Histories of Torres Strait Islander interaction and mythological geography

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Abstract

Archaeologists and anthropologists have long been interested in the study of past human interaction. In the Indo-Pacific, research has focused on the age and processes by which islands were settled and the role that intermediary communities played in these histories. Torres Strait, on Australia's northern border, represents one such frontier zone. For millennia this 48,000 km² area (containing at least 274 islands) separated predominately horticultural and pottery-using Melanesians and huntergatherer Australians, a contrast considered by some to be 'starker and more perplexingly than anywhere else in the world' (Walker 1972:405). Mirroring archaeological explanations and theoretical interests elsewhere, Coral Sea chronicles have transitioned between those prioritising large-scale migration to narratives of entanglement on the periphery of ancient globalisations. This paper develops the theme of entanglement, exploring distinctive regionally diverging histories of innovation and interaction occurring in Western, Central and Eastern Torres Strait. We suggest that traditional histories, involving the wandering trackways of Culture Heroes, provide useful insights into the deep history of human interactions, thereby helping us to understand patterns observed in the archaeological and linguistic record.

Introduction

Dispersal, migration, and cultural exchange are themes that have long fascinated scholars interested in human history (Childe 1950; Hodder 1974; Wright 1972). It is recognised that archaeology combined with linguistics, ancient DNA and ethnography have an important role to play in these debates (Service 1962; Roberts and Linden 2011). Early migration narratives suggested it was possible to map archaeological cultures. Direct human incursions, including migration and long-distance trade, may allow stylistic and geochemical correlations to be established for artefacts and/or features and source areas. Commodities are unlikely to exhibit a strong distance-decay pattern due to the potential leap-frogging of intermediate areas (Michelaki et al. 2012; Renfrew 1977; Wright and Zeder 1977). Conversely, 'down the line exchange' (in which goods are indirectly sourced via cooperative systems with adjoining communities) and diffusion of ideas typically leads to low numbers of prestige goods, a strong distance-decay distribution from source area, evidence that objects had spent some time in circulation, and the presence of only a few exotic objects within the archaeological assemblage (e.g Renfrew 1977). In line with ethnographic evidence, these systems may require redistributitive hierarchies, whereby communities developed 'regional, ecological specializations' interdependencies, becoming hubs for exchange (Service 1962:145).

Despite a significant reduction in archaeological explanations and theoretical interests in human migration during recent decades, prominence of this theme appears to have returned (van Dommelen 2014). One reason for this revival is scientific advancements in physical anthropology with bioarcheological tools such as stable isotope, ancient DNA and biological distance analyses making it possible to assess affinities between groups and individuals and to associate them with geochemically defined regions (van Dommelen 2014). Concurrently it is recognised that genetic studies can provide valuable insights into human migration,

although they may disguise regional variation and nuances inherent within the human experience of 'entanglement' (Callaway 2018:574). While links between material culture, shared practices and people cannot be downplayed, neither should scholars omit considering the important roles played by Indigenous communities during the periods under study (Frieman and Hofmann 2019). Regionally focused, multivocal and multidisciplinary studies may capture this information, allowing emphasis to be placed on 'local actors, practices, contexts and networks that sustained migrations and that enabled mobility of, within and between communities' (van Dommelen 2014:480; also Whiteley 2002).

Given its position between distinctive cultural regions, one strongly horticultural, the other hunter-gatherer, the role of Torres Strait (TS) as a 'bridge and barrier' (Walker 1972) between Papua New Guinea (PNG) and Australia has generated considerable debate (see Rowland 2018 for a review). Research frequently references one (or multiple) migrations into Cape York Peninsula (CYP) (e.g. Carter 2002; David et al. 2004; McNiven et al. 2006). More recently, notions of 'entanglement' increasingly influence hypotheses of settlement patterns in this region, with TS expected to be on 'dynamic peripheries' within ancient 'globalizations' (McNiven 2017:329; see also McNiven 2021). McNiven (2021:11) suggests a 'Coral Sea Cultural Interaction Sphere', involving 'a complex and dynamic picture of changing intensities of long-distance exchange relationships' spanning southern PNG, TS and CYP occurring for at least 4000 years and continuing within the recent, remembered past. An earlier iteration of this model suggested:

The presence of dogs was an expression of an Aboriginal Australia globalization that emerged c.4,000 years ago; the presence of outrigger canoes was an expression of a Melanesian New Guinea globalization that emerged c.3,300 years ago; while the presence of valuable turtle shell plates was an expression of a Southeast Asia globalization that commenced only a century prior to the Spanish expedition (McNiven 2017:319).

It has been postulated that canoes arrived in TS at c.4200-4000 cal BP (see Wood 2018; Wright et al. 2013:29), while recent large-scale genetic analyses in Island South-East Asia (ISEA) and the Pacific (see Karmin et al. 2022) show that TS fits into northern Sahul distribution. mtDNA and chY sharing between northeast Sahul and northeast Australia before and during the postglacial period (18,000-10,000 BP) further suggests that these areas were aligned before marine transgression. Austronesian expansion from Taiwan ~6000 BP likely reached ISEA and PNG by ~3500 BP. It is hypothesised that a ~3600 BP split occurred between New Britain and Queensland, possibly related to arrival of Pama-Nyungans from the south (see below) and linked to increasing Aboriginal activity in tropical North Queensland at the time (McNiven et al. 2006:66). The rapid spread of the Lapita Cultural Complex from the Bismarck Archipelago reached the Papuan Central District by 2900 cal BP and 'may have subsequently influenced islands off the Queensland coast by 2.5 kya' (Karmin et al. 2022:7). Should this be the case, it left behind very few genetic or material culture markers on CYP.

Greer et al. (2015) describe entanglement including CYP Australians within the more recent totemic history of TS Islanders. According to this model: 'subtle processes were at work [in TS], characterized by dynamic and transformative social engagement' rather than migration and colonisation. Tantalising clues about 'the nature of past social relations' may exist within 'narratives of ancestral beings or culture heroes, such as Kuiam¹, who travelled across the region' (Greer et al. 2015:74, original emphasis). In this paper we explore this prospect in detail providing a regionally focused study of intercommunity history between Central Western Torres Strait (CWTS) (Mabuyaagi²) and Eastern Torres Strait (ETS) (Mer, Murray Island). These regions are chosen due to association with substantial ethnographic and archaeological records, also because they enable assessment of regionally varying contact experiences and intracommunity innovations occurring across the Coral and Arafura Sea corridor. We argue that Culture Hero accounts provide important insights from ~1000 BP and a culturally inclusive starting point for contextualising archaeological/language datasets and better understanding the history of Torres Strait Islander communities. Before testing this hypothesis, however, it is first important to understand the bathymetric context, an element arguably under-represented in existing metanarratives of colonisation and entanglement for this region.

Dangerous Waters Even for Maritime Specialists

Archaeologists frequently discuss maritime human mobility in terms of 'amphibious archaeological settlement', 'fluid boundaries', 'seascapes', 'seapeople' and 'maritime specialists' (e.g. Crouch 2008; Fitzpatrick 2004; McNiven 2017). It has been recognised that islands are rarely insular and 'focus on terrestrial dynamics limits our potential understanding of the holistic nature of social seascape construction' (Crouch 2008:131). This should not detract

from 'the practicalities of deep-sea sailing, with details of weather and the relative accessibility of different island targets' key to understanding island settlement (Irwin 1992:3). The latter is an important consideration for contemporary TS Islanders who are required to negotiate complex subsurface topography, relatively shallow waters, extensive reefs and highly complex tidal regimes (Figure 1).

TS lies at the boundary between two ocean basins (the Coral and Arafura Seas) with sea levels to either side typically 5 m higher than those of the other according to moon/sun gravitational pull, leading to strong currents (Wolanski et al. 2013). Dangers may be compounded by prevailing weather systems, cyclonic-storm surge and highly complex tidal regimes, currents being particularly strong around reefs, shallow waters, and narrow island passages (Saint-Cast and Condie 2006) (Figure 1).

Communities in Western and Central Torres Strait (WCTS) and ETS face significantly different constraints. In ETS, consisting of Mer (Murray), Dauar, Waier, Erub (Darnley) and Ugar (Stephens), waters are relatively deep, and the Ashmore Reef system can be circumnavigated with ease en route to PNG or CYP. Today a major northeast shipping channel passes through this region, connecting both sides of the Coral Sea corridor. Waters are particularly shallow in north WTS, associated with Bœigu (Boigu), Dœwan (Dauan) and Saibai, while communities who occupy the Muralag group, Mabuyaagi, Badhu (Badu), Muwa (Mua/Moa) and the Central Islands navigate a dangerous combination of large reef systems, strong tides and currents (Saint-Cast and Condie 2006). Passage in this region is risky:

the vessel I had control of travelled about 20 knots so most tidal flows could be overcome with raw power. However, the Duyfken and most cruising yachts that transit this area [Hammond Rock] do not have the boat speed to overcome the flow that can reach speeds of up to 8 km in some locations (Riley 2012:11).

Hundreds of nineteenth and twentieth century European shipwrecks offer testament to the dangers of navigating this region. Each year an unspecified (but large) number of Islanders, in dinghies with outboard motors, require air sea rescue after capsizing or going missing in Central Torres Strait (CTS) and WTS.

Bathymetric evidence suggests that the Sahul land bridge connecting Australia and New Guinea was breached sometime between 9000–7500 cal BP (Chappell 2005; Lewis et al. 2013; Sloss et al. 2018). This was followed by a 'highenergy window' and finally a 'high stand' at approximately 6500–6000 cal BP, after which point post-glacial sea level rise ceased (Chappell 2005:531). At this point not only was living space limited on TS Islands, but the southern coast of PNG may have been much further inland than it is today (Lambeck and Chappell 2001).

¹ Spellings of Indigenous names/words vary according to linguistic training (if any). While Haddon et al. generally spelled this name *Kwoiam*, it was spelt *Kuiam* in the mission orthography. *Kuyam* is the modern linguistic theory influenced form. Both *Kuiam* and *Kuyam* are current. The phonetic form is ['quiam]. Unless otherwise stated, language terms used herein are in Kalaw Lagaw Ya (KLY),

the Mabuyaagi-Badhu variety of Western and Central Torres Strait language. Word final vowels are devoiced in []VVC #.

² Mabuyaagi, other dialects Mabuyag, mission spelling Mabuiag/Mabuiagi. Herein placenames are given in modern Indigenous form, barring citations. Standard map references can be based on early misrepresentations of local names.

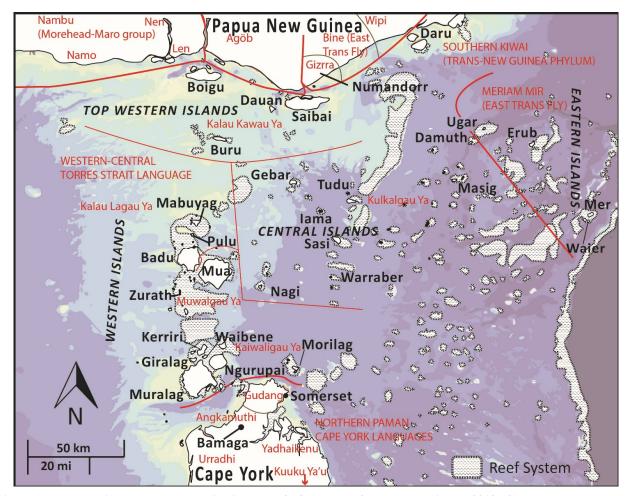


Figure 1. Bathymetric and language territories map of TS (adapted from Wolanski et al. 2013:72).

