit between the social configuration "community" and … material remains' (Hodder 1978:28). The dynamic, multilayered nature of human interaction was expected to disguise social groups, potentially creating homogenous material assemblages (e.g. Jones 2007:47). Material culture distribution could be influenced by environmental settings, trade ties, availability of resources, local traditions of craft production, status emulation, gender identities, intergroup marriage patterns and religious beliefs (Best 2003:171; Thomson 1939; Trigger 2006:309).

A valuable method to mitigate this problem was comparisons between ethnographically-known practices, sites and material culture and archaeological patterns (Binford 1962; Caldwell 1959; Trigger 2006:320). Following the tenets of middle range theory, if an artefact (or combination of artefacts) was found in contemporary societies this could be correlated to a particular form of behaviour or belief. This could then be connected with comparable behaviours and beliefs if found within an archaeological context (Binford 1962).

In Australia, a regionalisation model has allowed researchers to integrate ethnography and archaeology to create a textured view of the past (McNiven 1999). Birdsell (1953; also Binford 1983) used ethnographic analogies to show that social and/or demographic pressures may cause social groups to fission into smaller social groups with separate territories. Fissioning may be archaeologically visible through shifts from one to multiple settlement sites (Dortch 2002:13; McNiven 1999:162, 2003:331). As new territories form it was expected that movement of people became increasingly localised, regulated by new political systems and ceremonial activities (McNiven 2003; Pickering 1994). This localisation may result in unintentional modifications (e.g. linguistic divergence) or intentional social markers (e.g. unique sites and cultural materials) (David and Lourandos 1998). Regional patterns may develop in mortuary practices (Pardoe 1995), rock art (David and Lourandos 1998; Taçon 1993), and site distribution (McNiven 1999:163). A desire to maintain connections between newly-formed groups and territories may promote the development of formalised intergroup alliances and social gatherings associated with ceremonies and networks of trade/exchange (Lourandos 1997).

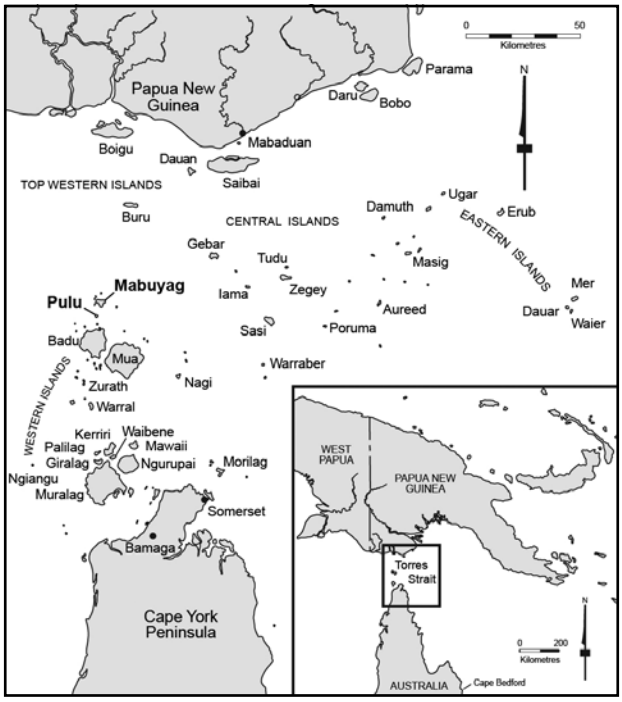

Figure 1 Map of Torres Strait Islands showing research area.

Torres Strait Communities

Indigenous Australian and European histories recognise that discrete nations (communities) exist in Australia. The Mabuyag community (Goemulgal) is one of many self-differentiating social groups in the Torres Strait. Others include the Saibailaig (affiliated with the Top Western Islands); the Badulgal and Mualgal (Western Islands); the Kaurareg (in the South Western Islands); the Kulkalgal (in the Central Islands) and the Meriam le

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Figure 2 Map of ancestral Goemulgaw villages on Mabuyag (Courtesy of Schlenker Mapping and Matt Coller). Aligned grid north.

in the Eastern Islands (Beckett 1972; Haddon 1904:67, 1935:37) (Figure 1). Historical sources identify vibrant inter-relations between communities involving expansive networks of trade, exchange and family ties (e.g. Beckett 1972; Haddon 1890:339-341, 1904:293-297).

Archaeological patterns (on a large/inter-regional scale) support fluid boundaries, including a plethora of occupation sites (rockshelters, shell middens, stone artefact scatters, oven stones); subsistence sites/facilities (mound-and-ditch systems; stone fish traps); and stone/ochre quarries (McNiven *et al.* 2004). Dugong bone mounds were an exception, restricted to the Western and Central Islands (McNiven *et al.* 2004). Rock art also appears 'not to have been influenced by social groupings of the late 1800s' (Brady 2005:397; also Brady 2006:370). The only sizable distinction appears to be a differing mode of artistic expression between painted traditions in the west and engraved traditions in the east (McNiven and David 2004).

