

Southern Shark Lore Forty Years after *Jaws*: The Positioning of Sharks Within Murihiku, New Zealand

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ABSTRACT: Forty years after the release of Steven Spielberg's *Jaws* the image of the shark in popular culture and public memory still bears the influence of that film. This article explores: recent high-profile human/ shark interactions, the impact of the Stewart Island shark cage diving industry, the body of traditional beliefs and lore about sharks exists along the southern coast of New Zealand, and the way that *Jaws* has influenced modern perceptions of sharks. The theoretical perspective of multispecies ethnography is suggested as a possible vehicle for further unpacking our understanding of human/ shark interactions.

Kaua tatou e tukua kia mate-a-whare, engari kia mate a ururoa

Let us not linger on and die of old age, rather let us die as does the shark, fighting to the last

Ancient Māori *whakataukī*, or proverb, recorded in Best (1902: 128).

It has been exactly forty years since the release of Steven Spielberg's blockbuster film *Jaws* (20 June 1975)—a film that remoulded the general public perception of sharks in popular culture throughout the Western World. The present writer (Jøn) clearly remembers the screams and momentary fear, followed by brave laughter, of audiences during the shark attack section of tours at the Universal Studios Hollywood theme park during the late-1970s. The imposing 'dead' *Jaws* model that hung in the theme park from a giant wooden frame also features strongly in memories associated with the film. Many people had overwhelming responses to the film itself. Since that time, commentators have linked *Jaws* to a wide range of shifts in the public psyche. Some commentators have even suggested, that due to the special place that *Jaws* holds within the popular culture psyche, the film may have even influenced shark related law changes in Western Australia (Neff, 2015).

Sharks have re-entered the broader public imagination, and debate, within the Murihiku region of New Zealand in recent months through

controversy regarding shark cage diving eco-/ adventure tourism operations. Arguably, some of the media reports about that controversy draw, if only loosely, on popular shark imagery and aesthetics commonly associated with *Jaws*. In this article, as well as remembering the influence of *Jaws* on shark aesthetics, we will: introduce some basic concepts of shark based multispecies ethnography, consider the shark's active agency in shaping the semantic and material culture of the broader region—particularly with reference to traditional Māori folklore and folklife—and examine the ways in which New Zealand is beginning to act as a maritime *kaitiaki* (guardian) of sharks. Some discussion of the Stewart Island / Bluff cage diving debate, and recent law changes in Western Australia prohibiting cage diving operations, will also be given.¹

Cage Diving around New Zealand's Stewart Island

One might argue, interest of 'thrill seekers' or 'adventure enthusiasts' in activities such as Great White shark cage diving is a direct result of the media driven 'mindless killer' imagery of sharks. The ocean around Stewart Island and Bluff, at the southern tip of New Zealand, is the only region that hosts Great White shark cage diving in the country. From a natural heritage (or eco) tourism marketing and development standpoint, this is an opportunity well utilised, as the area is among only five places on earth which have regular and high enough Great White shark movements to enable ongoing cage diving operations. There are two cage diving operators in the region, Shark Dive NZ, and Shark Experience Bluff, which have been conducting dives from around 2007.

Throughout 2015, Bluff and Stewart Island cage diving operations have been the centre of national media controversy. In basic terms, some critics of the operations claim that the accepted practice of baiting and chumming to attract sharks is teaching the region's sharks to relate humans and boats with food, and so – in the critics' opinions, making the sharks potentially become more aggressive toward other humans and boats. The debate has several tenets. There is both a perceived threat to the physical well-being of residents and recreational divers, and a perceived threat to the financial well-being of fishery workers and the local fishing / pāua diving industry. Balancing against those perceived threats, there are: the rights of the cage diving operators - as residents within their local environments, the financial resources that their business activities contribute to the area, and the notion that cage diving facilitates/ provides advocacy for Great White shark conservation efforts. Such conservation efforts can be outcomes of providing alternative, positive experiences for social actors with sharks, compared to the

¹ Research for this study included a period of participant observation on a commercial cage diving boat in southern New Zealand.

generally negative and stereotyped shark aesthetic that they may more often encounter through popular culture texts. Finally, there is the place of the sharks themselves, as the natives of these submerged spaces.