Geoarchaeological research supports stabilisation of seas, progradation of beaches and establishment of reefs and seagrass beds approximately 4000 years ago (Barham 2000:291-292; Chappell 2005:531). At this point conditions would have been similar to those today, sustaining rich maritime economies that included many fish species, shellfish, turtle and dugong. Archaeology on Mabuyaagi and Badhu gives evidence of offshore marine exploitation from 4200-4000 cal BP, along with the appearance of large numbers of small bipolar quartz flakes/cores (Wright et al. 2013:29). This may mark an arrival of two-boom ISEA canoes (see Wood 2018) or evidence the natural trajectory of dynamic TS Islander societies (as outlined further below).

The balance of palaeoenvironmental data suggest that TS would have been a dangerous place for watercraft for at least 4000 years, WCTS particularly so. Wood (2018:225) recognised that Late Holocene innovations, including seaworthy double outrigger canoes, did not detract from the realities faced by TS communities: 'the islands of TS and CYP were small, and to reach them entailed long, unsheltered open sea voyaging'. This does not mean that long-distance voyaging could not occur; however, traders and colonists would need to be well-equipped recognising that the cost of these expeditions may be much higher than the reward.

A System to Mitigate These Dangers

Ethnohistorical records suggest WTS and ETS Islanders were participants in complex (and regionally distinct) trade and

exchange relationships with PNG and CYP (Haddon 1935; 1994; Moore 1978:Figure 1). Perhaps unsurprisingly, given the dangers listed above, and despite seaworthy double-outrigger canoes, these sources frequently also describe development of 'insular allied groups [that] functioned as separate socio-economic units' practicing down-the-line trade rather than long-distance seafaring (Lawrence 1994:246; see also Haddon 1904:295, 1908:186; Moore 1979:34). Moore (1979:35-36; see also Haddon 1935:350) suggested the principal trade route involving WTS ran from 'Muralag to Badu, Mabuiag, Saibai and thence via Mawata [a Kiwai enclave, Papuan coast, Bine territory] to the mouth of the Fly River'. The 'Saibai people traded with villages on the Daudai coast, as far west as Togi (Mai Kussa)' (Haddon 1935:350). Perhaps the most graphic example of this system involves acquisition of PNG canoes. According to Haddon (1904:296):

If a Muralug man wanted a canoe he would communicate with a friend at Moa, who would speak to a friend of his at Badu; possibly the Muralug man might himself go to Badu, or treat with a friend there. The Badu man would cross to Mabuiag to make arrangements, and a Mabuiag man would proceed to Saibai.

Once the message had been received by people in PNG, a ready-made *gaamu* 'body hull' would be fitted with a *ngælkay saima* 'dummy outrigger' and transferred to Saibai; if none was available, a new *gaamu* would be made. On Saibai it

would be 're-rigged with two outriggers [to improve stability], and that gunwale fitted ... decorated with a figurehead, bow ornaments, and otherwise ornamented with feathers and shells' (Haddon 1890:341). A range of other trade items (shell ornaments, clubs, nose ornaments and harpoons in exchange for canoes, arrows, drums, cassowary feather headdresses), followed the same route through Saibai or CTS (Haddon 1890:340, 1908:186; Landtman 1927; Moore 1979). Such trade was carried out through a 'globalised' totemic network that linked New Guinea, TS and CYP (Rubu Ag, Sigabaduru (Agöb), pers. comm. to Mitchell 1977). This was done through buway ('totemic clan') networks; trading partners were *tukuyap* ('same-sex sibling'). Outsiders (South Sea Islanders etc.) were likewise incorporated into the buway network, becoming tukuyap of their local contact. In the long term, trading relations were cemented by wamupudhamay ('inter-buway exchange gubar marriage'), ('childhood adoption'), ('intercommunity feasting'), kupay ('food-pile exchange'), joint manhood initiations, and other long-term relationshipbuilding customs (Charlie Gibuma [Bœigu], Imasu Waigana [Saibai], pers. comm. to Mitchell 1982).

Trade and intermarriage are recorded between communities on CYP and the Kauřařaigalai³ in south WTS. For example, Barbara Thompson (Brierly 1848-1850 in Moore 1979), witnessed marriages between her adopted Kauřařaiga community and those occupying the northern tip of CYP including Gudang and Kartakartalaiga. Historical records report TS Islander canoes as far south as Restoration Island (Stokes 1846). Once again, a system of down-the-line trade was reported with Muri (alt. Murilag, Mount Adolphus Island, north from CYP), a Kauřařaigalai 'neutral ground to which at certain seasons people from different islands in the Straits meet and have exchanges by way of presents to each other, such as drums, shields, and different articles either of ornament or use' (Brierly 1848-1850 in Moore 1978). CYP communities obtained canoes, fish hooks and files, conical cane traps, bamboo pipes and knives, cassowary feathers, stone-headed clubs, harpoons, bows and arrows, threaded Kusa seed (Coix lachrymae) and pearl/turtle shell ornaments from TS (Brierly 1848-1850 in Moore 1979; Haddon 1904; Laade 1973; MacGillivray 1852; Moseley 1892). In exchange they exported spears, throwing sticks, spear throwers, red ochre and white pipe clay to the Kauřařaigalai and Kulkalgal. How far north these trade items moved is not well understood, however, according to Moore (1979:323-24) 'The Moa and Badu people, who voyaged much more widely within the TS than Kauřařaiga, appear never to have gone farther south than the Prince of Wales Group [Muralug]. Nor does there seem to be any record whatsoever in the literature of any actual encounter with TS parties on the Carpentaria coast.' The Kulkalgal, on the other hand, appear to have traded far and wide, from the Papuan coast to Lizard Island (McNiven 2015:170).

In ETS, Haddon (1935:350) suggests 'trade with New Guinea was mainly confined to Parama (a Kiwai community at the southeast corner of the Fly Delta), through Mibu and some villages on Kiwai'. Here also, there was a 'chain of trade', moving from Mer via Erub 'as these Islanders had

more constant communication with Parama Island and other places in New Guinea' (Haddon 1935:350; see also Alo Tapim pers. comm. to Wright 2016; Moore 1978:Figure 1). Trade may have also involved Ugar, Dhamudh and Tudu before moving north to Daru or Mawata (Lawrence 1998). In this scenario Erub were mediators with CTS Islanders who in turn traded with the Kiwai (Haddon 1935; Lawrence 1998:19). Direct passage to and from PNG along traditional trade pathways also occurred, with Kiwai traders often 'travelling directly [from the mouth of the Fly River] to Mer rather than visiting other islands' (Alo Tapim pers. comm. to Wright 2019). In the recent period, trade and Meriam Mir (MM) boai ('totemic clan') business involving travel from Mer to Bœigu and Bine and Gizrra territory in New Guinea was described as 'routine' (Alo Tapim, Dauareb custodian, pers. comm. to Wright 2019). Whether direct or down-theline, trade with PNG was 'brisk' and well-organised, with the Komet clan (from Mer) tasked with its maintenance (Alo Tapim pers. comm. to Wright 2016; Landtman 1927; W.H. Macgregor 1911 cited in Landtman 1927). Meriam exchanged shell ornaments and turtle shell for canoes, headdresses, dogsteeth necklaces, boars' tusks, sago leaf skirts, sago, pandanus mats, drums, clubs, bows/arrows; with gifts of food integrated into this system (Lawrence 1998:22).

According to Haddon (1908) the Meriam were 'practically removed from intercourse' with the Aboriginal communities on CYP. Greer et al. (2015) suggest the role of mainland Australia may have been under-represented and that 'long distance networks' involving non-material influences (associated with ritual) may have existed. Such a scenario is poorly attested, however, it may be supported by accounts of bartering centres in CTS that connected Meriam with products and ideas obtained from mainland Australia. McFarlane (cited in Moore 1978:322) was told by 'the old folks' that Aureed (Auridh) in CTS was regularly visited by Meriam who obtained 'clubs, ochre for painting themselves and their zogo stones, turtle grease, and other products' sourced from islands on the northeast coast of Queensland (Sir Charles Hardy Islands, Forbes Island, Quoin Island). Journeys were reputedly made to Raine Island and Ketái Kaur 'Aerial Yam (bulbifera) Island' (reputedly near Princess Charlotte Bay) by Meriam to collect ochre and guano (Alo Tapim and Falen Passi pers. comm. to Wright 2019). This connection has been recognised by the Wuthathi Aboriginal community who claim Native Title for Raine Island. The extent to which CYP communities journeyed into TS is unknown, with canoe technology observed during the ethnographic period unlikely to have supported long-distance voyaging.

These histories provide insights into regionally variable patterns of human mobility and a prevalence of down-the-line (as opposed to long-distance) trade. Following advice provided by Greer et al. (2015) we now examine Torres Strait Islander mythology, specifically the role played by wandering Culture Heroes.

The Historical Potential of Torres Strait Mythology

In TS and adjoining PNG and CYP 'a mythological geography of ceremonial exchange' exists, partly built around

spelling of *Kauřalaiga*, alt. *Kauřařaiga*, *Kauřařega* 'Islander', plural *Kauřařaigalai*, *Kauřařegalai*; in the modern dialect, *Kaiwalaig*, plural *Kaiwaligal*.

³ WCTS group names are commonly made by suffixing *-lai* 'proprietive'+*-iga* 'personaliser', thus a Central Islander is a *Kulkalaig*, plural *Kulkalgal*. When the stem-final syllable contains *-r*-, *-lai*- often becomes *-rai*-. 1800s *Kowrareg* was an Anglicised

wandering Culture Heroes who were incorporated into preexisting totemic, cultural and trading linkages (Figures 2–5) (Finn 2010:109; see also Alo Tapim and Cygnet Repu pers. comm. to Wright 2016; Busse 2005; Haddon 1908:45; Landtman 1917:135, 1927; Lawrence 2004; Lawrie 1970; Pitt 2005:154-155; Wagner 1972). The mythological journeys of these reforming and uniting Adhil ('great creator-protectors') and Muruvgul ('mythical or semi-mythical totemic ancestors'; in ETS both are termed Ad) integrate a chain of Coral and Arafura Sea communities that encompassed southern PNG, TS and CYP. Written records refer to mature networks that predate colonisation by generations, if not centuries (e.g. Beckett 1972; Finn 2010; Haddon 1935; Landtman 1927; Thomson 1933). Linguistics (including toponyms) and oral histories show that the mythological journeys form part of an integrated system stretching from at least the Papuan Nambu-Nen to the west and northwest of Bœigu to Sui and Kiwai in the Fly Delta, and across the Straits to Northern Paman CYP and beyond to at least Lizard Island (Wright et al. in press).

WCTS Islanders distinguish between three types of story: yagidha ('speech-story'), alternatively gidhawsagul ('story's fun'); gidha (see below); and aadhi ('legend, myth, sacred story, totemic story'). MM ad covers the latter two, with aadhi~ad also used to describe stones that Aadhi~Ad ('creator~teacher') beings became in stories. In MM Ad also translates as 'God', while aadhi~ad as adjectives translate as huge, mighty or great. The term is used as a title for certain Culture Heroes or objects, such as Adhi Kuyam and Adhi Buya ('Great Light'), the sacred battle-magic stone of the Saibai Aith people. Culture Hero narratives are generally termed gidha, and while distinct from purely historical texts, epitomise past and present Islander identities and relationships. Accounts from the Murray Islands, for example, suggest gidha provide Islanders with 'local knowledge for survival', encoding information about the 'development of cultural traits and traditional exchange' (Pitt 2005:144). On Mabuyaagi, Cygnet Repu (pers. comm. to Wright 2020) referred to Culture Hero pathways as 'guidelines showing us how we relate to one another so we can come together the proper way'. This scenario has been accepted by anthropologists, archaeologists and Native Title lawyers who note that strikingly similar sagas span this corridor (Beckett 1990; Busse 2005; Finn 2010; Greer et al. 2015; McNiven 2017; Mitchell 2015; Wagner 1972; Wright et al. 2018, 2021a, 2021b).