To date, the most fruitful line of enquiry for examining Torres Strait communities has been on a smaller/regional scale through ethnographically-known sites (e.g. villages and the ceremonial men's meeting place or *kod*) (McNiven *et al.* 2004). These sites are historically-documented, ethnographically-known, and intimately connected with contemporary Torres Strait communities (David *et al.* 2009; Ghaleb 1990; McNiven and Bedingfield 2008; McNiven and Wright 2008; McNiven *et al.* 2009). The following sections provide a synthesis of existing ethnographic and archaeological research at Goemulgaw villages, including new results from excavations in 2005 and 2006. Site chronology and distribution are scrutinised following expectations of fissioning events and regionalisation.

Goemulgaw Ethnography

The Goemulgal claim jurisdiction over Mabuyag, its surrounding seas, fishing grounds, reef systems and adjacent islets (Tom cited in Haddon 1904:285; Tim Gizu, pers. comm., 10 November 2006). Community is structured through totemic affiliation with four ancestral 'villages': Wagadagam and Dabangai on the north coast and Maidh and Goemu on the east coast (Haddon 1904:266, 1935:56) (Table 1, Figure 2).

Oral histories identify Wagadagam as the locus for Goemulgaw fissioning, with all other villages founded by sons and a daughter of Bari, the chief of Wagadagam (Edmund Bani, pers. comm., 12 November 2006; Haddon 1904:164, 236; Mooke and Simpson 1972:1). Following 'The Coming of the Light' (i.e. missionaries) to Mabuyag in 1872, residents of the various discrete villages and hamlets were amalgamated into the single settlement of Bau on the east side of the island.

Totemic affiliation structured the behaviour, practice and spiritual/ceremonial roles of people belonging to each village (Table 1). In line with its primary totem, Dabangai is reputed to be the place of great dugong hunters and the location for ceremonies relating to this animal (Eseli *et al.* 1998:74; Haddon 1904:40-44, 1935:182-183). Such magic involved 'proprietary offerings' of dugong bones placed in the trunk and roots of large Banyan trees (Moresby 1876:131). The people from Goemu were 'largely concerned with turtle fishing' and like the turtle are perceived as peaceful and humble (Haddon 1904:183; also Gabriel Bani, pers. comm., 21 September 2006). Success in turtle hunting was ensured through a number of key ceremonies at the Goemu *kod* and a shrine consisting of tall thin stones (*adil*) surrounding a large water-worn cobble (*wiwai*: Haddon 1904:164, 330-335, 1935:59, 353).

Villages were further individualised through intangible markers, including wind directions, stars, body parts and cultural heroes (Table 2). For example, Kuyam (a.k.a. Kwoiam) (recognised in oral histories to have brought warfare to the Torres Strait) is connected with many of the landmarks at Goemu, including boulders reputed to be the heads of his victims (Haddon 1904:285; Lawrie 1970:99).

The significant conceptual and spatial distinctions between villages were carefully maintained and regulated. To move between villages it was necessary to follow paths that were kept open through reciprocal gift exchange (Haddon 1904:99; Landtman 1917:152; Lawrie 1970:99). The people of Wagadagam, for example, provided *biu sama* (mangrove) to people on the east coast who provided dugong meat in return. Abuse of this system

Table 1 Totemic affiliation (from sketch map drawn in 1898 by Ned Waria cited in Haddon 1904:163).

Village	Primary Totem 1	Subsidiary Totem 1	Primary Totem 2	Subsidiary Totem 2	Primary Totem 3	Subsidiary Totem 3
Wagadagam	crocodile	sucker fish	snake	dugong	turtle	frigate bird, fruit bat
Goemu	turtle	crocodile, dog	–	–	–	–
Maidh	snake	turtle, sucker fish	–	–	–	–
Dabangai	dugong	crocodile	–	–	–	–
Pulu	dugong	sucker fish	cassowary	dugong, snake	dog	turtle

resulted in serious punishment for the perpetrator and the risk of closing down paths (Haddon 1904; Lawrie 1970:119). Access was also restricted to *kod* sites and *merkai mud* (ceremonial house in Maidh; Adhi Dimple Bani, pers. comm., 10 September 2006; Haddon 1890:399, 1904:208-209). A rare exception was 'the national kwod' of the Goemulgal on Pulu (Haddon 1904:3). This was the only *kod* in the Torres Strait where women and children were permitted to attend (McNiven *et al.* 2009:293). It was also the location for ceremonies relating to all Goemulgaw clans, with fireplaces, bone mounds and *bu* shell arrangements inscribed (and spatially organised) based on totemic affiliation (Haddon 1904:3-4, 208-209, 266, 1935:56-57) (Table 1).