Stepping into that debate, the *New Zealand Herald* has reported that NZ First MP, Clayton Mitchell, stated that Great White sharks are now being seen within the region on a daily basis by local fishers—suggesting that this represents evidence of changed shark behaviour patterns. The report also explained that ‘at a meeting on the island earlier in the year, about 200 of the island's 260 residents had spoken with Mr. Mitchell about stopping shark diving’ (New Zealand Media and Entertainment 2015b). Coupled with this, *The Southland Times* published both: concerns from residents - such as a letter from Raylene Waddell suggesting that the Department of Conservation should become involved in increasing safety around shark cage diving, and a response to those concerns from Allan Munn, the Director of Conservation Services for the Southern South Island Region at the Department of Conservation (Waddell, 2015). That debate has sparked interest nationally and appeared in media reports across all three main islands of New Zealand (McCracken, 2014). The debate has even prompted fast growth for the *Facebook* group: ‘Stop Shark Cage Diving Near Stewart Island’ <<https://www.facebook.com/StopSharkCageDivingNearStewartIsland>>, and a raft of other social media commentary.

From a scientific point of view, the claim that Great White sharks are getting more aggressive because of cage dive operators remains a contestable statement. Research in South Africa and Australia showed that indeed there was a change in shark behaviour due to cage diving operations, but, mostly, it has been related to the fact that they spent more time near the sites where the dives were conducted. No association could be found with them relating to humans in the cage, and, no alteration of their behaviour outside the dive site was noted (Elliott, 2014). So the perception of shark behaviour, and the reality of shark behaviour, quite possibly are two different things. It may be argued that, no matter what the reality of the situation is, the mere presence of the shark, and the perceived level of the shark's aggression, has a significant affective impact on the human societies that relate to them. From a multispecies perspective, the shark's agency is undeniable in shaping of the discursive, material and legal culture of the relevant region.

Current Shark Interest Levels Increased by Mick Fanning Episodes

The constructed concept of the shark within the contemporary post-*Jaws* public imagination—as mindless apex predators within the marine environment—has been further heightened within Murihiku, and across Australasia, by intense media interest in ‘shark attacks’. One such very

recent example has been the well documented and publicised incident of the ‘heroic’ escape of Mick Fanning (19 July 2015). Two minutes into the J-Bay Open 2015 surfing finals at Jeffreys Bay, South Africa, Fanning collided with a large Great White shark while competing against Julian Wilson. The entire incident was caught on video, and then, almost instantly, it spread across both news and social media with viral interest levels. In his struggle, Fanning quickly tried to position his surfboard in between his body and the shark to protect himself. He then struck out towards the shark with his fist—punching it. After biting through his surfboard’s leg rope the shark swam away. Wilson began to paddle towards Fanning, in an effort to rescue him, as soon as he realised what was going on. Much of the media has labelled Wilson a hero for taking those selfless actions to help his competitor during direct and close contact with an apex predator (Dye, 2015).

The southern media were swift to provide commentary on that event, with the *Otago Daily Times* running a series of stories such as: ‘Pro Surfer escapes shark attack’ (Australian Associated Press, 2015b), ‘Fanning recovery ‘will take time’’ (Australian Associated Press, 2015a), and, ‘Attack hasn’t put surfer off’ (New Zealand Media and Entertainment 2015a). Notably, however, media interest became even more intense when upon Fanning’s return to the ocean at Hastings Point in the northeast of New South Wales—which was filmed by the crew of the *60 Minutes* television programme—he reported seeing the fin of another large shark in the water near him, spurring a second spate of reports, such as: ‘Surfing: Fanning saw fin on return to water’ (New Zealand Media and Entertainment, 2015c).

Findings from detailed analysis of the initial shark’s interaction with Fanning may not align with the content of media reports. Experts suggest that Fanning may not have been attacked at all, and the best description of the incident can be ‘a human and animal accidentally colliding’ (Beauchamp, 2015), which is probably what actually happened. What this entire episode resembles is a distillation of the many ways humans misunderstand sharks and overhype their threat. The reality is that a shark, even with obvious opportunities: did not bite Fanning, did not bite the board, and chose to swim away. Furthermore, Great White sharks are ambush predators. Their attack pattern is quite starkly different from the way in which way this particular shark collided with Fanning.

