

Cetaceans and citations: a survey of the English literature on the role of cetaceans in South Pacific island cultures

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ABSTRACT: Prepared to support the development of the Museum of New Zealand Te Papa Tongarewa exhibition ‘*Whales – Tohorā*’, this review surveys material published in English on the practices, knowledge and beliefs of South Pacific people in relation to whales, dolphins and porpoises. It does so under the categories of deity and veneration, origins and classification, power, status and adornment, alliance and protection, enmity and threat, and capture and consumption. The cited material covers Kiribati, coastal Papua, the Solomon Islands, Vanuatu, Fiji, Tonga, Samoa, Tokelau, Tuvalu, Niue, the Cook Islands, the Society Islands and Rapanui. Itself recording the observations of an outsider, this article identifies the material mostly as reflections of similarly external examination rather than necessarily accurate descriptions. The review concludes with a brief consideration of possibilities for further research.

KEYWORDS: literature review, cetaceans, whales, dolphins, porpoises, South Pacific people, Oceania.

Introduction

This review article was commissioned as part of the research brief for the development of the exhibition *Whales – Tohorā* in the Museum of New Zealand Te Papa Tongarewa (Te Papa) during 2006–2007. *Whales – Tohorā* is a major cross-generational and cross-disciplinary exhibition that was developed by Te Papa to tour internationally. One of its aims is to showcase the stories, significance and objects that reflect the important place that cetaceans hold in Aotearoa New Zealand and the Pacific, scientifically, culturally and historically. At the time of writing, there were no published surveys of indigenous hunting practices and other related practices, knowledge and beliefs about cetaceans in the Pacific. This review is a small contribution to improving that situation.

The review is confined to printed material published in English, with the sole exception of two Internet sites

introduced to supplement and extend a printed contribution. Its geographical coverage (Fig. 1) and the order of material within each section begins in Kiribati, specifically Banaba and Tuarua, the western chain of islands spanning the Equator north and south, and sometimes still referred to as the ‘Gilberts’ to distinguish them from the group’s eastern islands. It touches lightly on coastal Papua and then continues across the Solomon Islands, Vanuatu, Fiji, Tonga, Samoa, Tokelau, Tuvalu and Niue, swings back to the Polynesian outliers in the Solomons – Rennell, Bellona and Tikopia – continues east to the northern and southern Cook Islands – respectively, Pukapuka and Tongareva, followed by Mangaia, Mauke and Rarotonga – and concludes in the Society Islands, the Tuamotus, the Marquesas and Rapanui. Unfortunately, published English records appear to offer no evidence from Torres Strait, Kanaky/New Caledonia, and Wallis/Uvea and Futuna.

The survey is divided into sections covering different themes: deity and veneration; origins and classification; power, status and adornment; alliance and protection; enmity and threat; and capture and consumption. The sources are many and varied, ranging from the scholarly through to the popular, and are mostly fragmentary and sparse. While the article may to some extent be a survey of knowledge, belief and practice of South Pacific people, it is also predominantly a record of how outside observers – often enough those implicated in one way or another in the colonial or neo-colonial projects – represented those people. It must be acknowledged that the stance of this essay itself is that of an outsider observing, mostly, outside observers.

A survey that is reliant, to a considerable degree, on travellers' tales and the notorious 'ethnographic present' will always be in danger of representing South Pacific people as timeless and unchanging. However, it is worth acknowledging again that this is essentially a study of what was said or, even, published rather than what was actually done. There is also a problem with references to introduced categories such as Micronesia, Melanesia and Polynesia, let alone South Pacific, which are used in dealing with Pacific cultures, and even the employment of modern country categories conceals a good deal of lively disparity. However critical one may be of those categories, they persist, as it has become almost impossible to discuss the Pacific without recourse to them.

There are two further difficulties. The usual translations of common Pacific words are often doubtful representations of the original concepts, and those concepts and their frameworks are themselves rather inaccessible without some familiarity with Pacific epistemologies and, necessarily, their associated languages. Once again, the provisional response to the problems is to skate over them by employing a variety of usages. The other difficulty is the fact that the categories and classifications created by Pacific peoples, as well as the terminology of earlier travellers, do not necessarily agree with those of modern western science. In this essay, the local and original references will prevail.

Deity and veneration

Specific references to cetaceans are largely absent from published records of the creation stories of the South Pacific as, for example, in Williamson's (1933a,b) survey of Polynesia. Possible reasons for that absence are a matter of conjecture,

and may variously be ascribed to their tacit inclusion in the realm of Tangaroa (god of the sea) and the fishes in general, the comparative infrequency of encounters with them, or simply the vagaries of the recording process. Their appearance in a variety of other stories about the exploits of the gods and goddesses, however, suggests a lively, if modest, presence in the spiritual and creative universe.

In what appears to be a rare direct representation of deity in Kiribati, Sabatier (1977: 58) suggests that Nei Teveni, by his account a vain, flirtatious, curious and demanding Gilbertese Venus, is represented by the head of a porpoise.¹ Elsewhere, she appears coming 'upon the winds out of the deep/ Bedecked and garlanded with porpoise teeth' (Maude & Maude 1994a: 267). Another god and a goddess wear porpoise-teeth necklaces, and a porpoise is sent by the Sun to punish his incestuous children by drowning them at sea (Grimble 1972: 92, 134). In the same source, there appears a suggestion that porpoise flesh served as both a replacement and a euphemism for human flesh in ritual sacrifice (Grimble 1972: 256).