Village knowledge, skills and stories were carefully guarded but in exceptional circumstances these restrictions could also be lifted. This is illustrated in a recent narrative about village relations:

> One day a man from Goemu accidentally speared a crocodile rather than a dugong when he was hunting at night time. He realised he had done wrong and brought the body of the crocodile around to the people of Wagedagam. Those people [the people from Wagadagam] cried for that crocodile. Then they made a crocodile out of tortoise shell and gave it to the man [from Goemu] and told him that he could carve new things (Tim Gizu, pers. comm., 1 October 2006; see also Lawrie 1970:120).

A similar example exists for *kuthibu* and *giribu*, two sacred tortoise shell pendants created by Kuyam and protected by the *koey awgadhaw kazi* (big totem clans). Wilkin (in Haddon 1904:318, 372) recorded a conflict in which the *kuthibu* was carried by a warrior of the *moegi awgadhaw kazi* (small totem clan) while the *giribu* was carried by a warrior of the *koey awgadhaw kazi*. In this sense, the socio-political and ceremonial life of the Goemulgal involved the selective protection and passage of knowledge, skills, artefacts and stories.

Goemulgal Archaeology

Surveys of Mabuyag have identified an abundance of archaeological sites, including middens, fish traps, stone-edged trackways, stone rectangles and circles, mound-and-ditch systems, surface arrangements of *bu* shells, dugong bone mounds, burials, rock art and wells (Barham and Harris 1987:5). Mabuyag's site diversity is considered second only to the much larger island of Mer (13 and 17 site types respectively) in the Torres Strait (McNiven *et al.* 2004:77). The adjacent island of Pulu also contains a wide variety of sites, including the most extensive rock art complex so far recorded for the Torres Strait (Brady 2006; McNiven *et al.* 2009). Of the 21 different site types recorded for the Torres Strait, however, none were considered unique to the Goemulgal, nor were rock art motifs exclusive to this community (Brady 2005:397; 2006:376).

The following sections examine the chronology and site distribution for Wagadagam, Goemu, Dabangai and Maidh (Wright 2010) and the Pulu *kod* (McNiven *et al.* 2009).

Wagadagam

Surveys in 1984 revealed little surface material and no archaeological features at Wagadagam (Barham and Harris 1987:28; Ghaleb 1990:163). The only conclusive evidence of former occupation was several relict mound-and-ditch fields in the northeastern quarter of the valley (Ghaleb 1990:158). Extensive surveys of the northeastern margins of Wagadagam in 2006 (Figure 2) revealed a site complex identified by traditional owners as the village *kod* (Edmund Bani, pers. comm., 12 November 2006). This site incorporated a large mound of heavily eroded dugong bone, eight linear and curvilinear stone arrangements, a single raised earth and stone platform, and two boulders painted with red paintings (Wright 2010). The only other rock art site on Mabuyag was located in northwest Wagadagam (McNiven, pers. comm., 5 September 2011).

Three excavations were conducted at Wagadagam (Wright 2010). Two test pits (Squares A and B) were located on the coastal fringe, at the end of a dirt track into the village. A third test pit (Square C) was positioned on the dugong bone mound. Square A (1m x 1m) was substantially disturbed so results are only presented for Squares B (1m x 1m) and C (40cm x 40cm). Square B contained significant quantities of highly eroded large marine vertebrate bone (dugong and/or turtle) along with igneous and quartz flaked artefacts. The majority of cultural material was restricted to Layer 3 (27-33cm below surface) radiocarbon dated to 1057–800 cal BP (Wk-24933 to Wk-24935) (Figure 3). Isolated fragments of bone were found above this Layer (in Layer 2) with culturally sterile sediment (Layer 1) radiocarbon dated to 535–464 cal BP (Wk-24932) (Figure 3). All AMS dates obtained are in chrono-stratigraphic order. A date of 128.8 ± 0.5% modern (Wk-20615) obtained from a burnt seed at the base of Square C was interpreted as evidence for a recent period of mound slumping (Wright 2010:206). Samples of bone from Square C were submitted for radiocarbon dating; however, no bone collagen survived, leaving the antiquity of this mound (and by association the *kod*) uncertain.

Goemu

Detailed archaeological survey of Goemu was conducted in 1984, at which time more than 100 surface features including large

Table 2 Intangible links to ethnographically-known villages (Eseli *et al.* 1998:74; Haddon 1904:339; Wright 2010). Cultural hero citations: Haddon (1890:302, 1904:13-14, 50-60, 67, 75-76, 88, 97, 285, 1935:56-59, 381-382, 406-408); Landtman (1917:159); Lawrie (1970:97-99, 112, 116, 1972:102).