Cultural Hero *gidha* describe dynamic and regionally varying (in terms of origins, priorities and pathways) social relations in which TS Islanders played a central role. In some cases these ancestors are said to originate in PNG (Malu~Malo⁴ 'Deep Sea'; Sau~Siu 'Skull Tree'; Sigay~Sigar 'Flying Fish'; Kulka~Kolka 'Blood'; Sœidha~Sidha~Said~Sida~Sido⁵), or west and north WTS (Wayath-Waiet, Kabai, Nima and Pœipœi). Occasionally they also have connections to mainland Australia (Kuyam, Waubin; e.g. Haddon 1904:61; Landtman 1917:159; Lawrie 1970:57-59; Southon and Kaurareg Tribal Elders 1998). Narratives include specific details about home villages or islands. According to Mabuyaagi lore, for example, *Adhi* Kuiam's father Kuyamu

came from Cape Direction (near Lockhardt River, CYP) in Kuuku Ya'u lands and returned there before Adhi Kuiam was born. Said, a TS-area Culture Hero, originally from Kiwai, came to Mer from the Papuan mainland beyond Beigu. The brothers Malu-Malo, Pinakar, Sigay-Sigar/Mœyaw-Maiau, Kulka-Kolka and Sau-Siu headed by their awadhe ('maternal uncle') Bomai came from Nen territory, upper Wasi Kœsa inland from Beigu before settling Mer, Nagi⁶, Yama⁷, Masig, and Auridh respectively, with Bomai also taking up abode on Mer (e.g. Haddon 1904:81, 1935:408; Laade 1967:70; Landtman 1917; Lawrie 1970). Finally, Wayath-Waiet may have come from the Bina-Turi area before settling on Wæydhul (an islet just off western Mabuyaagi). Pathways are often also described in considerable detail. Wayath, for example, interacts with communities at multiple villages on Badhu, Muwa, Nagi, Tudu, Mer, Dauar and Waier, each of whom 'produced [their] own accounts about how to interpret the mythological deeds and gifts of the cult heroes and culture bearers' (Pitt 2005:144).

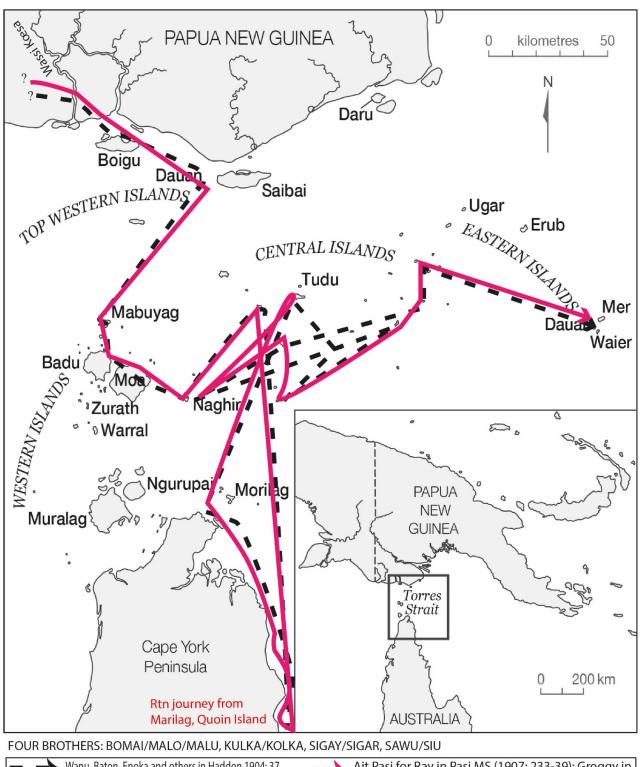
Reading Culture Hero pathways needs to be done with care. Each major chapter of a long-distance Culture Hero's journey takes place in a given area, and so in each chapter he is often said to originate in the location stated within the preceding chapter. As discussed in Wright et al. (in press), full appreciation entails combining all chapters. The Kædal ('Crocodile') Awgadh ('totem-god') ancestors Wayath and Naga (Wayath's mentor) 'appear in stories that folklore, linguistics, and archeology can date to a span from the post-Ice Age 'before-time-began' past to not long before European colonisation' (Wright et al. in press). For the Meriam and Dauareb, Waiet came from Mabuyaagi; in some WCTS stories, Wayath and Naga came from the Bina-Turi area; for these latter, 'Waiati' came from 'Mabuyagi', and Naga from Nagi; some Mabuyaagi stories suggest Wayath and Naga were one and the same. Their births and childhood are missing from all recorded sources in New Guinea, TS and CYP, where Wayath appears as Iwayi ('Old Man Crocodile') among the Kuuku Ya'u-Umpila. Linguistics adds clues; all records of words and songs belonging to Wayath are in the WCTS language. Except for those recalled on Mabuyaagi and Badhu, his dialect has affinities with Saibai, Dœwan and Bœigu, west from Bine territory. Bæigu is the departure point for the entrance beyond the western horizon to Kibukuth ('horizon end'), called Beig in MM and Adiri in Kiwai, the Afterlife World. Bæigu is an important centre for spirit passage rites with important marimulaymæbayg or 'spirit talkers', men who communicate with the mari ('souls') before they become Markay ('ancestoral spirits'). As discussed by Wright et al. (in press), 'ways in which place is referred to in different community language versions gives clues as to period and change through time and across space', including stories describing settlement (e.g. of Daru by Yama, the Muri-Muralag group by Hiámo, Daru/Mawata and other enclaves by Kiwai), geographical development described in folkhistory (Daru, Tudu). Archaeology dates associated sites, 'while the language records of the 1800s and prehistoric loans give clues as to how languages evolved' (Wright et al. in press).

⁴ First is WCTS, second MM.

⁵ These are variant language and dialect forms of the one name, probably originally *Saida.

⁶ Nagi, MM Nagir, Kauřařaigau Ya Nagiř.

⁷ Yama; early Mission spelling Iama, Anglicised Yam, MM Am.



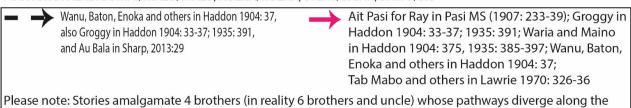


Figure 2. Indicative trackway based on an amalgamation of stories relating to the four brothers (in reality six brothers and Waiat's uncle).

journey (Pinekar on Naghir, Sigay/ Moeyaw on Yama, Kulka on Auridh, Sawu on Masig and Bomai, Malo on Mer)

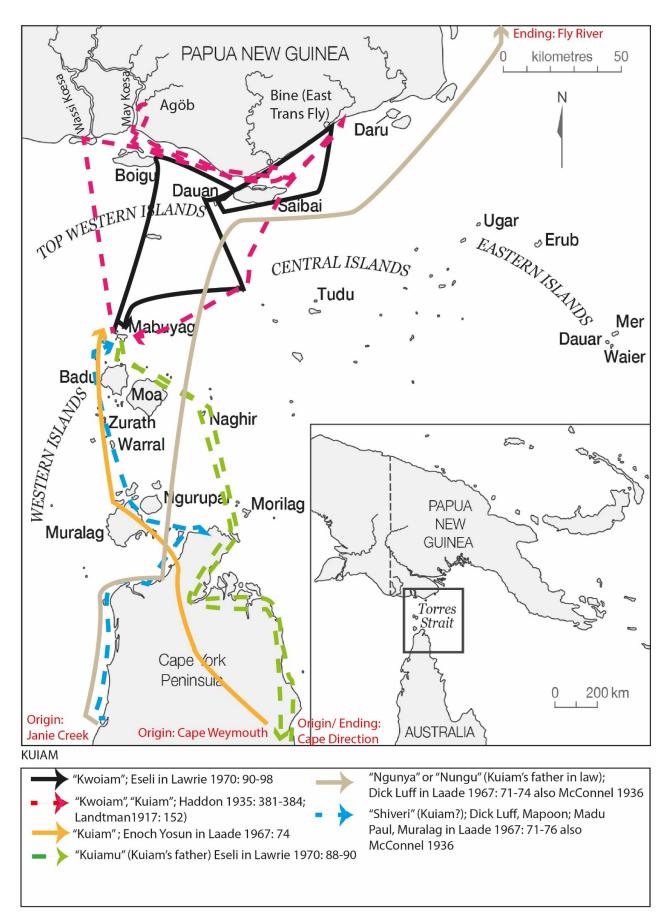


Figure 3. Indicative trackway based on an amalgamation of stories relating to Adhi Kuiam and associated mythologies.

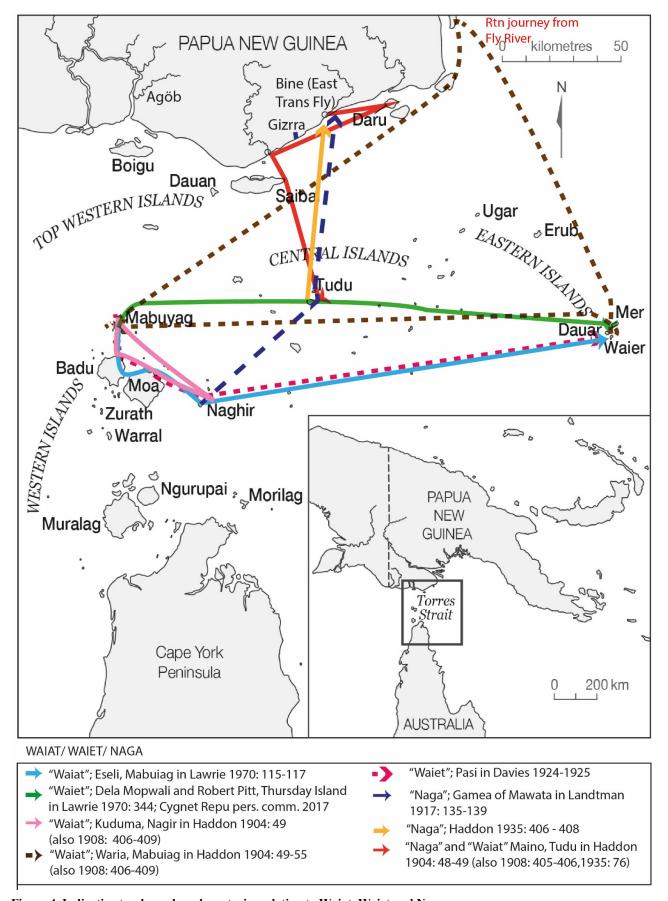


Figure 4. Indicative trackway based on stories relating to Waiat, Waiet and Naga.