Associations with deity are more evident in other records from the central and eastern Pacific. Clunie (1986: 176) notes the special spiritual value accorded to worked sperm-whale teeth and their role as both spiritual shrine and priestly adornment in Tonga as well as in Fiji. In Levuka, Fiji, Wilkes (1970: 87) witnessed the public trial of an initiate into the priesthood in which a whale's tooth provided the focus for intensely convulsive divination. In Tonga, Lawry (1851: 35) observed conversion to Christianity marked by the putting aside of a large whale's tooth ('Feaki, the fountain-head of all the minor gods') to which first fruits and at least one child had been offered. Also, the incarnation of a powerful chiefly woman was put aside in the form of a large whale-teeth necklace (Lawry 1851: 317).

Among a number of examples from a variety of locations in Tonga, Gifford (1929: 304) pays particular attention to Aloalo, a Ha'apai weather god and prophet represented by a whale's tooth covered by a fine mat. The god's prophetic activity was presaged by the appearance of a yellow butterfly and manifested in the shaking of the whale's tooth and the god's entry into the body of a priest who, convulsed and trembling, delivered the prophecy. In Samoa, too, gods manifested themselves in whale teeth. In one case, the likelihood of success in battle was indicated to a priest praying in support of the warriors by the east-west orientation of a whale's tooth; a north and south orientation would have indicated defeat (Williamson 1924b: 221, 250).

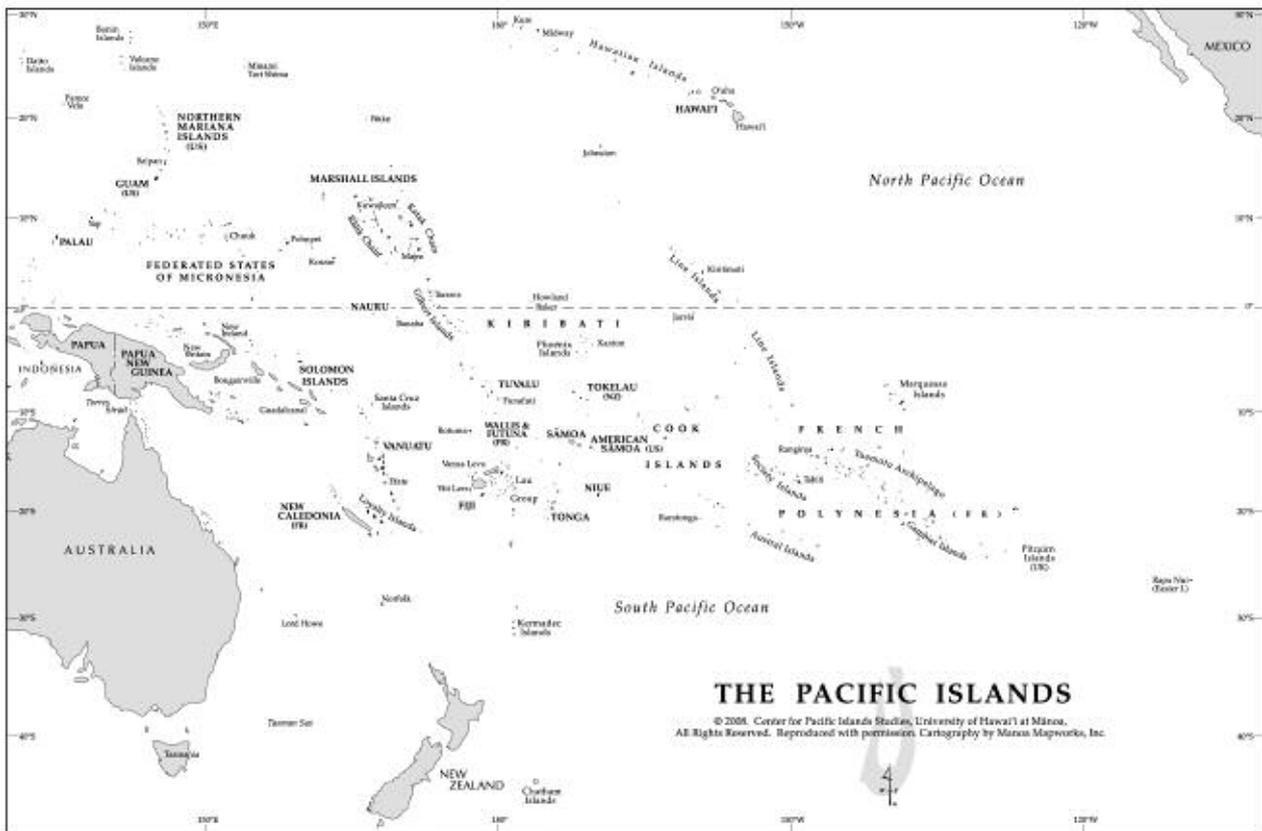


Fig. 1. Map of the South Pacific showing localities mentioned in the text.

William Mariner (see Martin 1981: 299), in his notes on Tongan religion, records the belief that gods might appear in the form of porpoises, particularly for the protection of boats at sea. A few decades later, Farmer (1976: 126) observed that whales, among other creatures, were particularly revered as spirit-god shrines in Tonga and that, chanced upon in sailing, they would be offered scented oil or kava. Additionally, the availability of a variety of cetaceans as conveyances for the gods, their friends and their lovers are attested to in Luomala's (1955: 104) account of the pan-Polynesian adventures of Tinirau, and more specifically in the Tongan Kae (Gifford 1924: 139).

In Bellona, rarely encountered creatures such as whales were regarded as special gifts from the god who controlled the world of nature, and their capture was marked by major rituals (Kuschel 1975: 10, 12). On the other hand, the gods would, from time to time, demand the 'life-principle' of a particular human being in exchange for such a capture (Kuschel 1975: 55). Also, according to Elbert & Monberg (1965: 335), in Bellona and Rennell whales were available to the gods as 'sacred canoes'.