	Goemu	Wagadagam	Dabangai	Maidh	Pulu
Wind Direction	SW	NW	NE	SE	NW
Wind Name	Zay	Kuki	Naigai	Sagerr	Kuki
Body Part	right arm	head	left arm	belly-button	?
Role	warriors/hunters	warriors	hunters	spiritual people	spiritual
Stars	–	–	Kek	–	–
Cultural Heroes	Kwoiam, Tomagani, Aukum, Aipozar	Waiat, Manalbau, Sasalkazi	Sesere	–	–

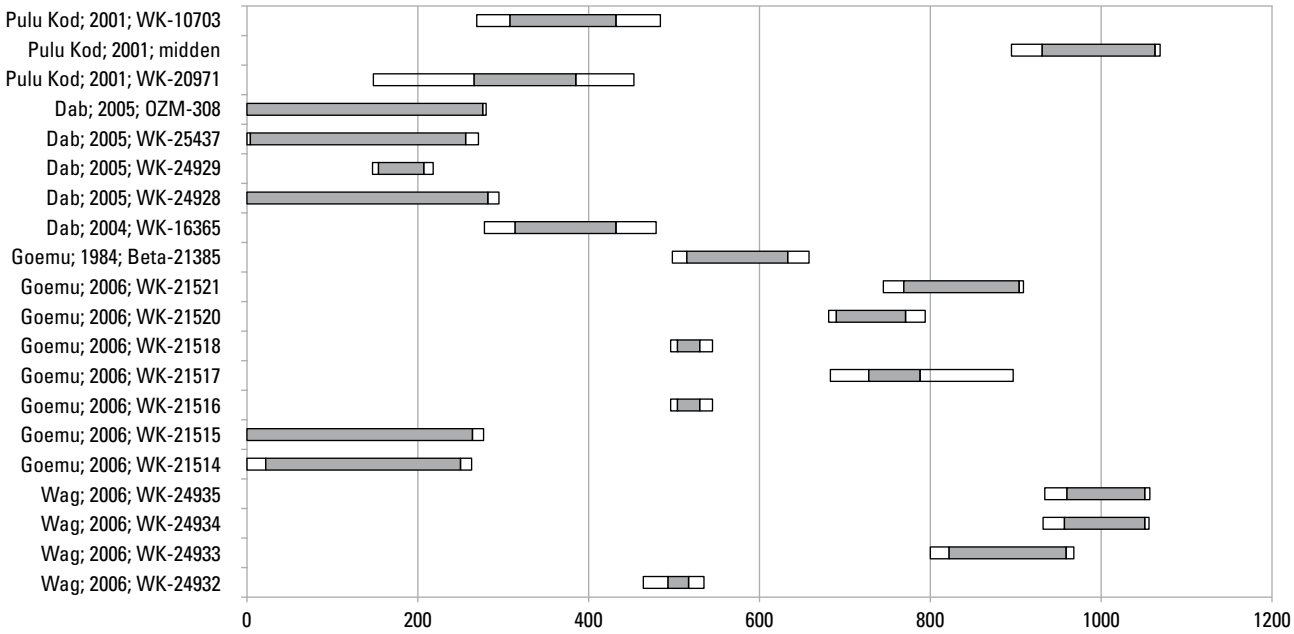

Figure 3 Calibrated AMS dates from Goemulgaw villages. Dates marked 2004, 2005 and 2006 are from Wright (2010), those marked 1984 are from Barham and Harris (1987) and those marked 2001 are from McNiven *et al.* (2009). Date range represents 1 and 2 sigma range (Reimer *et al.* 2009).

vertebrate middens/mounds and shellfish arrangements were recorded (Ghaleb 1990:160-161, 181-185; Harris *et al.* 1985:44, 48) (Figure 4). Particularly common were circular, linear (platform) and rectangular (ridge) mounds of dugong and turtle bone (McNiven and Wright 2008). Unique sites at Goemu are platform and ridge mounds (Figure 4) and a stone arrangement in the shape of a turtle, recorded on a hill overlooking Goemu (Barham and Harris 1987:10). This stone arrangement was identified as a marker of the region's primary totem (Tim Gizu, pers. comm., 1 October 2006).

Excavations in 1985 and 2005 tested circular, ridge and platform mounds (Barham and Harris 1987; McNiven and Wright 2008). A circular bone mound at the northern end of Goemu (#87 on Figure 4) was reputed to have been the location of the *wiwai* stone (see above). Although no dates were obtained from this feature, glass was observed throughout the midden deposit indicating deposition within the past 200 years (Ghaleb 1990:234).

A further five 1m x 1m test pits were spaced across the platform and ridge midden mounds (Squares E, GH, M, T and Y on Figure 4). A radiocarbon date of 658-498 cal BP (Beta-21385) was obtained from the base of the platform midden deposit (Ghaleb 1990:221; Figure 3). A ridge midden mound excavated in 2005 (Square A on Figure 4) was also radiocarbon dated to 545–496 cal BP (Wk-21516) with increased sedimentation noted prior to the onset of midden development dated to 909–681 cal BP (Wk-21517, Wk-21520 and Wk-21521) (McNiven and Wright 2008). The ridge and platform midden mounds therefore appear to pre-date circular mounds at Goemu (McNiven and Wright 2008). Two radiocarbon dates (263–0* cal BP and 277–0* cal BP, Wk-21514 and Wk-21515) within the top 13cm of deposit indicate this mound continued to be constructed after European arrival.