This episode, arguably, perpetuates a stereotype through re-stating the popular culture espoused belief that Great White sharks are out to get us—perhaps returning us to thinking about the aesthetics of texts such as *Jaws*. This misperception feeds into public fear of sharks, and contributes to a public hostility toward sharks (Beauchamp, 2015). As Francis (2012) has noted, with reference to that increased hostility toward sharks following media portrayals, shark hunting became an immensely popular

and bankable pursuit—perhaps due to the ‘manliness’ that hunting the apex predator of the oceans projects—after the release of *Jaws*. In fact, it is, at times, openly acknowledged that ‘our fear of sharks was used to sell newspapers, magazines, and television programs’ (Paxton, 1996).

It is true, sharks are apex predators of their domain, and shark attacks on humans do take place within that domain. If a shark wants to ‘get’ you while you are in water, she will likely succeed, especially if she is a Great White shark. However, the statistical probability of a shark attack, on an individual human, taking place, is quite insignificant. According to the International Shark Attack Files—maintained jointly by the Florida Museum of Natural History and the University of Florida, there have been 2,778 documented unprovoked shark attacks worldwide, between the years 1580 and 2014. Apparently, more people die from being attacked by cows than sharks (Florida Museum of Natural History 2015). Drilling down through shark attack data, New Zealand had only 49 attacks in recorded history—with only eight fatalities, up until 2014.

New Zealand's latest fatal attack took place in 2013 at Muriwai Beach, near Maori Bay, and was the first of its kind in 37 years (Stuff, 2013). The attack has been analysed many times now, and it is generally agreed that the victim, Adam Hunter Strange, was not attacked by one shark, but actually by several sharks—including both a Great White and Bronze Whalers (or Copper sharks). It is claimed that the Great White shark retreated, but the Bronze Whalers did not—continuing to attack the body aggressively—after the main episode was complete. Just after the incident, police tried to rescue Strange’s body, by shooting the sharks from helicopters and boats. As gruesome as the actual details of the incident were, the media sparked further public concern by adding a *Jaws*-like spin to the events. A *YouTube* video was quickly uploaded, claiming that ‘unfortunately Adam was killed in what many tourists describes as scenes of the film *Jaws*’ (GabeHashTV 2013). Interestingly, however, relatives and friends of Strange showed no wish for vengeance on the sharks—in fact feeling that Strange would have never condoned people blaming / killing the sharks for the attack (Elliott, 2014).

In fact, several groups, who spend much time in the ocean, are presently calling for increased levels of legislative protection for sharks, instead of culling them—such as the Face Book community *Surfers for Sharks* <<https://www.facebook.com/SurfersForSharks>>. Furthermore, a very interesting piece of research by Neff and Yang ‘suggests that shark bites do not always produce negative emotional responses toward sharks’ from the public when ‘an adequate casual story is present’ (2013, 3).

Some Conclusions/ a Consolidated Assessment

Based on the above facts, the media appears to promote an overhyped and negative image of sharks. GabeHashTV's stance, in positioning the shark as a 'man eating' creature of destruction, through his Adam Strange shark attack *YouTube* video, is perhaps reflected in the broader attitudes of the *YouTube* contributions regarding sharks—with even organisations such as the *Huffington Post* providing offerings in that format such as their 'The Best Shark Attacks In Movies | HuffPost Mashup' (The Huffington Post, 2012). Once again, this popular culture medium text links back to, and reminds the general populace of, *Jaws*.

A few other incidents have occurred in New Zealand involving unintentional human/ shark interactions where the media deemed the contact as an 'attack'. This can be exemplified by an episode where a 14 year old girl encountered a shark while boogie boarding, with no actual evidence of the shark actively attacking her, in a 2013 incident, which was reported on by Reuters and then uploaded onto Youtube by trans2020ccc (2013).