Firth (1967: 558; 1981: 223) suggests that the Tikopia belief in cetaceans as representations or embodiments of gods underlay reception rituals at their strandings. He quotes an *ariki* (chief) to the effect that 'people say that they [cetaceans] are all bodies of the spirits' (Firth 1967: 560). The appropriate responses to the consequent feeling of ambiguity or anomaly at their appearance on land were the ceremonies of threat first and, subsequently, offerings of green food before butchery or burial (Firth 1967: 558, 562; 1981: 223). Another elder is reported as asserting that his major deity was the one responsible for noosing and stranding whales, and, in another case, a whale was offered by a goddess in reciprocity for a song composed in her honour (Firth 1967: 561).

Whales stranded in Pukapuka fell within the purview of Te Mangamanga, the guardian of trees. It was his priest who supervised the division and distribution of whales, but the consumption of their flesh was forbidden to children (Beaglehole & Beaglehole 1938: 311). To the south, Vatea, the father of the gods in his Rarotongan form, appeared as half-man, half-fish and was allied to the porpoise

(Williamson 1933a: 12). Also in Pukapuka, and partly in pursuit of his quest for Polynesian origins in India, Gill (1912: 60) recorded a story written by one Itio in 1882 that included a whale, in the service of Tangaroa, consuming a land and its people.

Similarly, Henry (1928: 389) records that, in ancient Tahiti, the whale was ‘the shadow of Tā’aroa’ and, together with the other fishes including dolphins, took up the spirits of people lost at sea, especially those drowned. In the latter case, the changes of a dolphin’s colour in the course of dying were ascribed to the departure of those spirits (Henry 1928: 390). An interpretation of research into petroglyphs and *rongorongo* (the written language of Rapanui) has located the whale in that island’s creation chant as born of the god Tinirau and the goddess Hina, as well as making a connection with the supreme god Makemake (Métraux 1940: 321; Rjabchikov 2000, 2001: 219, 2002). It is also argued that the physical association of glyphs for dolphin and *atua* (god) suggests that sea creatures appearing in petroglyphs may represent incarnations of gods (Huyge & Cauwe 2002: 15; Rjabchikov 2002).

Origins and classification

While the bulk of the material in this section comes from Kiribati and two small Polynesian outliers in the Solomon Islands rich in systems of classification, it is possible to imagine similar theories and taxonomies existing at least in other areas of Polynesia. Samoan dictionary-makers and ethnographers, for example, distinguished the sperm whale, *tafolā* (*tafolātū* when particularly large), from the dolphin, *masimasi* (although there appears to be considerable uncertainty as to whether this applies to dolphins, dolphin-fish or both) and *munua* (predominantly used to refer to a porpoise, but also a dolphin) (Krämer 1995b: 497, 500). Interestingly, both Krämer (1995b: 493) and the early lexicographer Pratt (1984: 85) record an alternative to *tafolā* in *i’amanu*, literally ‘fish-beast’. It is unclear whether this represents an accommodation with introduced ideas of mammalian nature, or whether it is an earlier perception of character. The former is suggested by the fact that a song from Manu’a, American Samoa, includes the whale, as well as the dolphin, within a catalogue of a number of varieties of fishes, noting, however, the infrequency of appearances of the whale (Krämer 1995a: 571, 630). Another song, this time from Tutuila, also in American Samoa, includes the whale in the war of the fishes and the birds, and takes up a

widespread Pacific trope of juxtaposing the minute and the gigantic in observing that the blowhole ‘was pierced by the dragon fly’ (Krämer 1995a: 495).

Luomala (1977: 202) cites a story written in 1951 by one Tuia Atanuea from Arorae in Kiribati, to the effect that three *babai* (swamp taro) on Tarawa, threatened by a giant’s javelin, fled into the ocean and swam as porpoises to Arorae, where they were once again transformed into taro. Luomala (1977: 207, 211) further refers to humans temporarily or permanently becoming porpoises, and to cases of temporary transformations in the opposite direction, identifying the two mammals’ common delight in perfume and partying.

According to Kuschel (1975: 33, 130, 290), one complex Bellonese classification of sea creatures includes whales and porpoises in the same category, *tahonga’a*, but distinguishes among them, and identifies separately, a large whale and three varieties of porpoises. It places them all, along with turtles, in the class of *ika*, fish other than shellfish, and within that defines them as oceanic, scale-free, large, having long and round bodies with both back and belly fins, and humanoid. This latter classification also includes sharks and turtles, and is said to derive from the large quantities of blood that flow from their bodies when dissected. The term for that humanoid quality, *pengea*, was also applied to those animals in the distant past that were culture heroes and that used the same speech as humans. Kuschel (1975: 83) also records two variant origins for the whale: one that it, like the skipjack tuna and skink, was originally a tree that ran and fell into the sea; and another, countless generations old, that it was originally a land animal that was transformed into a seagoing one. The Bellonese, too, took pleasure in the humorous juxtaposition of large and small, in which the latter usually outwits the former in such stories as the whale and the sand crab and the whale and the rock-climbing fish (Kuschel 1975: 129, 137).

Firth (1967: 558) reports similar patterns in Tikopia, with cetaceans collectively classified as *tafora* within the general grouping of *ika*, and distinctions between large and small whales and other categories covering a variety of dolphins and porpoises. In another connection with terrestrial vegetation, the god previously cited as responsible for noosing and stranding whales was embodied in the sago-tree trunk, as bulky on land as the *tafora* at sea, and the same offering made to beached whales was also made at the grating of the sago trunk for flour (Firth 1967: 561).