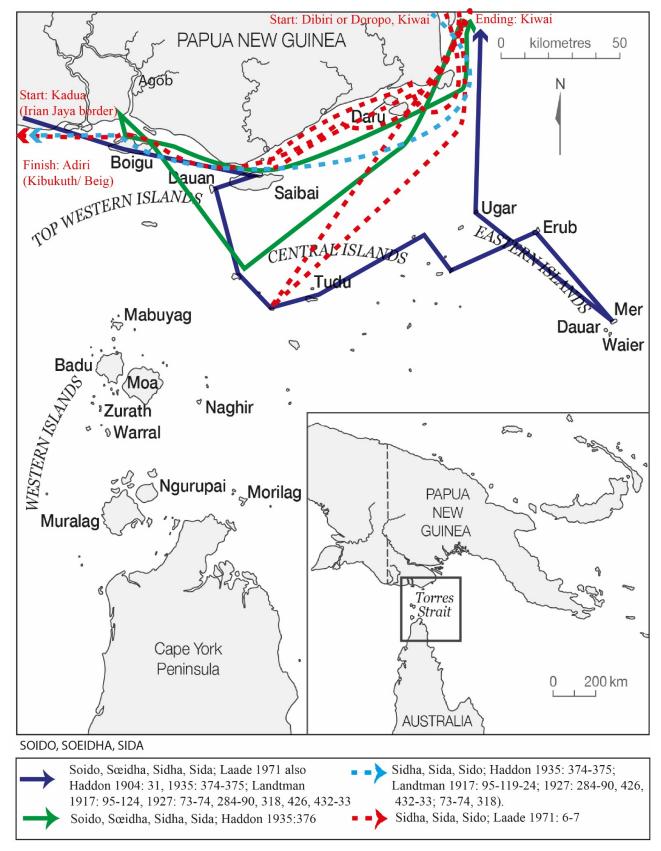


Figure 5. Indicative trackway based on an amalgamation of stories relating to Soido, Sida.

Accounts provide a nuanced picture about processes by which internal innovations and exotic arrivals were embedded within existing cultural systems. Examples include new mortuary ceremonies called markay thay ('ancestral spirits' community festival') brought by Naga from PNG to Nagi and Tudu, subsequently transmitted to the Mabuyaagi community after Wayath journeys to Nagi (Cygnet Repu pers. comm. to Wright 2016; Eseli, Mopwali and Pitt cited in Lawrie 1970; Haddon 1904:48-49; Wright et al. in press). The emplacement of these new ceremonies in ETS was arguably fraught with difficulty with Wayath unable to settle on Mer as this was 'in possession' of Malu. This Ancestor followed the sound of a drumbeat to Dauar where 'the land was straight and did not appeal to him' and finally arrived at Ne (Ni 'freshwater, juice') on Waier island, chosen because this was the only place in which his drum beat sounded right (Pasi cited in Haddon 1928:128). Meriam Elder, Alo Tapim (pers. comm. to Wright 2019) suggests this story symbolises the negotiation of 'whether this new zogo [sacred object] should be allowed to stay on their island and where it should go'. Comparable examples include the Ad Said and the introduction to the Murray Islands of coconut and three species of banana from PNG, also improvements in dugong hunting by the Adhi Kiba (Laade 1971:81-83; Landtman 1917:316, 236-237); Lawrie 1970:209-210 Haddon 1935:43-44; Moses Dau in Lawrie 1970:209-210) and Mabuyaagi-Badhu Islander, Sesere (Haddon 1904:18-20, 1935:59-61; Landtman 1917:159, 163; Lawrie 1970:57-60).

In at least one case a Culture Hero was appropriated by communities in the post-European contact period. This was argued by McConnel (1936) and discussed by Laade (1967, 1971), citing Kuyam's incorporation within Shiveri mythology by some residents of Old Mapoon. The characters, personalities, totem affiliations, modes of travel, origins, routes and names of the two are radically different, suggesting that these actually represent two unrelated individuals. Laade (1967:84-95) believed that the Mapoon interpretation may have developed through contact between men from Mapoon and Islanders working side by side on bêche-de-mer and pearlshelling boats. TS Islanders discussed the saga of Kuyam with CYP communities, and the latter took a special interest in it because Kuyam (or in some versions Kuyam's father) was identified as hailing from CYP. According to Laade (1970:290-291), the people of Mabuyaagi now generally say: 'Kuiam came from Mapoon, thus referring to the Aboriginal myth of Tyiverri, but without knowing Tyiverri's name. If asked how they knew this they replied that certain Mapoon people had told them so'. While it certainly appears there was post-colonisation incorporation of Kuyam into Mapoon lore, Laade may have been mistaken in the other sense; few if any on Mabuyaagi think that Kuyam came from Mapoon (see Lawrie 1970:88-101).

A related case of more extreme post-colonial incorporation also deals with Old Mapoon, namely the *Zugub* ('Sky-God') Thægay (senior co-leader) and his younger brother Kang (junior co-leader). Kuyam was Gæmu *Kaygas* ('Shovel-Nosed Shark') *Awgadh* (sub-*awgadh*: *Zey-Guuba* 'South-West Wind'; *Kek* 'Achernar', the yam/sweet potato harvest and battle *Zugub*). The related *Dhæybaw* ('Wild-Yam') *buway* of Saibai-Dæwan-Bæigu (sub-*awgadh*: *Zey-Gub* 'South-West Wind'; *Thægay* 'Orion-Pointers-Southern Cross') have the *Zugub* coming by whale from Elcho Island in Yolngu territory (Northern Territory) to the Weipa/Old

Mapoon area, then north to TS. 'Thœgay' and 'Kang' are public names; the totemic names are respectively *Siribiriya* and *Seserbe* (Warusam 2007:30-32); *Siribiriya* resembles the name Tjiverri. Even more intriguingly, the Yolngu *yirritja* moiety 'Warramiri and Gumatj used to say that when someone dies, the soul goes on the back of the whale to the island of Badu [rect. Badhu]' (David Burrumarra, in McKintosh 2015:46, 109). The name resemblance to Badhu in TS appears coincidental; the inhabitants of Badu (alt. Banda, Namulka, other names) were whale and dugong hunters, and probably Sama-Bajau (Sea Gypsies) (McIntosh 2015:137).

Regardless of actual historicity, cosmo-political networking appears to be reinforced by evolution in folk-history, as recognised by Henry et al. (2003:10):

In the Torres Strait, Kuyam is exemplified by his use of spear and woomera; in and around Mapoon, Shiveri carries a bow and arrow (McConnel 1957:24). The spectre of each is transposed onto the other- the two are in essence interchangeable. In Torres Strait, Kuyam inter alia, may be seen to symbolise connection with people to the south, and on the mainland Shiveri symbolises connection to the north. Perhaps each stands metonymically for the distinction between, yet affiliation with the other.

Whether or not the reader accepts that empirical evidence is contained within TS Islander mythologies, there can be no doubt that 'ritual cycles' influence art, culture and identity. Buway, boai that adopted Culture Heroes incorporated aspects of their lore into their highly restricted male initiation ceremonies in which important knowledge relating to totems, warfare, headhunting, clan magic and mortuary practices was transmitted. Distribution of ceremonies associated with these fraternities, some being 'Culture Hero fetish-based headhunting cults' (McNiven 2015:173), many with shared terminology, was observed to span PNG and TS. This includes Naga~Wayath's significant cross-community feasting and dancing festival that celebrates the link of the living with their Markay in Kubikuth~Beig, called markay thay, Saibai-Dewan-Beigu markai tha, Kauřařaigau Ya markai thaiřa, Mawata-Daru Kiwai (MD-Kiwai) markai taera (borrowed from the old WCTS Hiámo dialect) and markai keber in MM (keber, from WTS kabal, CTS kabalai 'dance performances'). Baaywa ('mythical ancestoral-spirit spear, waterspout') is báw on Saibai-Dœwan-Bœigu (also markai gub 'ancestoral spirits' wind'), baiwa~bayu elsewhere in TS, baauřa in Kauřařaigau Ya, and borrowed as baura in MD-Kiwai from Hiàmo, and in MM as báur (Haddon 1935; Landtmann 1927; Wright et al. in press). In everyday use the term means 'special spear' (WCTS), 'heavy single-pointed fighting spear with detachable head' (MD-Kiwai), and 'fishing spear' (MM).

Culture Hero pathways were imprinted on place at *kooda* (other dialects *kod* [rhymes with 'cord'] 'men's cult house'), *kuykuw yuutha* ('head (skull) house') and *sugu* ('cleared dancing and feasting area'). Rituals taking place in these areas were associated with distinctive installations and paraphernalia (*zamiyak*). The latter including turtle shell *mawa* (alt. *maywa*, MM *nog*) masks strung with significant decoration and in some cases human bones, also masks representing totems including shark, hammerhead, shovelnose ray, crocodile etc (Wright et al. in press). These ritual places may dramatically encode spatial information

associated with wandering Culture Heroes. Dam on Mer, for example, included at least two exotic stones amongst 14 sacred stones and 40-50 Fusus shells, reputedly brought by Malo from islands and villages visited on his journey (Enoka, Wanu, Pasi, Mamai and Harry cited in Haddon 1908:306). Bu (Syrinx sp.) and mabar (Fusus sp.) were significant, bu representing the harvest-battle 'god' *Kek* (Haddon 1935:145), and mabar representing kupay (MM kopor) 'navel, duty, responsibility, rights' of the being they stand beside (e.g. Haddon 1904:5, 1935:357). For people in the Middle Fly and southern lowlands 'wandering heroes are historical figures. From their perspective, Sido's grave exists in the material world and can be visited' (Busse 2005:463). The same was also the case for the Gœmulgal of Mabuyaagi, who regularly visit a cairn under which Adhi Kuyam was reputedly buried (Haddon 1904).

In summary, Indigenous stories about Culture Heroes provide alternative means for understanding TS Islander pasts – internal innovations and negotiated processes by which new arrivals were emplaced or rejected by strong, resident communities. They also provide commemorative elements that might be tested through archaeological research.

(Pre)History of Contact Involving Central Western Torres Strait Islanders

The islands of Mabuyaagi, Badhu and Muwa lie roughly halfway between PNG and CYP. Prior to marine transgression these high, granitic islands were hill-tops in the Great Dividing Range. The Badhulgal (Badhu people) form one overall community with the Mabuygilgal or Gœmulgal of Mabuyaagi. The south Muwa Italgal or 'Rock Oyster people' and the Muwalgal from north Muwa formed one overall grouping with the Kauřařaigalai of the Muralag-Muri group, and often lived in enmity with their Badhu-Mabuyaagi neighbours. They also had a close relationship with the Kulkalgal of Nagi and the other Central Islands and an origin story link to Mer (Gelam; Lawrie 1970:297-299). In the following section we explore internal innovations as well as external influences that may have occurred on these islands.

Contact Histories in WTS

The Western Torres Strait Cultural History Project and subsequent research provides a comprehensive archaeological study for the region (David and McNiven 2004). This revealed human activity dating back to 9000-8000 cal BP at the cave site of Badu 15, indicating a resident community in WTS at the time of marine transgression (David et al. 2004:74). It was suggested that people retreated to adjacent mainlands and between 6000-3500 cal BP and returned occasionally on foraging trips. Southern rather than northern links were considered most likely because simultaneous human presence was observed on islands along CYP, and 'stepping stone' mud islands (e.g. Bæigu and Saibai) to the north of Badhu did not form until some thousand years later, though the northern hill islands of Gebar, Dæwan, and Numandorr (alt. (Bine) Dawan Podo, near Mabudauan; this before coastal progression) could be of significance. A similar antiquity for occupation was recorded for Dhabangay (Dabangai) on Mabuyaagi (Wright 2011; Wright et al. 2013). Early layers (between 7300-4000 cal BP) were associated with directly dated burnt turtle; also fishbone, large quantities of charcoal and moderate numbers of stone artefacts. Wright et al. (2013) suggested that communities may not have left WTS after marine transgression, but remained and adapted to the new island environment.