Dabangai

Barham and Harris (1987:28) suggested that 'the Dabungai area, with its abundant and varied archaeological features, appears to be the next most potentially rewarding area, after Gumu, for future archaeological research on Mabuiag'. This village has a locally-unique system of stone-lined tracks (approximately 1m in width) connecting the beach to the Kodakal double fish trap (west of Dabangai) and the hills inland (Harris *et al.* 1985:27). Other features include a large, oval-shaped dugong bone mound, 30 stone-bone-shell mounds and five stone 'cairns'. The village is further associated with multiple mound-and-ditch fields, along with 'rectangular units which may represent old occupation areas or former fields' (Barham and Harris 1987:48). Totemic stone arrangements included a crocodile and dugong at Dabangai and crocodiles at both Kodakal and Sao to the west (Edwards and Edwards 1997:3-5; Harris *et al.* 1985:26-27; Figure 4). Stone arrangements continue to be maintained in the contemporary period by traditional owners (Figure 5).

Two excavations were conducted at Dabangai: one into a large dugong bone mound 3m from the current high-tide line (McNiven and Bedingfield 2008), the other in an area of midden bone deposit located 55m away from the current high water mark (Wright and Jacobsen in press). Marine shell from the base of the bone mound provided a date of 479–278 cal BP (Wk-16365), while the midden was radiocarbon dated to 312–0* cal BP (Wk-24928, Wk-24929) (Figure 3). Glass and metal in the upper layers of both sites support continued deposition within the past 150 years. An earlier layer of charcoal, stone artefacts and small fragments of marine vertebrate bone at the midden site was dated to 7238–6748 cal BP (OZM-311) (Wright 2011).

Maidh

The ethnographically-known village of Maidh revealed little surface material and few physical features. Surveys identified a stone arrangement shaped like a crocodile, and fragments of *bu* (*Syrinx aruanus*) and *akul* (*Polymesoda erosa*) shells, as well as mound-and-ditch fields (Barham and Harris 1987:32). A 1985 test pit excavation at Maidh revealed no subsurface cultural materials (Harris *et al.* 1985:48). Traditional owners were

Table 3 Radiocarbon ages discussed in the text. Radiocarbon dates were calibrated using Calib 6.0.2 (Stuiver and Reimer 1993) and SHCAL04 for charcoal dates (McCormac *et al.* 2004) and the marine calibration dataset (MARINE09) for marine dates (Reimer *et al.* 2009) with a ΔR value of -63±44 years (Ulm *et al.* 2007). Ranges marked with a * are suspect due to impingement on the end of the calibration dataset.

Site	Material	Lab. Code	Square	XU	Depth (cm)	$\delta^{13}C$‰ ±0.2	^{14}C Age (years BP)	Calibrated Age BP (68.3% probability)	Calibrated Age BP (95.4% probability)	Reference
Pulu Kod (*Moegi Sibuy*)	dugong rib	Wk-10703	A	–	–	-7.3	670±44	308-432	270-484	McNiven *et al.* 2009
Pulu Kod (*Koey Awgadhaw Kupay*)	*Syrinx aruanus*	Wk-20971	Grid 1	–	–	-7.7	606±33	266-385	148-453	McNiven *et al.* 2009
Pulu Kod (midden)	*Terebralia sulcata*	Wk-11351	A	–	–	-0.7	947±50	539-639	494-684	McNiven *et al.* 2009
Pulu Kod (midden)	marine shell	–	D	–	–	–	1396±41	929-1064	894-1160	McNiven *et al.* 2009
Dabangai	charcoal	OZM-308	A	30	70-73	-24.9	175±40	0*-276	0*-280	Wright 2010
Dabangai	charcoal	Wk-25437	A	25	56-59	-25	142±30	4-252	0*-267	Wright 2010
Dabangai	charcoal	Wk-24929	A	19	40-43	-25	247±30	154-301	147-312	Wright 2010
Dabangai	burnt seed	Wk-24928	A	9	16-18	-23.4	197±30	0-282	0*-295	Wright 2010
Dabangai	marine shell	Wk-16365	A	–	–	-5.5	674±35	314-432	278-479	McNiven & Bedingfield 2008
Dabangai	charcoal	OZM-311	A	48	166-169	-9.8	6160±80	6885-7156	6748-7238	Wright 2011
Goemu	charcoal	Beta-21385	M	–	35	–	600±70	515-633	498-658	Barham & Harris 1987
Goemu	charcoal	Wk-21521	A	32	156-161	-26.5	954±32	769-904	745-909	Wright 2010
Goemu	charcoal	Wk-21520	A	25	98-105	-27.8	878±32	690-771	681-794	Wright 2010
Goemu	charcoal	Wk-21518	A	18	50-55	-25.6	523±32	504-530	496-545	Wright 2010
Goemu	charcoal	Wk-21517	A	15	38-41	-26.8	893±32	728-788	683-897	Wright 2010
Goemu	charcoal	Wk-21516	A	11	24-28	-25.2	524±32	505-530	496-545	Wright 2010
Goemu	charcoal	Wk-21515	A	7	10-13	-9.8	160±31	0-264	0*-277	Wright 2010
Goemu	charcoal	Wk-21514	A	3	2-3	-22.7	131±32	22-250	0*-263	Wright 2010
Wagadagam	charcoal	Wk-24935	B	18	60-63	-25.3	1140±30	960-1051	934-1057	Wright 2010
Wagadagam	charcoal	Wk-24934	B	16	53-56	-25.3	1134±30	957-1051	932-1056	Wright 2010
Wagadagam	charcoal	Wk-24933	B	10	30-32	-24.4	1050±40	822-959	800-968	Wright 2010
Wagadagam	charcoal	Wk-24932	B	7	7-11	-25.7	486±30	493-517	464-535	Wright 2010
Wagadagam	burnt seed	Wk-20615	C	8	8-9	-25.7	128±0.5%	modern	modern	Wright 2010