Williamson (1933b: 41), citing French ethnographer Pierre Adolphe Lesson, relates a belief from Nuku Hiva in



Fig. 2 Ceremonial whale tooth, Roviana, Munda Bay, Solomon Islands (maker unknown. Te Papa, FE004359).

the Marquesas that the whale and the ray had previously been human beings. Emory (1975: 215) claims that in the Tuamotu Archipelago both whales and dolphins were generally included in the classification as *paraoa*. However, at Fangatau within the archipelago, he states that the pygmy killer whale, *punupunu*, was distinguished from the dolphin, *paraoa*, that both were supposed to have been born on land, and that the *paraoa* was the product of the union of Tinirau and Puturua (Emory 1975: 222). As previously outlined, in Rapanui it has been suggested that the whale was believed to have been the product of the union of Tinirau and Hina.

Power, status and adornment

Whether as metaphor, symbol, artefact or food, cetaceans are indissolubly linked with power and status in the Pacific, a bond frequently expressed and celebrated in personal adornment and sumptuary regulation. Understandably, the complex, much studied and highly valued Fijian *tabua* will loom large in this section, but its connections with the understandings, beliefs and practices of other areas will also become clear. It is vital to bear in mind that the *tabua*, like other Pacific cultural forms, really comes to life only in

motion, whether that of personal gesture, presentation, reciprocity or the consolidation of relationships.

Maude & Maude (1932: 284, 295; 1994b: 22, 26, 56), drawing on the evidence of Nei Betuea and Nei Teotintake, relate that in Banaba the lordship of the Tabwewa people was marked in part by their right to take stranded porpoises. It is said that, in the poetry and magic of Tungaru, the porpoise and the whale appear frequently as a metaphor for great power and royalty. In the 'Song of Mouia', for example, their association with two menacing foreign lands 'indicates that those two lands stood, in the poet's mind, for a tradition of peculiar awe' (Grimble 1972: 258).

Bennett (1987: 41) comments on the value placed on whales' teeth in Ontong Java, a Polynesian outlier, and Simbo, both in the Solomon Islands, but suggests that this may have been picked up from Fijians or Tongans. However, Richards (2006) pursues the functions of whales' teeth in the Solomon islands of Marovo Lagoon, Roviana, Ranongga, Simbo and elsewhere, suggesting an evolution that provided increasing accessibility from horizontal placement to vertical hanging in a shrine and on to personal adornment (Fig. 2). Other writers note the value of dolphin teeth and their use in bodily ornamentation, and this appears particularly to have



Fig. 3 *Tabua* (ceremonial whale tooth), Fiji (made from sperm-whale tooth, sennit and pandanus. Maker unknown, 1800s. Te Papa, FE000229/1).

been the case on Makira and Malaita, also in the Solomons (Stevenson 1988: 94; Kokonge 1989: 63). Speisser (1990: 166), writing about Vanuatu, cites a variety of authorities in support of his contention that whale-teeth necklaces had represented chiefly power on Tanna alone, although the usage had since disappeared from memory.

The *tabua* (Fig. 3), in the form of a polished and worked tooth from the lower jaw of a sperm whale, is without doubt the supreme valuable of Fiji. Clunie (1986: 176), in notes on

tabua in the Fiji Museum collection, reports that they 'were presented as a marriage token, a mark of particular esteem, as an atonement, and in quest of a particular favour', as well as recording that one had been presented in payment for an assassination. Wilkes (1970: 103) relates two anecdotes to support his contention that 'a whale's tooth is about the price of a human life, even when the party slain is of rank'. Dodge (1972: 184) and Lockerby (1982: 23) confirm that their possessors 'lays them up as great riches as porshens for

their Daughters and Making peace with their offended Supirirs etc'. To these occasions, Derrick (1950: 9) contributes chiefly installations, visiting and the building of houses and canoes, while Capell's (1968: 210) dictionary adds the birth of a child, presentation to the father-in-law on the death of a wife and the acquisition of property, but the latter view is partly disputed below.

There has been conjecture as to the original material of the *tabua*, but agreement seems to have been achieved that, at the earliest times, it was made from wood or shell (Roth 1938: 28). Perhaps the most authoritative account is that of Tatawaqa (1914: 1, 4), who, as well as providing a variety of evidence to support the pre-European origin of the *tabua*, asserts that his own people, who lived high up in the hill country, originally made the *tabua* from the wood of a locally precious tree, whereas coastal people used a particular variety of seashell. As to the name, he variously suggests that it comes from the hill people's tree, the *bua*, or the fact that the coastal *tabua* did not have a string attached, which in the local language is *tabu-wa*. Elsewhere, an association with *tabu*, meaning 'sacred', has been made (Roth 1938: 28). In any case, G.A.F.W. Beauclerc, who translated and read Tatawaqa's (1914) paper to the Fijian Society, was adamant that the word does not mean whale's tooth.

Therefore, it appears that the potency and value of the *tabua* is connected, at least in part, with its association, whether in adornment or reciprocity, with power and status. William Mariner (see Martin 1981: 180), recollecting his experiences in Tonga in the beginning of the nineteenth century, claims that whales' teeth were even more highly esteemed in Fiji, where any person other than a great chief (even a foreigner) who possessed one would be in mortal danger. Its power appears to extend even beyond the grave, being buried along with a man's weapon to aid his journey to the underworld (Clunie 1986: 177). Further evidence of the inherent force of whales' teeth lies in the late nineteenth-century manufacture of chiefly and priestly breastplates from whale tooth or bone, originally to deflect enemy fire but later diminishing in size to become emblems of status (Clunie 1986: 161).