A reduction in site activity occurred at Dhabangay, on Dhangal ('Dugong') buway land, between 4000 and 1500 years ago, corresponding with the first appearance of dugong bone and an increase in bipolar, quartz artefacts at this site. This chronological association suggested reconfiguration in subsistence economies for the Mabuyaagi community (Wright 2015; Wright et al. 2013). A similar pattern was noted at Mask Cave on Pulu, through 'a [>4000 cal BP] marine subsistence focus on offshore (turtle and to a lesser extent dugong) and nearshore low tide reef pool (small fish)' (McNiven et al. 2006:62). Two adjacent, non-residential islets (Berberass near Badhu and Sarbi near Muwa) revealed diverse maritime specialist activities including dugong in layers dating after 4200 cal BP (Crouch 2015; Crouch et al. 2007). At roughly the same time (after 3500 cal BP), Badu 15 witnessed 'sustained' human activity (a fivefold increase in stone artefacts, also upturn in sedimentation rates) (David et al. 2004).

David et al. (2004:75-76) observed lexical resemblance between Austronesian languages from southeast PNG and TS-area languages (e.g. outrigger float: WCTS sayima; Kauřařaigau Ya sařima; Gudang charima; Kiwai sarima; compare Motu darima). These authors suggest a hybrid language formed after a 3500 cal BP incursion from the northeast, including male settlers from South-East Papuan Austronesian (SEPA) (David et al. 2004:65), though archaeology provides no support for close contact with southeast PNG (see below). While Carter and Lilley (2008:79) did not dispute Austronesian influence, they suggested that >2600 cal BP dates were unlikely, positing Austronesian association with the 'influx of Pacific Islanders to Torres Strait in colonial times'. Linguistics provides support for 'local Australian settlement expansion' (McNiven et al. 2006:73) or 'Aboriginal Australian globalization' (McNiven 2017) >3500 years ago. This may have been part of the Australia-wide Pama-Nyungan expansion which started around 7000-6000 BP, accelerating 3000-2000 years later, and reaching TS c.3500 BP. Mitchell (2015:344) assessed that 22% of WCTS core vocabulary is Paman-Nyungan, 34% Papuan (Eastern Trans-Fly [ETrF], SEPA), and 44% 'unknown'; some of this latter is probably palaeo-Torres-Strait word stock⁸. In comparison to northern Paman languages, the Paman content of WCTS is archaic, suggesting that Pama-Nyungan colonisation occurred quite early. Later Papua-Austronesian colonisation effectively 'removed' the language from later CYP areal changes (McConvell 2013:4; Mitchell 2015:348; cf. Wurm 1972).

A 'Papuan influx' (McNiven et al. 2006:73) or 'Melanesian New Guinea globalization' (McNiven 2017) has also been proposed from 2600 years ago. This was associated with increased proficiency in maritime subsistence activities at Badu 15, also Berberass (near Badhu; Crouch et al. 2007:60; McNiven et al. 2006:59). Excavation results from Mask Cave on Pulu (near Mabuyaagi) revealed five, locally

⁸ With better data, Mitchell (unpublished data) has revised these figures to: 25% PNy, 25% Austronesian, 10% EtrF, 10% 'more

than one possible origin', and 30% 'unknown', potentially palaeolanguage.

manufactured pottery sherds dating between 2500–2000 cal BP (McNiven et al. 2006). A link was suggested with southeast PNG, where significant quantities of pottery occur at sites along the southeast coast (e.g. Bickler 1997; McNiven et al. 2011); linguistic evidence for this is WCTS dawuma ('clay') compared to Proto-SEPA *daRo ('clay pot, clay'). It also correlates with pottery discoveries in ETS (see below) and 'because by 2500 cal BP occupation is intensive enough to be archaeologically evident in the northern (Saibai), eastern (Dauar) and western (Badhu) ends of Torres Strait' (David et al. 2004:75; see also Barham et al. 2004).

This may explain linguistic research noted above which identified the WCTS language as Pama-Nyungan 'with a heavy Papuan lexical and partly typological and phenological overlay' (Wood 2018:205; see also Mitchell 2015; Wurm 1972:345). Mitchell (2015:344) identified the language as being mixed at all levels of phonology, syntax and vocabulary. Continuing long-term southeast Papuan Austronesian contacts likely occurred for centuries, potentially until around 800 years ago, providing linguistic evidence for McNiven's 'Coral Sea Cultural Interaction Sphere' mentioned above (see below; Mitchell 2015:352-356).

The latter scenario adds linguistic support to an alternative hypothesis for a later phase of entanglement that post-dated 2000 cal BP (Wright 2015). Eight of the sixteen sherds from Pulu were found in layers dating after 1700 BP, with two recovered from a 'lag deposit of stone artefacts within a shallow erosional channel' on the surface (McNiven et al. 2006:63). Pottery sherds tested from both periods at Mask Cave were petrographically 'indistinguishable' potentially 'from the same vessel'. This situation suggests a single event, with site disturbance responsible for the appearance of two pottery horizons separated by over 700 years. Pottery (two conjoining sherds) was also excavated from a layer dating between 1620–1330 cal BP at Muyi on Mabuyaagi (Wright and Dickinson 2009). These sherds shared similar (unusually high) quantities of sand temper to those collected from Mask Cave suggesting a shared cultural tradition post-dating 1700 cal BP (Wright and Dickinson 2009).

Whether direct or indirect, presence of pottery does indicate contact between WTS and ETS and other pottery using regions in PNG. This may support models of PNG globalisation, however, it is plausible that diffusion of ideas (possibly through Islander visits to southeast PNG) occurred, accompanied by few (if any) migrants and no pottery vessels (Wright and Dickinson 2009:40). Petrographic analysis from tested Mabuyaagi and Pulu sherds indicate local manufacture, with sand content 'well beyond the normal temper ratio for other Oceanic sherds' (Wright and Dickinson 2009:40). The late Bill Dickinson (Professor Emeritus of Geoscience, University of Arizona, pers. comm. to Wright 2009) further stated 'it is unlikely that pottery containing this much sand would survive the firing process'. As only terrigenous sands were recorded in the Pulu ceramics this anomaly may be explained through use of naturally 'temper-rich clay bodies' (McNiven et al. 2006:56). On Mabuyaagi, however, the recovery of a hybrid (calcareous and terrigenous sand tempered) pottery supports deliberate addition of calcareous grains. McNiven et al. (2006:64) suggested composition may reflect a 'special, perhaps prestige, or ritual function'. Alternatively, we may be witnessing experimentation by Islanders who were unfamiliar with this technology.

Carter (2010:115-116), Irwin (2012:8) and Wright (2015) see direct contact with PNG as being at odds with manufacture techniques, limited number of WTS sherds and paucity of other physical markers of an Austronesian cultural legacy, such as domesticated chickens and pigs. Linguistic and related cultural evidence, however, do suggest long-term Austronesian contacts (Mitchell 2015:350). The evolution of local words for 'pig' of southeast Papuan Austronesian origin suggests long-term presence, as regular language-specific sound changes occurred since borrowing: Proto-SEPA *mboro-ma ('(tame) pig') (Motu boróma), WCTS burum(a) ('pig'), MM boróm, Bine blomo~blomwe~blome, Wipi b'om [*bor> implosive b], Kiwai borómo (Kope boómo, Kerewo bòmo) (cf. Mitchell 2015:349); Proto-SEPA *bwawe ('(wild/bush) pig') (Ross 1994:439), WCTS buyai ('big wild, long-tusked male pig'), Gogodala⁹ woi ('pig'). The presence of the Burum Awgadh ('pig totem') on Saibai, Dœwan, Bœigu also suggests a relatively long history. WCTS kalakala, MM kalkal, Gizrra karrakarra, Bine karakara, Kiwai (Urama) kokoro ('chicken') appears Austronesian in origin (e.g. Mekeo 'o'olo, Motu kokoroku, Kilivila rekorekwa, Proto-Oceanic *kokorako~*kokoroko; Clark 2011). There is no folk tale evidence that chickens predated European colonisation.

Post-2000 cal BP entanglement with PNG is supported by discovery at Wagedægam (Wagadagam) on Mabuyaagi of low-intensity forms of plant management (included bananas; Musa cvs) from 2145-1930 cal BP (Williams et al. 2020). This was followed by intensive forms of agriculture from 1376–1293 cal BP, associated with stone terrace construction, banana cultivation and dramatic transformations to the local palaeoenvironment. Research on Saibai provided a minimum age of 400 cal BP for mound-and-ditch agriculture, with a coring program suggesting fields post-dated 1200 cal BP (Barham 1999). This indicates diffusion of cultivation practices and cultivars supported by similarity between mound-and-ditch field systems recorded on Mabuyaagi and those in the adjacent Papuan Trans-Fly region (Harris 1995) and further afield (see below). While the age of these features in WCTS leave questions, archaeological research supports claims that the 'western islands were occupied by wellestablished hunter-gatherers with whom incoming horticulturalists had to come to terms' (Golson 1972:389).

Significant southeast Papuan (Central District, Papuan Tip) and Western Oceanic influence is also suggested by horticultural terms. Mitchell (2015:343) noted wæywi ('mango'), aapa ('garden bed'), puuyi (Kauřařaigau Ya рииři) ('plant, magic actions and products'), and aay ('food') as being of SEPA origin. Others as yet unpublished include: daway (Saibai-Dœwan-Bœigu dawa) ('banana plant'); Proto-Central-District *Da(q)u(v)a ('long white-fleshed cooking banana sp.'); g@ru~guru ('sugar cane'); Proto-SEPA *garo ('garden, sugarcane'); kawur(a) ('wild yam sp.'); Proto-SEPA *qa(v)ula ('seed yam'); kuthay(a) (MM ketái) ('aerial yam (bulbifera))'; Proto-SEPA *kotea~kwatea ('yam [generic?]'); pábu ('hoe.adze'); Proto-Oceanic POc *b(w)a[g,k]ur ('work garden, hoe'); para- ('harvest.pick (vegetables, fruit etc.)'); Proto-Oceanic *paRi ('cut or lop off branches, fruit etc.'); puwa ('yam mound'); Proto-Oceanic

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⁹ Fly River TNGP, west from Kiwai.

*[p,b]uk[i,e] ('make yam mound'); pæpathai- [-tha(i) causative] ('prepare ground for planting'); Proto-Oceanic *papo ('weed (verb)'); zæg(a) ('garden rubbish heaped and burnt'); Proto-Oceanic *sokot(-i-) ('burn grass, rubbish, fields etc.') (Austronesian data from Dutton 1973; Ross et al. 1998, 2008).

Contacts with ISEA are also possible around this time, which gives the earliest direct evidence of the dog in TS. Teeth and fragmented vertebrae appear <1800 BP in ETS middens (Carter 2004:322-323). Teeth dated to ~950-1,000 BP (McNiven et al. 2015:458) found in a Gemu midden have haplogroup A2b2, not shared with dingos (A2b3) or Lapita dogs (B). A2b2 has been identified in Bronze Age Thailand, and first appears in the Pacific at Taurama (Port Moresby) and <1800 BP at Santa Cruz (Solomon Islands), Fiji, and Polynesia. Taurama dates 2,000-1,200 BP and contains new pottery designs ('Early Papuan Pottery') and evidence of cultural change. It 'is the earliest known Oceanic occurrence of Hg A2b2 and may indicate the arrival of dogs from a different source population to those in the terminal and post-Lapita Caution Bay archaeological sites' (Greig et al. 2018:5-6). Site locations might suggest arrival from ISEA via TS ~2000 BP.

McNiven (2006:10) argued for 'synchronous, broader scale changes in settlement, demography, mobility, rituals, seascape construction, social alliances and exchange relationships' occurring within the last 800 to 600 years. This involved 'an absolute increase in activity across the region due to overall population increase' (McNiven 2006:9) and included escalation in midden activity and *sibuy* ('hunter's trophy-bone mound') (predominately dugong and turtle bone), frequently associated with ethnographically significant villages (McNiven 2006; Wright 2015). Parallel shifts occur in ritual activities (involving dugong bone and *bu Syrinx aruanus* shell arrangements), observed to be 'unique to the contiguous region covering TS, CYP, and southern Papua' (David and Mura Badulgal 2004; also David et al. 2004; Greer et al. 2015).