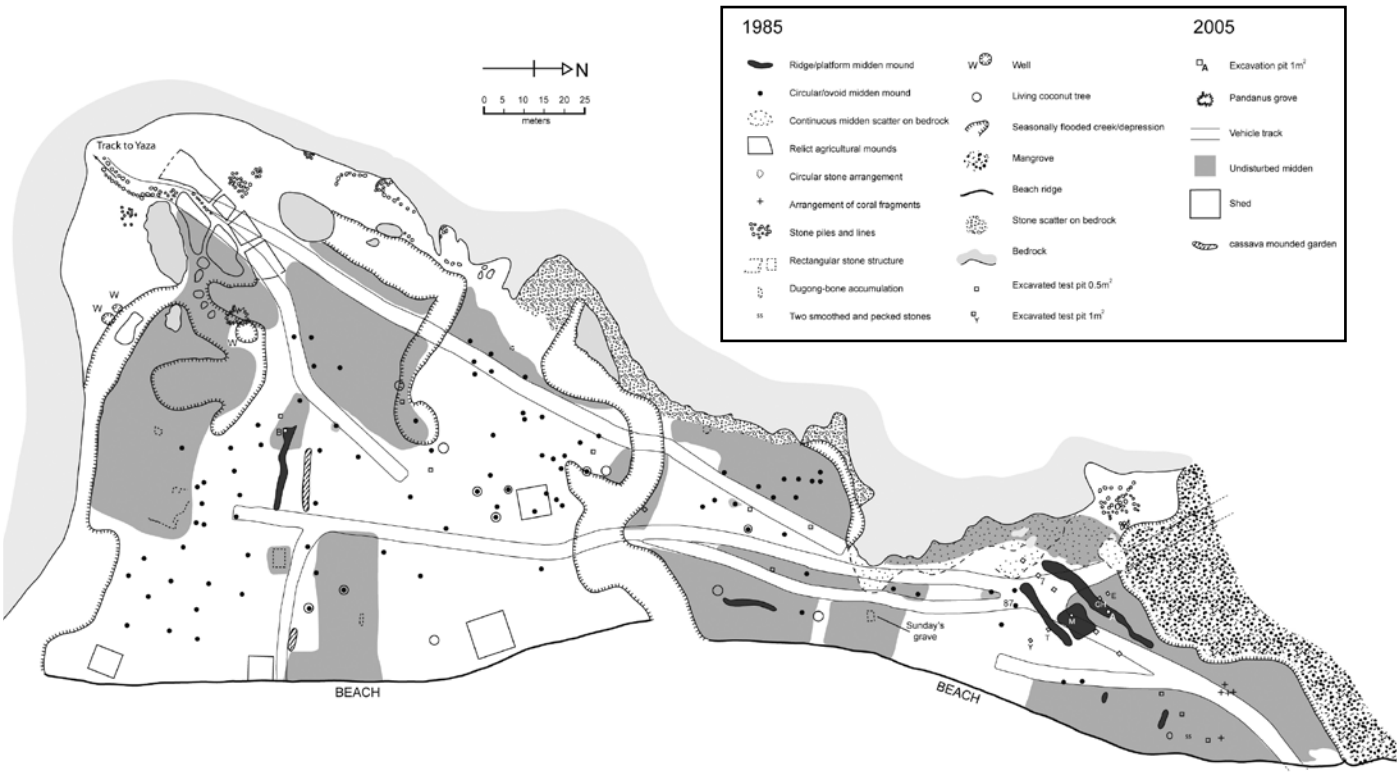

Figure 4 Map of the archaeological features at Goemu village (Courtesy of Ian McNiven). Excavation dates: 1985=published by Ghaleb (1990); 2005=published by McNiven and Wright (2008).