For the most part, published records still do not fully elucidate the origins of the power of the *tabua*. Clunie (1986: 160, 176), however, tentatively explores one aspect that may contribute to that enquiry. He suggests that its origins may lie in representing a symbolic woman of the community of its presenter, with, by nature or additionally by craft, 'its tip perhaps betokening a breast, its butt cavity a vagina', the

latter closely resembling the seashell employed by the coastal people. Clunie (1986: 160) supports this by reference to related imagery in the formation of whale-tooth pendants that carry those same associations, and anatomically specific male and female whale-tooth dart heads that were employed in competition, ceremonial marriage ritual and personal adornment. Thomas (1991) generally concurs with Clunie, although emphasises that the *tabua*'s significance lies rather in the association with alliance and exchange than in the person of a specific woman. However, an entry in Capell's (1968: 210) dictionary defines *tabua-ni-valu* as 'a woman sent by one chief to another to secure help in war, before the days of whale's teeth'.

Sahlins (1983: 72) and Thomas (1991: 69) reproduce an account of an alternative origin of the word *tabua*, dated in the 1870s and said to originate in the Fijian provinces of Nadroga or Namosi. Here, it is reputed to derive from the name of a shipwrecked outsider, Tabua, who wins a chief's daughter on the pretence that he has grown the whale's teeth he presents by planting his own front teeth, actually knocked out in the process of removing those of a stranded whale. Sahlins interprets this account as the record of the result of a failure to eat a shipwrecked stranger immediately, a practice to which he ascribes the origins of Fijian cannibalism:

metaphorically, the whale is analogous to the man in that both are victims of an accident at sea who drift ashore at the same time. Metonymically, the man loses his own teeth in the act of extracting the whale's teeth, which is also an inverted metonym of Tabua's status as a cannibal victim, entailing the substitution of that by which he bites food for himself as food. (Sahlins 1983: 85)

Thomas (1991: 74, 80), expressing some scepticism about aspects of Sahlins' analysis, sees in the account 'a shift from incestuous endogamy to exogamy', from poverty to sociality.

Regardless of Thomas's (1991: 225) grammatically supported assertion that the *tabua*'s power was bestowed rather than intrinsic, it was certainly in the form of the whale's tooth that the *tabua* achieved its special potency, and this may partly have been the result of the original scarcity imposed by reliance on occasional whale strandings and, quite possibly, on importation from Tonga (Tatawaqa 1914: 2; Derrick 1950: 9; Clunie 1986: 176). Even the comparative abundance of whales' teeth that resulted first from the sandalwood trade and later from commercial whaling did little to reduce the *tabua*'s 'especially remarkable spiritual or intrinsic value in Viti' (Clunie 1986: 176). The precise

nature of that value has also been the subject of some conjecture. In spite of Derrick's (1950: 71) assertion that *tabua* were items of barter in Fiji, it is more plausibly suggested that, while they may have played that role in the vigorous trade between Tonga and Fiji (Tatawaqa 1914: 2), within the latter they had an elevated value greater than that of a currency. Indeed, Thompson (1940: 124), writing about Lau, the eastern Fijian pivot between Melanesia and Polynesia, and accepting that *tabua* constitute a particular form of moveable property, asserts strongly that 'the value of other objects cannot be expressed in terms of whales' teeth, thus they cannot be classed as a medium of exchange or true money. They are valuables.' Roth (1938: 30) goes further, arguing that there was no general Fijian measure of value and that the *tabua*, in particular, could not be exchanged for an agreed quantity of other goods.

As already indicated, much of the commentary on Fiji applies equally to Tonga and at least some of it to Samoa as well, which is unsurprising given the close genealogical, travelling, trading and invasive relations among the constituent islands. William Mariner (see Martin 1981: 179) emphasises the value placed by chiefs upon necklaces made of elements carved from whales' teeth and duplicating their form, and relates an anecdote about the severe punishment of a couple found guilty of concealing a whale's tooth from Finau of Ha'apai and Vava'u in Tonga. St Cartmail (1997: 99) records the wearing of whale-tooth dart heads (Fig. 4), pendants and breastplates in Tonga, identical to those of Fiji, and argues for their original Tongan provenance. Krämer (1995b: 336) describes the manufacture of highly crafted whale-tooth necklaces in Samoa and ascribes their restriction to chiefs and their sons and daughters to their rarity, rejecting the suggestion that they constitute a form of money. In the same place, the difficulty of generalising about even a limited group of islands is emphasised by his observation that sperm whale teeth are not worn in the eastern American Samoan island of Manu'a.

Williamson (1924a: 268), relating the history of Karika and Tangiia in what would become the southern Cook Islands, includes the whale among the perquisites of regal authority along with slaves, hogs and canoes. According to Morrison (1935: 208), second mate of the HMS *Bounty*, who wrote about Tahiti in the late eighteenth century, the flesh of dolphins and porpoises was denied to women on the grounds that those sea creatures, among others, were sacred, even when not touched by males. However, there is a suggestion that elsewhere such prohibition was confined

to commoner women and resulted from scarcity (Oliver 1974: 225, 275). Similarly, Buck (1938: 173) reports the comparative absence of stranded whales in Mangareva and the restriction on the wearing of whale-tooth necklaces to chiefs, priests and the wealthy. Martinsson-Wallin (2002: 74) concludes that, in Rapanui, the consumption of sea mammals was confined to chiefs.