The Late Holocene phase of ritual activity incorporates sites associated with Culture Heroes. The Wayath kooda (Wayathan Kooda) on Wœydhul (in Mabuyaagi Kædal-Awgadh; Kuki-Guuba 'North-West Wind'; Baydham 'shark constellation Ursus major gægayth buway territory') was reputedly used by this and related buway for initiations and mortuary ceremonies. Ritual installations associated with these rituals, specifically large sibuy of dugong bone, were constructed after 634-535 cal BP, with staggered site construction continuing until 370-273 cal BP (Wright et al. 2021a). Underlying deposits include substantial quantities of shark teeth and bones, interpreted as restoration of a site previously used for specialist fishing and/or ritual activities. A more recent age (440-123 cal BP) was reported for a shell within a stone cairn, ayguy, believed to be the burial place of Adhi Kuyam on Kuyaman Pad 'Kuyam's Hill' in Gœmu, his gægayth (McNiven et al. 2009). The Gœmu buway are 'masters-of-ceremony' in harvest season rites, certain mortuary rites and pipi ('war dance') ceremonies (Eseli et al. 1998; Wright et al. in press). Brady (2010:163, 354-363) noted that rock art at kooda sites on Pulu (specifically faces, facemasks and headdresses) were comparable to art and material culture objects in New Guinea. This was also observed for oval-faced, x-ray figures painted at the 400-yearold Wagedægamaw Kooda on Mabuyaagi (Figure 6) (also

Wright et al. 2016, 2019) and matches well with a proposed '400 year event', involving increase in ritual activities across WTS (David and Mura Badulgal 2004).

While these changes do not necessarily reflect external arrivals there is a growing body of evidence supporting increased entanglement from 500-400 years ago following even earlier phases of entanglement and innovation. As noted above, the WCTS language shows 'long-term contacts over centuries' potentially involving 'Austronesian men [who] married local women and lived in a world dominated by Papuan and Australian languages' starting at least 2600 years ago (Mitchell 2015:354). Oral histories from Mabuyaagi and Badhu (Reverend Seriba Sagigi, Missi Mam and Jimmy Luffman in Laade 1967:146-148) describe 'light-skinned' traders from the east who intermarried with local women on Parama and who later, when their children were teenagers, were the first to colonise Mer, then progressively westwards. This oral history states that the continental islands were already inhabited by Age ('Australian Aborigines'), with whom the incomers intermarried. Narrative historicity is unclear, however, it is supported by archaeological evidence relating to settlement of ETS 2800-2000 cal BP and indeed an osteo-biographical study of 550-100 cal BP skeletal remains from Badhu suggesting inter-marriage between Melanesians and mainland Australians during this period (Donlon and David 2010).



Figure 6. D-stretch image of two figures painted in x-ray style at the *Wagedægamaw Kooda*. Note the presence of a traditional *dhæri* headdress and the face structure/spiky hair of these figures (Photograph: Paul Taçon).

Direct evidence for Southeast Asian and European presence in WTS includes ceramic fragments (on Mabuyaagi and Pulu) likely to date from 500 years ago, including 'the earliest known Asian artefact in Australia' (Grave and McNiven 2013:4538), namely a glazed southern Chinese decorated jar sherd dating to 1500-1600 CE found on Mabuyaagi, and Italian glass beads found near Kikori, Papuan Gulf, PNG, dated to 1650-1750 CE (Rhoads 1984), From 1792 CE on Europeans trading with TS peoples recorded being asked for toorick (and variants) 'iron tools, such as knives and axes' (Haddon 1935:10). Variants of ISEA *tudika~*turika ('knife') (e.g. Tetun tudik), from Sanskrit churikā ('knife'), is found throughout Nusa Tengara and Maluku provinces, and in the TS area as 'metal cutting tool, axe, knife' (WCTS thurik(a); Agöb turika; Bine turikä; MM túlik; Kiwai turika) and 'knife' (Gizrra turrik) (and on CYP meaning 'crowbar', Urradhi thurriya). ISEA trade may have started when Seram Laut (Maluku Province) traders were barred from the Aru Islands in 1645 CE by the Dutch East India Company and had to seek new sources of Papuan-area products. They presumably visited the TS area from 1645 to the 1790s, when the Dutch withdrew during the Napoleonic wars (Swadling 2019:154, 157). Tobacco, proto-TS *saguba (WCTS sæguba~suguba; Urradhi tjuyuβa; MM sogob; Gizrra~Agöb suguba; Kiwai~Län sukuba; Gogodala sakopa; Idi (Pahoturi) skopa; Ende (Pahoturi) sakop; Marind-Tuger subake) was also probably introduced during this time (Swadling 2019:165), possibly through Buginese cambako or Tae' sambako.

Evidence for contact, albeit with less secure chronologies, includes transportation of stone-headed clubs and axes from TS to PNG. Geochemical studies revealed that TS stone was used for some Kiwai axes (McNiven et al. 2004) while Dœwan was a major centre for stone-headed club manufacture (McNiven and von Gnielinski 2004). The chronology of these axes remains uncertain, however, studies provide material evidence for contact between TS and PNG, mirroring ethnohistorical records. Dated subsurface groundstone artefacts range from approximately 1200 years ago, though one ground-stone fragment found at Dhabangay (Mabuyaagi) dated to 6033–6469 cal BP (Ash et al. 2020).

(Pre)History of Contact Involving ETS Islanders

Approximately 180 km east of Badhu (and less than 10 km from the northern extension of the Great Barrier Reef) lie the eastern group of islands. These consist of Mer, Dauar, and Waier, the most easterly inhabited group in the TS archipelago, with Erub and Ugar further north. These are volcanic in origin, peaks of volcanoes that were active in Pleistocene times. For this reason they contain rich and fertile soils which support spectacular agricultural landscapes including a patchwork of mound-and-ditch fields (Barham et al. 2004) (Figure 7). The traditional inhabitants of this region are the Meriam-Dauarab Le, differentiated by boai districts: Komet, Zagareb, Meuram, Magaram, Geuram, Peibri, Meriam-Samsep, Paidram/Dauar and the Eburam-Ugarem Le (Haddon 1935). The following section argues that ETS Islanders have a settlement history that is markedly different from CWTS.

Contact Histories in ETS

Considerably less archaeological research has targeted ETS, a notable exception being doctoral research by Melissa Carter

as part of the Murray Islands Archaeological Project' (e.g. Carter 2002, 2010; Carter et al. 2004). Excavations took place between 1998 and 2004 on the islands of Mer and Dauar to establish the timing of human occupation and historicise traditional marine and horticultural subsistence systems. The earliest date for human activity (i.e. the onset of midden marine shell at Sokoli and Ormi) was 2800 cal BP, apparently occurring soon after beach formation and stabilisation, as demonstrated by dates from lithified rock facies on Dauar (Carter et al. 2004:176).

To understand the antiquity of agriculture in ETS, Parr and Carter (2003) examined plant microfossils (phytoliths and starch grains) in sediment samples excavated from Sokoli and Ormi. These included large numbers of common Pacific cultigens (coconut, yam and banana). At Sokoli starch grains resembling coconut were found in layers dating to 2800 cal BP, comparable with Ormi where coconut and banana phytoliths were observed, also yam starch between 2500-2000 cal BP (see also Carter and Lilley 2008:74). At both sites there appeared to be a change in landscape management practices. At Sokoli this involved a shift from Themeda australis grass to fire resistant Imperata cyclindrica by 1600 cal BP. The same phase was marked by ashy sediments (dating between 1500 and 700 cal BP) and carbonised phytoliths including banana. This was interpreted as evidence for horticultural practices, similar to gardening (firing and clearance) techniques used ethnographically (Carter and Lilley 2008:74). At Ormi closed woodland was replaced by open grassland after 2000 cal BP, providing further support for a post-2000 BP chronology for gardening (and potentially contact with PNG). Barham et al. (2004:49) revised this chronology to 1200 cal BP, considered 'a reasonable first order estimate for initiation of significant and sustained horticultural practices across northern and eastern Torres strait'. This would match results from north WTS and escalation in agricultural activity (including mound-and-ditch fields, cropping economies – banana, yam and taro) on the south coast of PNG during this period (e.g. Harris 1995). As this coincided with the Little Ice Age (1200-1400 cal BP), adaptation to climate change may have been necessary.

Excavations at Waiet's place at Ne on Waier obtained radiocarbon dates between 134–292 cal BP (at 2σ) for installations ethnographically associated with initiation ceremonies (Wright et al. 2019:126; see also Wright et al. 2021b). At this site significant quantities of human remains were observed lying on the surface alongside shells, some of which appeared to preserve ochre paint and one of which dated within the past 300 years, while subsurface human remains identified had a maximum age (obtained in multiple test pits) of 1883–1692 cal BP; a littoral zone of water-rolled, non-cultural shell from this site dated to 2303–1917 cal BP (Wright et al. 2019:128). This suggested ongoing use of Ne for mortuary activities, with alterations that included incorporation of large quantities of shell and a turtle shell effigy within the recent period.

There is clear evidence for contact between the Murray Islands and PNG. This is evident in language connections with MM closely related to the other ETrF languages (Bine, Wipi and Gizrra), and more distantly to the Pahoturi Family (Mitchell 2015:248). The Meriam may have migrated from the western (Bine-Gizrra) part of the ETrF tribal area. Wright et al. (in press) estimates MM to have been linguistically separated for a minimum of 2000 years. Mitchell (unpublished



Figure 7. LiDAR map of the northwestern portion of Mer including the airstrip, fishtraps and hundreds of field systems (Image: Philip Parton).

data) suggests that MM's distance from its sisters could be c.10%, less than 1000 years. MM folk history supports a later date; when the Meriam migrated to Mer, it may have been inhabited by *Gamle*, people considered to be the same as the WCTS Islanders (Koiki Mabo, Mer, pers. comm. to Mitchell 1980).

This situation may be mirrored by archaeology, with three of the six archaeological excavations to take place in ETS returning direct evidence for external (most likely PNG) influence (Carter 2010:114; Wright et al. 2019). At Ormi and Sokoli (on Dauar) 23 pottery sherds were recovered with an additional unprovenanced sherd found on Mer by a Meriam Islander (Carter 2010). Three of the larger sherds (excavated from upper deposits at Ormi) and the unprovenanced sherd from Mer, were petrologically tested revealing abundant plagioclase, clinopyroxene, quartz, brown hornblende, schist and basalt/andesite. Magnetite and olivine were also identified in small proportions. Elemental composition incorporated similar minerals to those found in highland New Guinea (Carter and Lilley 2008:77). Two source areas were suggested 'the Kubor Anticline-nested between the volcanic clusters of the New Guinea Highlands' and 'the hinterland of the Kikori River system, located in the north-west of the Gulf of Papua' (Dickinson 2003). Several researchers have found this provenance problematic since no pottery production area has yet been found in the highlands (Carter and Lilley 2008:77; Glenn Summerhayes pers. comm. to Wright 2018). A low-fired pottery sherd recovered in layers dating between 1517-1123 cal BP at Ne on Waier Island may also have a PNG source, however artefact provenance remains unclear (Wright et al. 2019).