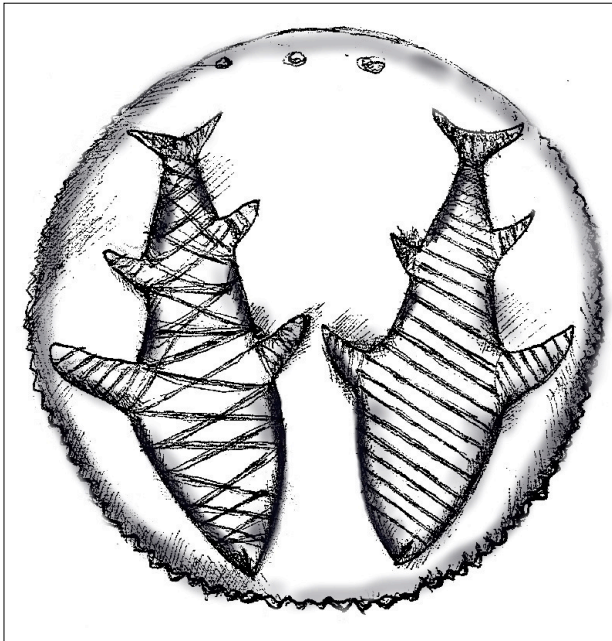
Those, and similar episodes, exemplify how easily human/ shark interactions can not only reinforce the *Jaws* image, but also feed the perceptions of a 'need for safety' from sharks—in effect spurring the creation of laws to avoid such attacks. Consequently, 'beach culture', and people's other interaction with the oceanscape, are arguably influenced by this social process. These developments, and the way that they are perceived by the general populace, are of particular interest to anthropologists, multispecies ethnographers and folklorists. This is true not only due to the currency of the topic, but also because of the significant traditions, folklife and folklore of sharks that were traditionally held by both: Murihiku's Ngāi Tahu *iwi* (tribe) specifically, and New Zealand Māori more generally. When considered in tandem, as two threads of the southern regional identity of sharks (and human/ shark relations), we can form an understanding of the contradictory nature of shark perception in this region, and hence the recent shifts in public policy towards formally taking on a *kaitiaki* role towards sharks, despite the extremely negative, public opinion of them. Traditional shark imagery also helps flesh out the stance of cage dive operators and the tourism industry—who agree with Ngāi Tahu that the sharks are a local *taonga* (treasure).

Some Examples of Traditional Thinking About, and Use of, the Shark in Murihiku

Historically, sharks can be seen to have held a valued place within Māori folklore and folklife. From a multispecies perspective, it is significant to note that the image of the shark, and products harvested

from its body, have been interwoven with the semantic and material culture of Māori. In this section we will consider just a small sampling of the ways that sharks, and shark imagery, have been employed—in an effort to stress the fact that, to traditional Māori, sharks were a prized *taonga* (or treasure).

Sharks were a valued food source to the Māori. For some *iwi*, the significance of shark fishing expeditions was so great that it was strictly regulated by tribal law. ‘Each year, the northern Te Rarawa tribe set aside two days for shark fishing. The first day was close to the full moon in January; the second was two weeks later. People catching sharks outside of these days were stripped of their property’ (Hutching, 2012). Those traditions depict long lasting and significant customary tribal links to both particular forms of fishing, and to the shark—as an important animal and food source within indigenous folklife and culture. We know from the collection work of the respected ethnologist Beattie, that while shark was not as popular a fare for the Murihiku Māori as it was in the north, they were still acknowledged as good eating—and could sometimes be caught with a line and hook (Beattie, 1994: 153). There are



several records of shark fishing, and eating, within the region. The hooks were often crafted from the roots of *mānuka*—‘from the natural crooks of the root [which] were ‘strong enough to hold a whale’ and were used to catch sharks’ (Tipa, 2004: 25).

Line drawing of: E148.79, shark motif rendering on black serpentine, housed at Canterbury Museum, Christchurch. Rendering Dr. Raj S. Aich.

The image of the shark appears in Māori visual aesthetic culture too. The image of sharks has been worked onto stone artefacts—one particularly striking example of which is housed at Canterbury Museum (E148.79). That plate-like shaped necklace pendant, as pictured above, was collected from the Okain’s Bay region by H. Harris in circa 1900. It

then it made its way through various owners before being loaned to the Canterbury Museum in 1949. The piece was crafted from black serpentine and it included the images of two sharks—one with diagonal hatching lines and the other cross-hatched. Trotter and McCulloch (1989) have suggested that the piece is a local rendering of a design motif that would be found, traditionally, around the Pacific—and usually carved upon pearl shells. This highlights cultural links, and borrowings of visual aesthetics, across spatial regions.