Alliance and protection

The universal sense of a bond between humans and cetaceans is already apparent from the earlier sections of this review, particularly that examining origins and classification, just as it is in the manifestation of deep community concern in response to contemporary strandings and the occasional emergence and celebration of dolphins as public figures. While there are references to porpoise and dolphin calling, no examples of whale calling appeared in the literature reviewed. In one way or another, cetaceans appear as companions, helpers, guides, and both givers and receivers of protection.

In Kiribati, for example, porpoises are indispensable to navigation in the form of seamarks, equally stable equivalents of terrestrial landmarks (Grimble 1972: 140; Grimble 1989: 50). Grimble's (1952: 133) characteristic anecdote about his experience of porpoise calling on Butaritari, in the north of the island group, is supported by a more serious local account of this craft: a caller's spirit travels under the sea to invite the porpoises to dance their way to and onto the beach of his village, where the inhabitants enter the water to fondle and embrace their chosen individual and lead it ashore. At that point, of course, the amity rather breaks down in the pursuit of nourishment, but the impression of cooperation in the earlier sections remains, however much betrayed at the end (Grimble 1972: 205; Grimble 1989: 102). On other Tungaru islands, there appears a truce between humans and porpoises as a consequence of receiving a protective incantation and the presence of sacred porpoises that accompany canoes to protect them from fiercer sea creatures (Grimble 1989: 243).

On Malaita in the Solomons, where large-scale and highly organised capture of porpoises occurred (see below), there also appears to be a belief in the power of priests to call dolphins, presumably with the same outcome as in Kiribati (Stevenson 1988: 29).

In Tonga, the appearance of porpoises for the protection of canoes under the tutelage of gods has already been noted



Fig. 4 *Ulutoatagane* (dart head), Fiji (made from whale tooth or sea-mammal ivory. Maker unknown, 1800s. Oldman Collection, Te Papa, OL002223).

(Martin 1981: 299), as has the availability of whales as marine vehicles for the gods in the exploits of Kae (Gifford 1924: 139). At Fagasa in American Samoa, Krämer (1995a: 482, 500) relates that, even in his time and in a reliving of an ancient event, the village *taupou*, or leading maiden, would still go out on the reef in full regalia at a certain time of year to greet the dolphins and place them under a ban. Williamson (1933a: 322) refers to a passage about a drowned Samoan turning into a porpoise, but the whereabouts of his source material is unclear. Niue, too, has a tradition of mammalian canoes, as well as inter-island connections, in the story of an ancestral figure carried thence from Tonga in the belly of a whale (Williamson 1924a: 351). Tikopia has a similar story of a large sea creature such as a whale providing support or transport to a drifting lineage figure (Firth 1981: 221).

Enmity and threat

The relationships between humans and cetaceans, both of which are rather complex creatures, are by no means confined to amicability, as already suggested by their eventual betrayal in some cases. The human threat to the sea creatures will appear in the final section of this review. Here, the real, imaginary or, in one case, metaphorical enmity of cetaceans is discussed. The fact that most of the published sources

come from Kiribati may say something about the sources themselves, or it may possibly say something about the continuing intimacy of the links between Kiribati navigators, voyagers and fishermen with cetaceans.

Kiribati seafarers face a number of specific and named dangers, particularly from whales. *Te kaininoki* is a giant whale that appears in the westerly season and is repelled by a dark green sapling; *te taboingan* comes in on the bow and is destroyed by an unhusked green or decayed immature coconut, as is *te ika auriaria*, which comes in on the stern. The porpoise was deflected by an entire, shrivelled coconut leaf (Grimble 1972: 239; Maude & Maude 1994a: 130). The character of these creatures may perhaps be gauged from Sabatier's (1971: 143) explanation that *te kaininoki* was a man transformed into a whale. A complex system of incantations accompanies the material protections, including a mixture of deeply courteous and quietly threatening elements (Grimble 1972: 239; Sabatier 1977: 108; Grimble 1989: 243).

While a variety of attitudes may be held regarding the claims of both myth and poetry, there can be little doubt that their representations of physical experiences reflect actual events. The porpoise that overturned the canoe of the Sun's incestuous children has already appeared in an earlier section (Grimble 1972: 134). Porpoises and whales appear in other epic songs. On the one hand, they are victims, speared and

left dying in a canoe's wake; on the other, they are menacing, threatening to slay or devour, or lifting a fin high to strike. In one incident, a sperm whale, rising on the bow of a canoe, 'leaps and twists and turns then, threshing angrily' (Grimble 1972: 258; Maude & Maude 1994a: 256, 282). Furthermore, in some cases, these vivid descriptions convey a second level of threat in that the 'braggart' porpoises and whales represent powerful invaders and conquerors (Grimble 1972: 259; Maude & Maude 1994a: 252, 269).

In a story related by Kunitau & Hekau (1982: 87), Pulekula (1983: 122) and Talagi (1882: 106), a Niuean woman from beyond Tungaru is distracted from her *tapa* beating by a great whale lashing around in the water. The whale, provoked by insults from the woman about its appearance, swallows the woman and makes off with her until she remembers her shell scraper and abrades the whale's stomach until it stops to rest at Mu'a, in Tonga. In a theme that has already been dealt with above, on origins and classification in Tikopia, Firth (1967: 562) argues that the vague but imminent threat inherent in the beached whale lies in its being out of its element and therefore representing, especially in view of its vast size, an invasion of the land.