Figure 5 Beeboy Whap clearing stones away from the crocodile stone arrangement at Dabangai (Photograph: Ben Watson).

reluctant for re-excavation of this area in 2006, however, a survey of recent house foundations and drainage cuts revealed no surface or subsurface cultural materials (Wright 2010).

Pulu kod

The Goemulgal identify two key sites on Pulu: the *kod* and associated *Awgadhalkula* skull cave. In 1898 Haddon (1904:3) recorded dugong bone mounds, clan fireplaces and *bu* shell arrangements within an area measuring approximately 40m x 50m (Haddon 1904:3). Multiple panels of rock art were located on the interior margins of the *kod* site complex. In 2001 a detailed survey revealed little change to the originally documented site complex (McNiven *et al.* 2009:294).

Excavations in 2001 revealed a layer of midden materials (with a basal date of 1396±41 BP, 894-1160 cal BP) underlying installations associated with the Pulu *kod* (McNiven *et al.* 2009:308). A small mound of dugong bone locally known as *Moegi Sibuy* dated to 484–270 cal BP. The *Koey Awgadhaw Kupay*, *bu* shell arrangement was dated to 453–148 cal BP while other shell arrangements (e.g. *Koey Math*; *Moegi math*) were added to the *kod* between 300–150 BP. Radiocarbon dates from the *Moegi Sibuy* mound and *Koey Awgadhaw Kupay bu* shell arrangement identify multiphased construction (McNiven *et al.* 2009).

Fissioning and Regionalisation of the Goemulgal

Both archaeology and ethnography identify Wagadagam as the earliest village site on Mabuyag and the origin for fissioning on the island. Excavations reveal an early phase (1057–932 cal BP) of sustained settlement by people who ate large marine vertebrates and manufactured quartz and igneous flaked artefacts (Figure 3). Earlier (or overlapping) settlement may have also occurred on

Pulu, with midden materials underlying the *kod* (1160–894 cal BP) and Tigershark Rockshelter (1300–700 cal BP) (McNiven *et al.* 2008, 2009) (Figure 3). Substantial decline in cultural activity at Wagadagam (after 900 BP) coincides with initial settlement at Goemu (Figure 3). During this period midden activity occurs at Tigershark Rockshelter and the Pulu *kod* (McNiven *et al.* 2008, 2009) supporting increased socio-demographic pressures on the resident population.

Excavation results suggest Wagadagam and Tigershark Rockshelter (on Pulu) were abandoned (or occupied differently) after 535–464 cal BP (McNiven *et al.* 2008). Dense midden materials underlie the Pulu *kod* and substantial ridge and platform midden mounds develop at Goemu. McNiven *et al.* (2008:15) suggested this marked a settlement shift towards open villages (i.e. <500 cal BP). The importance of Goemu, as the namesake of community (i.e. Goemulgal) and home of Kuyam, may also date to this period.

A key part of Goemulgaw ethnography is affiliation with multiple, totemically-organised villages. Archaeology suggests that settlement of all four villages occurred within the past 400–300 years, finalised with the establishment of Dabangai. During this period dense midden deposit is recorded at Dabangai and Goemu and ethnographically-significant bone mounds (*Moegi Sibuy*, Dabangai) and *bu* shell arrangements (koey *awgadhaw kaazi*, *Kuyam*'s grave) appear on both Mabuyag and Pulu (McNiven *et al.* 2009:314). Morphological and compositional similarities between Wagadagam dugong bone mound and examples from Dabangai and Pulu suggest a relative chronology of a few hundred years exists for the Wagadagam *kod* (Wright 2010). McNiven *et al.* (2009:314) hypothesised that 'the kod, and by association the Goemulgal and their totemic clan and moiety system, emerged over the past 400 years'. I argue that this was directly associated with fissioning events taking place on the main island of Mabuyag.

The most recent stage of Goemulgaw fissioning was the historically-documented move to Bau (<150 BP). Although Bau has not been approached archaeologically in this paper it is interesting to note that midden activity and maintenance of totemic stone arrangements continued at many of the traditional villages into the twentieth century. Bau's link with earlier stages of Goemulgaw fissioning is evident through the use of two stones from Goemu (connected with Kuyam) in the pedestal of the church font. Reverend Done (1987:18) recognised 'it was appropriate that these two stones, so intimately connected with the dark times, as pre Christian days are called, should be used in the making of the font, the gateway of Christian life'.