There is also considerable evidence for contact between ETS and the linguistically unrelated WCTS Islanders. MM is an 'Eastern Trans-Fly Papuan language with some influence

from Kalaw Lagaw Ya' (Wurm 1972; see also McConvell 2013). Mitchell (2015:336) recognised that 'words, phrases and songs were borrowed from the Western and Central languages into the neighbouring Papuan languages (including MM) over the centuries preceding European contact', with some loans in the other direction. These involved individual words (shared vocabulary between MM and the Western-Central Language of around 40%; Mitchell 2015:343) and phrases and religious-cult songs or formulae, the latter including ceremonies relating to dugong-turtle hunting, initiation and fertility cycles, and treatment of the dead (Mitchell 2015:341). Currently, archaeological research on the Murray Islands has not revealed clear supporting information. Haddon (1935:77,88; see also McNiven 2016) observed exotic sacred (zogo) stones reputedly transferred between CTS and ETS. No geochemical analysis has been completed on these stones; however, this supports close social and economic ties between Eastern and Central Islanders clear in folk history (e.g. Lawrie 1970).

Discussion and Conclusions

Studies of past human mobility increasingly recognise empirical evidence may be contained within Indigenous narratives (e.g. Levi Straus 1966; Whiteley 2002). Unlikely to provide linear histories, these narratives may provide insights into generational change in community values, tastes, relationships and perceptions. This insight is repeated by TS Islanders who identify Culture Hero *gidha* as embodying a chain of connections between communities who shared stories, songs and ceremonies. Developing the trajectory of existing research that prioritises mythological geography (e.g. Busse 2005; Greer et al. 2015; Lawrence 2004; Mitchell 2015), this paper examines the long history of two Islander communities exploring intersections between archaeology,

linguistics and ethnography. It recognises that distinctive histories echo external contacts, but also cultural dynamism involving independent socio-political decisions and internal innovations, in part due to differing ecologies and bathymetries of the various regions.

Torres Strait Islander histories are increasingly interpreted through a lens of community 'entanglements' spanning the Coral (and Arafura) Sea corridor (e.g. McNiven 2021). Culture Hero narratives, language and archaeology support this assessment to a degree, while also emphasising dangers of creating meta-narratives that downplay regional variation between self-motivated communities or recognising the potential influence of down-the-line interactions between neighbouring communities, as opposed to long-distance voyaging. In ETS, for example, Culture Hero narratives (e.g. Said; Bomai, Malo, Sigar, Kolka, Siu; Waiet) and ethnohistorical records provide insight into strong and regular links between Murray Island communities and those in CTS, WTS, southern PNG (some via Bœigu, Dœwan, Saibai and Daru) and to a lesser extent CYP (some via Muri). An origin for Wayath-Waiet among the Bine of Papua (as evident in Culture Hero narratives and argued by Haddon 1935:408 and Lawrence 2004) is plausible, given MM and Bine are part of the isolate ETrF family (see also Mitchell 2015:336; Wright et al. in press); however, the Bine apparently disagree (Haddon 1935:406, 409). Southern Kiwai Parama, in the Fly River region, is recorded to have been a significant trade partner for Meriam. The Kiwai relationship is also strongly present within Sida~Said narratives, though Sida~Said's non-MM language on Mer, like Waiet's, is WCTS (Lawrie 1970:339-341). This may reflect the fact that he first went from Kiwai to Yam-Maro territory, entering TS via Bœigu, visiting significant WTS and CTS islands – where he spoke WCTS – before arriving at Mer; from Mer he went to Erub, Ugar, before returning to Kiwai territory with important Meriam gardening zogo stones. He was later killed, was reborn, travelled to Boeigu then to Adiri (Kibukuth, Beig) to prepare the After Life for the Kiwai urio ('spirit'; markay, MM lamar) (Haddon 1935:374-375; Landtman 1917:95-119, 119-124, 1927:73-74, 284-290, 318, 426, 432-433; Lawrie 1970:339-341). Parama also appears in the Mabuyaagi-Badhu folk history referred to above, having been settled by SEPA traders who soon after moved to Mer. This antiquity of entanglement between ETS and PNG is likely to date back to 2800–2500 cal BP, with the initial settlement of Mer-Dauar, archaeologically identified by exotic cultivars and artefacts such as pottery (e.g. Carter 2010). This assessment is supported by language research (e.g. Mitchell 2015).

Cultural Hero *gidhal* suggest a different history for WTS Islanders, arguably possessing differing priorities to communities in ETS and southern PNG. This is also evident in archaeology with locally manufactured pottery on Pulu and Mabuyaagi suggesting experimentation by a community less familiar or interested in a technology of considerably more prominence to those in New Guinea. Palaeoenvironmental evidence for horticultural activity on Mabuyaagi (bananas by 2145 BP), Kæriri (2700–2300 cal BP) and on Saibai (potentially as early as 2540 BP) suggests some level of connection did exist. This is strikingly different, however, from the ubiquity of this evidence recovered in ETS, suggesting either superior fertility of ETS, or separation from/peripheral engagement within a Coral and Arafura Sea Cultural Interaction Sphere. Language and cultural datasets

provide stronger evidence of relatively intense Austronesian and Papuan contact throughout TS from ~2800–2500 cal BP, with the main difference being a potentially later influx of ETrF peoples to ETS.

The important role of WCTS cultural influences may be ambiguous in archaeology, however, they are preserved in language and cultural content. The language most spoken by wandering heroes is that of WCTS, evident in stories, songs and significant sayings associated with Culture Heroes within neighbouring Papuan (including MM) languages (see also Haddon 1904; Landtman 1927; Mitchell 2015:336). Language typology provides further clues; with the Wayath and Said WCTS songs used by Meriam observed to have close affinities with the dialect of Saibai, Dœwan and Bœigu; significant as Bœigu is the entrance to the pathway to Kibukuth. This suggests that funeral and Other World songs and statements in Wayath and Sida-Said narratives referenced (or were conceived in) this gateway area.

Concurrently, there are narratives connecting Wandering Heroes such as Kuyam, Wayath and Naga voyaging to adjacent PNG where they significantly impact Papuan communities. This scenario may explain archaeological observations outlined above, also the strong influence from WCTS on the MD-Kiwai, who at an early stage borrowed much culture from the Yama (Hiámo) of Daru (Landtman 1917, 1927; Mitchell 2015). Hiámo Daru was said to be the island where the mortuary ceremonies learnt by Naga then Wayath were first developed, spreading to the Papuan coast and down into the islands and as far as the Kuuku Ya'u on CYP. While the WCTS mortuary rites and customs started first on Daru, MD-Kiwai Turtle Fertility ceremonies came from Yama-Tudu, the pipi (a ceremony sung and danced after a successful battle raid) called Kuyaman Pipi ('Kuyam's War Celebration') came from Saibai. MD-Kiwai cosmology and weather lore was largely borrowed from the WCTS Islanders, lore which also figures in the mortuary and other ceremonies borrowed by the Kiwai.

WCTS Culture Heroes (e.g. Kiba, Sesere, Wayath and Naga) are frequently associated with internal innovations, including improvements to dugong hunting and new mortuary practices. This has important implications for historical research in the Coral and Arafura Sea region. In WTS, for example, maritime specialist activities (often used as markers of migration) can also be viewed as ongoing developments by Islanders long adapted to maritime environments. Soon after marine transgression the resident community on Mabuyaagi had the capacity to capture turtle and fish, adding dugong hunting to this repertoire from 4000 years ago (also evident on Berberass, Sarbi and Pulu). The ability to hunt nutritionally rich dugong is likely to have had major repercussions for WTS Islanders, not dissimilar perhaps to the introduction of horticulture in ETS (Barham et al. 2004). It is easy to imagine the implications of such a breakthrough, not least because they are echoed in the stories of Sesere, Kiba and Gelam. As the dugong became increasingly central to community survival it was inevitable that they would also become spiritually enmeshed within WTS Islander cosmologies. Physical evidence of this occurs within the past 800 years, with animals inscribed on both body and country through dugong bone sibuy, rock paintings, carved charms, stone arrangements, and scarifications (Haddon 1904; McNiven and Feldman 2003; McNiven et al. 2009) (Figure 8).



Figure 8. Maitui (Beeboy) Whap clearing stones away from his clan marker (a crocodile and dugong at Dhabangay on Mabuyaagi) during archaeology excavations at this site (Photograph: Ben Watson).

McNiven (2021:15) suggests 3000 years of voyaging over 'hundreds of kilometres of coastline', spanning Papuan Yam-Maro territory to the Fly Delta, and south as far as Old Mapoon (northwestern CYP) and Lizard Island (eastern CYP). While this may at times have occurred, we suggest that down-the-line interactions better explains the majority of ethnography (including Culture Hero narratives), genetics, linguistics and archaeology. WTS, CTS and ETS Culture Hero stories frequently involve travel to adjoining islands, occasionally also New Guinea and CYP. This is evident in Wayath's return journey from Wœydhul to Nagi where he learns how to perform the death dance and steals important masks belonging to his mentor Naga, and Adhi Kuyam's raiding trips. Wayath, according to the Meriam, came from Mabuyaagi, though, as noted above, he may well have come from New Guinea or northwest TS. His name is firmly embedded within Mabuyaagi and Badhu genealogies (e.g. Rivers in Haddon 1935: Tables 1b, 3a, 4B, 8b, 17b), although it is acknowledged that the practice of naming children after a famous person is not uncommon in totemic societies such as

WCTS where all incoming settlers are incorporated into a local buway.

McNiven (2021; see also Greer et al. 2015) emphasises cultural interactions incorporating communities in northeast Australia and southern PNG. Culture Hero narratives do identify journeying from PNG into TS and vice-versa (see Figures 2–5). Prominent in this regard are narratives relating to Malo-Bomai and family, who travel from Wasi territory (western Papua) to Mitpirinchi ('Soul Place'), called Marilag ('Soul Place') by WCTS Islanders (Mitirinji, Quoin Island) in Kuuku Ya'u territory before settling in CTS and ETS. This saga suggests cultural links (as yet not strongly identified through archaeology) not only between WCTS and ETS and speakers of the Yam-Maro languages west from the Wasi Kœsa, but also as far as northeast CYP. Very occasionally, stories describe journeys taking weeks if not years, including Sida-Said and Kabai of Dœwan. This latter sailed eastwards to Kibukuth to where the sun and moon rose, bringing back new varieties of banana, sugar cane and taro (Lawrie 1970:132-134; Laade 1971:59-62; Haddon 1935:42). Should

this be a record of a real journey, Kabai would have reached southeast Papua. He was away for some years, returning greyhaired to find the baby he had left a young married woman.

Few TS Culture Heroes come from Australia, with some attributions (e.g. Shiveri) likely representing recent cultural associations (see above). Notable exceptions include Waubin, a Muralag *Aadhi* originally from CYP who protects Waubinin Malu ('sea') and the Muralag group within it (Lawrie 1970:6-8; Southon and Kaurareg Tribal Elders 1998), and Kuyam's father, who travelled overland from Kuuku Ya'u territory in northeast CYP to the tip of CYP and then 'walked' over the sea to Mabuyaagi where he married Kuynam of Kauřařaiga Muri origin, later to return home. It is noteworthy that the Kuuku Ya'u people from this region have strong precolonisation influences from WCTS (they call Islanders Kulkaliya; their main contacts were with Kulkalgal), including markay thay mortuary ceremonies (see below), also production of dugong bone mounds (unpublished photographs in the Donald Thompson collection, Victoria). Paucity of journeying between New Guinea and mainland Australia is intriguing, possibly suggesting that entanglement with these communities was either less common, or alternatively was conceived in ways that were culturally distinct from predominantly Melanesian gidhal. Considering limited genetic and archaeological evidence for substantial contact between the two regions, a division that remains no less 'stark' 50 years after the Bridge and Barrier Symposium (Walker 1972), also varying seaworthiness of canoe technologies across this sea corridor, the authors suggest caution when assessing the deep history and ubiquity of entanglement in this region.