Capture and consumption

The opportunistic exploitation and occasional consumption of stranded cetaceans appear virtually throughout the South Pacific. Unless there are other particular circumstances associated with such a practice, it will not be further commented on here. Accounts of such strandings and their aftermath can be found in Gifford (1924: 141), Maude & Maude (1932: 284, 295), Morrison (1935: 159), Beaglehole & Beaglehole (1938: 54, 311), Buck (1938: 173), Derrick (1950: 9), Elbert & Monberg (1965: 100), Firth (1967: 558), Grimble (1972: 254), Oliver (1974: 283), Kuschel (1975: 37), Sabatier (1977: 43, 118), Martin (1981: 178), Stevenson (1988: 29) and St Cartmail (1997: 97). While the flesh made available by these occasional strandings would have been a welcome addition of protein to the human diet, the harder materials, such as bone and teeth, were the most especially prized, as has already been indicated.

In addition to the calling of the Butaritari porpoise as outlined above, in Kiribati there are records of harpooning and noosing or snaring porpoises (Sabatier 1977: 118; Luomala 1984: 1215). Whales that entered the lagoon were driven towards the shore by fleets of canoes and incantations, then, when close, they were roped by the tail by divers

and pulled ashore by crowds of villagers (Koch 1986: 12).

While whales and dolphins were present in coastal Papua, there appears to have been little opportunistic or deliberate exploitation, beyond the occasional Risso's dolphin *Grampus griseus* (Cuvier) or, perhaps more systematically, the Irrawaddy dolphin *Orcaella brevirostris* Owen *in* Gray. It is suggested that the presence of whalebone lime spatulas in Papua may as likely be the result of trade as of strandings (Perretta & Hill 1981: 176; Allen 1986: 65).

Dawbin (1966: 207) gives a very detailed eyewitness account of a mid-1960s porpoise hunt in Malaita, employing underwater stone clanging to disorient the animals and culminating in the porpoises plunging their heads vertically into the soft sea-bottom in a move described as 'burying their ears from the sound'. At this point, both hunters and the mass of villagers waiting on the shore fell upon the prey, the main goal being the acquisition of valuable teeth, with only a small proportion of the flesh being consumed. This account both supports and is supported by sources relying on earlier observations, such as those by Stevenson (1988: 29, 95), who describes the trade between inland and coastal people that followed a porpoise capture, and suggests that coconut-shell rattles were also used for disorientation. Miller (1978: 30) suggests that similar techniques were used on other islands of the Solomons. Several writers, in addition to Dawbin (1966), acknowledge the value placed upon porpoise teeth in relation to status, adornment (Fig. 5) and commercial exchange (Bennett 1987: 2, 5, 11, 83, 94; Stevenson 1988: 29, 65, 94; Kokonge 1989: 63). However, Bennett (1987: 336), in his discussion of modern resource development, suggests that offshore hunting was rare in the Solomon Islands. Speisser (1990: 141, 166), while acknowledging the ornamental use of whale and other teeth in parts of Vanuatu, claims that offshore hunting did not develop there either.

Whales' teeth, apparently mainly of Tongan origin, played a major role in the intensive trading that developed among South Pacific cultures, which also included scarlet feathers from Fiji and fine mats from Samoa (Williams 1870: 82; Hjarnø 1979–80: 105). Describing a whale stranding off Vava'u in Tonga, William Mariner (see Martin 1981: 179) explains that, while the 'lower orders' fastened onto the flesh of the creature, it was the teeth that attracted the chiefs. The later development of whaling in Tonga provides an interesting example of the integration of new technologies into established cultural forms and adaptability in the exploitation of natural resources. An English settler by the name of Cook



Fig. 5 Necklaces, Solomon Islands (made from rodent, canine and dolphin teeth. Maker unknown. Te Papa, FE003816/1-6).

introduced the then available whaling technology to the Tongan islands of Ha'apai in the 1860s, later transferring it to Nuku'alofa, and small-scale whaling also operated in Vava'u. While the government hoped that commercial whaling might develop, the enterprise was maintained by Cook's Tongan descendants and remained a local activity serving a local market (Campbell 2001: 196; Orams 2001). Ruhen (1966) published an adventure bestseller describing his exploits in association with the current generation of whalers. Whaling was, however, banned in Tonga by royal decree in 1978, and whales have been protected in Tongan waters ever since. From the mid-1990s, a whale-watching industry began to develop, one whose history and prospects have been discussed in some detail by Orams (2001, 2002).

While, as mentioned earlier, confusions remain about the actual identity of the Samoan word *masimasi*, both Krämer (1995b: 224, 497) and Pratt (1984: 211) regard it as

referring to the dolphin, with the former briefly describing its capture by trolling. In Tokelau, the inclusion of the porpoise in company with a number of marine fishes in an ancient prayer to the Tui Tokelau for abundance indicates that it was sought, at least at one time (Hooper & Huntsman 1991: 49). Koch (1984: 43) notes that in Tuvalu, *tafolā* is a collective term for whales, dolphins and porpoises, but, in this case, probably refers only to the latter two categories, which were hunted in the open ocean by a method called *alai*, defined as encircling or surrounding with a net (Jackson 1994: 12, 73). Firth (1967: 558) observes that, in Tikopia, cetaceans were referred to only as having been cast ashore.

Similarly, Beaglehole & Beaglehole (1938: 54) report that, while there was no deliberate catching of whales in Pukapuka, the vertebrae from stranded animals were used as seats, although no other use was made of whalebone. Shoal driving was employed in Tongareva to beach porpoises



Fig. 6 *Hakakai* or *ha'akai* (ear ornaments), Marquesas (made from whale tooth. Maker unknown, 1800s. Oldman Collection, Te Papa, OL000213/2).



Fig. 7 *Peue* or *peue koi'o* (headaddress), Marquesas (made from sennit, beads and dolphin teeth. Maker unknown, 1800s. Oldman Collection, Te Papa, OL00208/1).