The regionalisation model predicts that fissioning events may be physically expressed through unique sites and/or cultural materials. Goemulgaw traditional owners confirm this to be the case, designating totemic associations to humanly-made sites (e.g. *wiwai* shrine at Goemu, dugong bone mound at Dabangai), cultural materials (crocodile carvings, *kuthibu* and *giribu*) and intangible markers (e.g. culture hero sites). Archaeological surveys identify physical (and often monumental) features that are distinctive to villages. These include the large complex of midden mounds at Goemu, two rock art sites at Wagadagam and a network of stone-lined paths at Dabangai. All villages (with the exception of Maidh) contain midden and circular bone mounds; however, platform and ridge midden mounds are unique to Goemu. In addition to unique monumental sites and site combinations, Goemu, Dabangai and Maidh are associated with stone arrangements 'out of respect' for the primary and occasionally secondary totem animal (Tim Gizu, pers. comm., 10 November 2006).

In keeping with the regionalisation model restrictions were lowered in exceptional circumstances (e.g. Tim Gizu's story) and at prescribed places (e.g. the Pulu *kod*). The Pulu *kod* was a nexus for ritual activity and this is physically manifested through the quantity, variety and spatial division of cultural features. The Pulu *kod* contains numerous sites that are otherwise unique to individual villages on Mabuyag (i.e. rock art, complexes of bone mounds and stone arrangements). The blending of sites at the *kod* is interpreted as symbolic expression of the multilayered Goemulgal community, intimately related with the formation of traditional villages and totemic identity.

Rock art offers a useful method of examining connection between Goemulgal sites. Both Wagadagam and Pulu *kod* sites are painted with red ochre and share distinctive motifs. Bird paintings are unique to the Western islands of Pulu, Badu and now Mabuyag (Brady 2005:401-402) (Figure 6). There is further comparability between a 'waterspout' at the Pulu *kod* and a similar design at Wagadagam (Figure 7).

These comparisons offer insight into regional variations and the formation of ceremonially linked sites on Pulu and Mabuyag.

Conclusions

To answer the original question set by McNiven *et al.* (2006:75), extensive human settlement of the Mabuyag Islands appears to originate at Wagadagam after 1057 cal BP. This may have been preceded by 100–200 years at two sites on adjacent Pulu. Archaeology identifies multiple fissioning events (approximately 800 BP, 400 BP, 150 BP) with each stage marked by new (and frequently monumental) sites. In keeping with ethnographic expectations of fissioning, the Goemulgal cement identity through social gatherings at the Pulu *kod*, physically marked by the amalgamation of sites otherwise unique to individual villages.

In contrast to previous work this study has looked at the fissioning process from a fine-grained perspective, with all events within the past 1000 years. Very few Australian archaeologists have looked in detail at changes over this short time period yet there is increasing evidence that major changes did take place at this time. While some attempts have been made to relate changes to responses to environmental changes, such as the Little Ice Age (e.g. Williams *et al.* 2010), it is also possible to explore the social dimensions of these changes. The fissioning model allows archaeology and oral histories to intersect providing a history that is meaningful to both academic and Indigenous communities.

The results presented in this paper indicate that social change and social divisions can be observed in the Torres Strait despite vibrant inter-relations, trade and exchange. It remains to be seen whether the same fine-grained perspective can be successfully applied to other contexts in the Australia/Pacific region.

Acknowledgements

I thank the Goemulgaw community for their help and support, in particular Tim Gizu and Edmund Bani who shared their

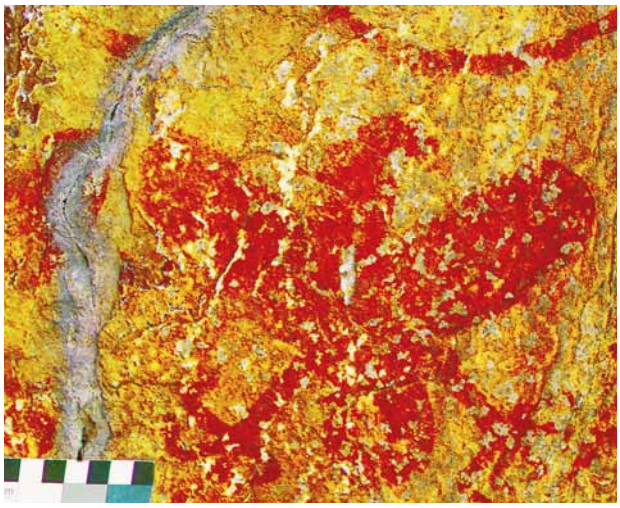

Figure 6 Red-ochre bird painting at Wagadagam (Photograph: Duncan Wright, December 2006; enhancement by L. Brady).

Figure 7 Waterspout painting at Wagadagam (Photograph: Duncan Wright, December 2006; enhancement by L. Brady).

time and stories with me. Thanks also to the Australian Institute of Aboriginal and Torres Strait Islander Studies for project funding and to those who participated in fieldwork: Beboy Whap, Thomas Whap, Ben Watson, Cameo Dalley, Alice Bedingfield, Matthew Coller and Sally May. Thanks also to Tim Denham, Jeremy Ash, Lynley Wallis, Ian McNiven, John Bradley, Matthew Coller, Sally May and Paul Taçon for reviewing drafts of this paper.

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