Greer et al. (2015) suggested Culture Hero mythologies may provide useful lessons about nuances within past human interactions. The authors agree with this assessment, suggesting that Wayath's arrival on the Murray Islands provides one such lesson. Alo Tapim (pers. comm. to Wright 2019) believes that this Culture Hero personifies negotiation by resident Meriam about how to emplace new mortuary practices within existing cultural systems. Archaeological research at Ne on Waier revealed 300-year-old ritual installations and human remains (associated with Wavath-Waiet ceremonies) at a site that had been used for mortuary activity over millennia (Wright et al. 2019). A similar pattern of transitioning site use/ritual syncretism was noted for a comparable Wayath initiation place on Wœydhul (see below; Wright et al. 2021a). Both studies identify the importance of resident communities in the settlement history for TS Islanders, a story frequently downplayed within migration narratives (Frieman and Hofman 2019).

Staged emplacement and transitions are further evident in language and culture studies. Not only are the significant religious/cultic words and songs of the travelling heroes, regardless of provenance (Said, Malo-Bomai, Waiet), often in the WCTS language, but Wanderers also absorb older *aadhi*stories and belief. The *Adhi* Kuyam saga, for example, incorporates the much older *Zugub* (*Thægay* and *Kang*) discussed earlier, with *Adhi* Kuyam himself used as a paragon of the southwest 'Sky-God' *Kek* and his role in head-hunting. Additionally, *Tagai* and *Kareg* (in MM) are important to the Giar-Dauareb from Dauar Island (Lawrie 1970:304) appearing in religious content within the Wayath songs (Wright et al. in press); the name *Tagai* is owned by a Gigred *boai* on *Ziai* ('South-West') Mer (Lawrie 1970:304).

The Reports of the Cambridge Expedition (e.g. Haddon 1904, 1935), Landtman (1917, 1927), Lawrie (1970) and many other works mention the Zugub. Zugub lore has tantalising similarities to 'Lapita' (referring to cultural traits, not pottery styles) beliefs of the Central and Eastern Pacific (for these see François 2013; Marck 2000), including north Vanuatu Tagaro (François 2013:240) and Polynesian Tangaloa (Tonga); Tagaloa (Samoa); Taka'oai/Tana'oa (Marquesas); Tagaroa (Mangareva, Tuamotua); Kanaloa (Hawai'i); Tangaroa (Maori) ('first-order anthropomorphic god'); Ta'aroa (Tahiti) ('pre-existing creator god'); and 'Ono/'Oko (Marquesas), Lono (Hawai'i), Rogo (Tuamotua), Rongo (Maori) ('first-order anthropomorphic god'), Ro'o (Tahiti) ('one of the earliest gods') (Marck 2000:171, 175). Thægai, MM~MD-Kiwai Tagài is the ('oldest-brother') chief Zugub who controls weather, sea, travel; horticulture, harvest/planting, southwest harvest wind, hunting, battle. He is very similar in form and function to the Proto-Oceanic Sky-God *tanaloan (*tana sack, *loan long, endure), an anthropomorphic supreme/first-born/principal creator-god or deity, god of sky and/or sun and/or water, of food, of After Life (Marck 2000:140-179). He complements Kang, Kauřařaigau Ya Kæřanga, Kaiwaligau Ya Kæyang, MM Karèg, MD-Kiwai Karòngo, ('youngest-brother') chief Zugub, who controls weather, north-west monsoon, rainfall; growth; hunting, battle; blind, excellent hearing, lame. The Oceanic complementing god is *(?qa-)ronoR Sound, second son of Sky and Land, god of agriculture, fertility, rainfall, etc. (Marck 2000:140-179). Should this link with 'Lapita' culture be authentic, then the Zugub presumably came with the earliest SEPA settlers, introducing a 'Lapita' pantheon of skygods/goddesses and associated beliefs.

This paper identifies important commemorative elements associated with Culture Hero mythologies. These include places set aside by buway to commemorate these individuals (e.g. Kuyam's cairn, dated within the past 300 years; McNiven et al. 2009) or to conduct important rituals of initiation in which fertility, weather, hunting and death were often intertwined (Wright et al. 2018; 2021a, 2021b). WCTS mortuary songs and paraphernalia at Mer and Mawata-Daru are also often songs of life, food gathering, water and the means of continuing life (Wright et al. in press). Important ritual centres include Wayathan Kooda on Wœydhul where dugong bone sibuy started to accumulate from 700 cal BP, continuing until 300 cal BP (Wright et al. 2021a). This is considerably earlier than the Waiet site in ETS, where ritual installations associated with this Culture Hero date within the past 300 years, which coincides with the story of Wayath's departure from Wœydhul and Waiet's arrival at Ne. Features associated with Wayath rituals on Wœydhul cap a layer incorporating large quantities of shark bone and teeth. This suggests site syncretism and a shift from specialist fishing and/or ritual activities to those focusing on the systematic mounding of dugong and turtle bone (Wright et al. 2021a). A similar situation may occur in ETS where mortuary activities appear to have a long history, transforming within the past 300 years to include installations associated with the Waiet cult (Wright et al. 2018). These observations provide tantalising clues about the antiquity of Coral Sea mythological geographies, confirming the central roles of resident Islanders as well as potentially echoing pathways and origins as identified through language and saga narratives.

Future Directions in the Search for Bridge and Barrier

This paper identifies high potential for multidisciplinary and multivocal research relating to gidha mythologies. It only begins to unpack potential intersections between epistemologies, mainly because few studies have examined the materiality of these TS Islander chains of connection. It is anticipated that research integrating Indigenous perspectives, linguistics, archaeology, and museum studies will provide significant insights into regional variation and nuances within the settlement history of this region. Archaeological research might test gateway regions within these narratives, specifically islands in Kiwai territory and the northern tip of CYP. Mythic and linguistic histories identify these as likely early stages within the ritual development of this Coral and Arafura Sea Corridor. Equally intriguing will be multivocal historical assessment of exotic introductions. This includes sacred stones reputedly transported along the routes of Wandering Heroes, such as those noted at Dam on Mer. Additionally, insights into the historical trajectory of maritime innovations and horticultural arrivals may survive within the Said, Sesere, Kabai and other sagas or study of shared ritual activities. A key example of the latter is the markay thay mortuary ceremonies associated with the crocodile clan and masked dancers, recorded in CYP, throughout TS and neighbouring New Guinea (e.g. Thomson 1933; Haddon 1935; Landtman 1917).

As recognised by McNiven et al. (2006:74) 'the degree to which they [pre-2600 year old TS Islanders] might be described as genetically 'Aboriginal' (Birdsell 1993:440) or 'Melanesian' (or a complex mixture of both) is a matter for speculation until pre-2600 year old skeletal remains are forthcoming'. Indirect comparisons between PNG and mainland Australia have demonstrated genetic morphological links between populations on both sides of the Sahul shelf divide during the Pleistocene with populations diverging 37,000 years ago (Malispinas et al. 2016). Malispinas et al. (2016:212) found evidence for ongoing, albeit occasional gene flow that was mostly unidirectional from Papuans to Aboriginal Australians. This differed from research by Nagle et al. (2016) that suggested genetic isolation, with no secondary gene flow during the Holocene. The general consensus based on multivariate craniometrics analysis of skulls from uncertain provenance suggests TS Islanders cluster statistically with remains from PNG (e.g. Hanihara et al. 2003). These studies provide little support for models of extensive entanglement between CYP, TS and PNG. It is acknowledged, however, that recent genetic analyses (Karmin et al. 2022) show that TS Islanders fit into a northern Sahul distribution, with northeast Sahul and northeast Australia forming a common genetic area until after marine transgression. This appeared to remain the case until ~3600 cal BP, when a genetic split occurred between men in New Britain and Queensland. The extrapolation could well be that the population of TS and north CYP was 'Northern-East Sahul' until the arrival of Paman-Nyungans. Some Pamans reached the islands, intermarrying with palaeo-Islanders, introducing Paman while retaining much palaeo-TS-language content. The WCTS folk history noted earlier suggests that such mixed Paman-Palaeo people also inhabited northern CYP.

A recent survey of anomalies identified through LiDAR on CYP, Horn Island and Badhu identified the shared

presence of earth mounds across this region. The cultural origin of these features continues to be debated, though Orange-Footed Scrubfowl (megapodes), called surka in WCTS and widespread in coastal wet tropics of far north Queensland, far north Northern Territory and the Kimberleys (Western Australia), much of southern and western Papua and Nusa Tenggara (Indonesia), are known to create large earth mounds to insulate their eggs (e.g. Brockwell 2006; Brockwell et al. 2016). This most likely explains many of the mounds visited in 2018 that revealed no cultural materials and occasionally clear evidence for scrubfowl disturbance. On Badhu, Thomas Mene (pers. comm. to Wright 2018), who had grown up on Muwa, described witnessing one such mound being built by two industrious *surka* in the family garden! Cultural activity or not, it will be interesting to better understand the spread of these features and the extent to which this represents human introduction of surka to the TS Islands. While earth mounds post-date 4000 cal BP in northern Australia (Brockwell 2006), no dates are available from neighbouring New Guinea or TS. Equally important may be the extent to which surka were emplaced by resident communities. These birds appear in several aadhi and gidha throughout the western islands, from the south to Saibai and Bœigu, including the Kuyam gidha (Haddon 1904; Lawrie 1970). Modern distribution patterns suggest an original range in wet tropical Sahul south of the PNG Highlands. If so, the birds may have been present in TS from before marine transgression.

Conclusion

Archaeological, linguistic and ethnographic records suggest divergent settlement histories for communities on the western and eastern margins of the TS archipelago. Specifically, ETS experienced significant and ongoing interaction with PNG from initial settlement (from around 2800 years ago), while WTS demonstrates less sustained and at times more recent contact, though horticulture in WTS appears as early as 2700 cal BP on Kœriri and banana cultivation on Mabuyaagi by 2145 cal BP. Linguistically and culturally the picture is much more complex, suggesting upwards of 4000 years of contact of various kinds between Islanders and people living on neighbouring New Guinea (ETrF, Pahoturi, Yam-Maro, Kiwai). CY communities, arguably less enmeshed within gidhal narratives and the associated cosmo-political culturescape, were not isolated at all stages, with early Pama-Nyungans creating significant language change on the Islands (and northern CYP) >3500 cal BP. Contacts likely increased from around 2800 years ago, including SEPA peoples. A cultural unity developed across this Coral and Arafura Sea corridor. This facilitated down-the-line cultural exchange, as recorded ethnographically, and was undoubtedly strengthened by innovations made by autonomous but dynamically interlocked Islander communities, particularly the WCTS Islanders. This duality represents a key aspect for understanding the history, heritage and identity of Islanders who saw their islands and seas as occupying the middle of the world and indeed significantly influenced the cultural trajectories of adjoining regions. Major changes in social and ceremonial life occurred across the Coral and Arafura Sea corridor during the Late Holocene, and echoes of these innovations and infiltrations are not only present in the archaeology, but also the languages and Culture Hero sagas of TS Islanders.

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Abbreviations

CTS Central Torres Strait

CWTS Central Western Torres Strait

CYP Cape York Peninsula

ETS Eastern Torres Strait

ETrF Eastern Trans-Fly

ISEA Island South-East Asia

KLY Kalaw Lagaw Ya

MD-Kiwai Mawata-Daru Kiwai

MM Meriam Mir

PNG Papua New Guinea

SEPA South-East Papuan Austronesian

TS Torres Strait

WTS Western Torres Strait

WCTS Western and Central Torres Strait

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