(Buck 1932: 198). Scott (1991: 19, 305), drawing on a variety of sources provided by Ronald Powell, describes the Rarotongan shore-whaling industry of the second half of the nineteenth century and the celebrations that followed a successful pursuit. Dolphin hunting and the perilous capture of whales in shoal waters or on the reef were reported in late eighteenth-century Tahiti, and porpoises were said to be prized, though the scarcity of cetacean flesh and its confinement to men has already been mentioned (Morrison 1935: 154, 159, 202; Oliver 1974: 275, 283). Morrison (1935: 157) includes a brief description of 'fishing' lines to hunt dolphins, and Nordhoff (1930: 170) provides a much more extended reconstruction based on 'many a yarn with former dolphin-fishermen'. In what might be an exhibition of native Tahitian skills, Omai is recorded in Table Bay, during Captain James Cook's third voyage in 1776, as teaching dolphin fishing with a rod and excelling at the sport (Beaglehole 1967: 14).

Some conjecture has been advanced about former methods of hunting dolphins in Huahine, French Polynesia, involving harpoons and clubs (Leach *et al.* 1984: 189). In Emory's (1975: 215, 222) study of the Tuamotu Archipelago, two Maohi (indigenous French Polynesians) explain the methods of capturing *paraoa*, a category including whales, dolphins and porpoises, and chants to ensure success are also recorded. In the Marquesas, Linton (1923: 427, 431) mentions in passing that whales were not captured, but that whale-ivory ear ornaments (Fig. 6) were highly prized, while Handy (1923: 176, 290) describes a technique of porpoise hunting that closely resembles that in Malaita in the Solomons and the ornamental employment of whale and dolphin teeth (Fig. 7). Alexander (1902: 745) records another adaptation of commercial methods to local enterprise in capturing whales from customised whaleboats. In Rapanui, glyphs and petroglyphs of whales and dolphins, although described as rare, indicate at least some familiarity with the animals (Huyge & Cauwe 2002: 15; Lee 1992: 38, 85, 88, 169; Rjabchikov 2000, 2001: 219, 2002), as does the use, however limited, of whalebone for breast ornaments and, possibly, porpoise bone for fishhooks (Métraux 1940: 230; Ayres 1981: 73).

Conclusion

To a considerable extent this survey is like looking through a telescope the wrong way: while it has attempted to be comprehensive within its limits, those limits constitute only

a fraction of existing knowledge about the whole range of relationships between humans and cetaceans in the South Pacific. The paucity of material available directly from native sources published in English, or published at all, must skew the emphasis of the evidence that the published English sources present, and raise questions about the validity of a necessarily superficial drawing of conclusions. There is, of course, no suggestion that region-wide generalisations or conclusions can be reached on the basis of the fragmentary evidence produced here. However, it does provide some glimpses of a variety of Pacific frameworks and orientations.

The strongest common thread is, perhaps, a sense of affinity between humans and cetaceans. This affinity is evident in such systems of classification and identifications of origin, as appear in both alliance and threat in the context of voyaging, in the existence of two-way communication, and even in the exploitation of dolphins and porpoises that is assisted by calling and physical contact. A similar affinity resides in the relationships between gods and cetaceans, the latter or their distinctive parts serving as residence, temporary embodiment, actual vehicle or product of the beneficence of the former. There are surely further associations, as well as a suggestion of some connection between gods and humans in the place of whale bone or whale tooth as a repository of power or a manifestation of status, and of whale flesh as a gift from the gods. These relationships are also manifest in the complex and precise observation and ordering that appear in the few available sources, their openness to transition among deities, humans, animals and vegetables, and the impression they give of coherence, however at odds this is with the categories and boundaries of western science.

It is equally difficult to generalise about the representations of beliefs and practices presented by the witnesses that appear in this survey. While an exploration of the discourses of the observers and recorders would present a number of possibilities for further research, an even more fruitful endeavour would be the assembly of contemporary oral evidence from across the South Pacific. A project of that kind would be invaluable in providing an alternative framework for the published sources and, better still, would provide the foundation for a lively critique of those sources themselves. Such research might canvass the persistence, adaptation or disappearance of the examples that are discussed here, as well as others that are current. Also, it might uncover modern attitudes to both those examples and the representations of them; the appearance of more recent examples of classifications of cetaceans and relationships between them

and humans; and the impact of, for instance, western scientific concepts and education, or Christianity, on those understandings. Furthermore, similar studies of manatees (specifically dugongs), turtles and sharks would be of interest in themselves, and may well shed new light on the existing information on cetaceans, as well as opening up other geographical areas of study.

The latter would almost certainly be the case if studies parallel to this one were conducted on sources other than those written in English. Investigations, accounts, anecdotes and observations are most likely to appear in Spanish, Portuguese, French, German, Dutch, Russian and Japanese sources from a similar assembly of explorers, merchants, missionaries, colonial administrators, ethnographers, historians and travellers. As well as testing and expanding the evidence as it exists in English, such sources might equally illuminate the extent to which the categories and themes chosen for this review are the product of an English-speaking sensibility. Beyond this lies the tantalising prospect, almost inconceivably difficult, of surveying those items in Pacific languages that must surely exist in family papers, archives and elsewhere.

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Note

- 1 The term 'porpoise' has been used widely in the literature to refer to a great variety of small species of cetaceans, usually as a name equivalent to dolphin. However, the term porpoise is now exclusively restricted to members of the cetacean family Phocoenidae, which includes six species distributed outside the geographical coverage of this review (Reeves *et al.* 2002: 452). Therefore, the term porpoise is used in this paper to correspond only with its use by the authors of the articles reviewed for this survey.

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