Burnt Mako tooth necklace, from the collection of Southland Museum & Art Gallery Niho o te Taniwha (Invercargill, NZ). Provided by Dr Tracey Wedge (Collections Manager).

Sharks also contributed to the sacred, artistic, and highly painful process of Māori traditional tattooing. We know that, like whale and albatross bones, shark teeth and sharp stones were used as chisels—which were called *uhi*. Unlike Western tattooing, which is based around the use of needles, the skin would be struck with these chisels in Māori tattooing—sometimes after already being cut. The exact technique, and the choice of chisel materials and style, would depend on the pattern being created.

Further, J.H. Beattie recorded folk traditions surrounding the making of ornamental earrings out of shark teeth, which would be tied on with

whitau strings (Beattie, 1994: 241-42). The Otago Museum holds, and displays, several significant collections of shark teeth that were worked by local Māori to produce ornamental items—such as necklaces (two examples being D22.281 and D79.6674). One set in particular, gifted to the museum by Sir Frederick Chapman and collected from the Goodwood Beach region (D29.5842), not only displays sound technical craftsmanship, but has been included in museum publications as a classic and representative example of traditional Māori artefacts (Broughton and Ellison 2006: 87). We know that, in the time of their manufacture, Māori particularly sought teeth from the Mako and Great White shark species, as those items held very high trade value.

Museums throughout Te Waipounamu often display such artefacts - prominently due to their significance in traditional indigenous culture - with particularly interesting examples held at: Southland Museum & Art Gallery Niho o te Taniwha in Invercargill, Canterbury Museum in Christchurch (exhibits E142.267.1-6), and, Te Hikoi Southern Journey Cultural Heritage Museum in Riverton. Traditional Mako shark tooth jewellery was treasured, due to the aggression and domineering spirit of the animal. William Yate's 1835 book, *An Account of New Zealand*, explained: 'the ornaments in the ear are of all kinds, and fantastic shape-long, short, square, round, rough, smooth, large or small, according to fancy of wearer, but that which is most highly valued, is the shark's tooth, which is beautifully white, with a little red sealing- wax melted on the fang' (Yate in: White, 2015: 24).

Further utilisation of the shark as an aesthetic symbol, and a natural resource, can be noted both in traditional and modern Māori art—for example, shark tooth necklaces carved from greenstone. These objects have been considered to represent strength, and to hold the ability to protect their wearers. We also note that oil manufactured from shark's livers was often mixed with red ochre to create a form of paint, or ink, that was used on carvings.

Implements made from shark were used for a range of purposes. 'Tarewai Wesley, Ngāi Tahu kaumātua (died, 1967) confirms [...] that the weapon called *wahaika* was used in olden times to emasculate men found guilty of sexual offences against society' (Williams, 2012: 94). The *wahaika* is a small hand held weapon, that can be produced from either bone or wood, and which sometimes had a section that was covered in shark's teeth to allow a cutting action to be performed. This intriguing weapon was also used as a tool for hand-to-hand combat. Along that line of cutting type tools, Best—who served as an ethnologist for the Dominion Museum—noted 'that a shark's tooth was used in cutting hair or shaving the head' (Best, 1934: 211), highlighting the idea that the uses of these teeth, by Māori, were many and varied.

Shifting to briefly consider Māori oral traditions, we know that, within customary *whakataukī*, or proverbs, Māori likened the ideal for warriors to sharks—with examples ranging from the *whakataukī* at the head of this article, to ones such as: ‘*Kia mate a Ururoa! kei mate Tarakihi*’; ‘Let us die fighting bravely, as the fierce shark, Ururoa, struggling to the last! and not die quietly like the fish Tarakihi’ (Royal Society of New Zealand, 1879). The *tarakihi* is a form of fish found in New Zealand, Australian and South American waters. The place of sharks within *whakataukī*, and hence in oral tradition, highlights traditional thought about prominent qualities of the shark.

Under the Ngāi Tahu Claim Documents for Treaty of Waitangi settlements, the Mango Tuatini, or Great White (*Carcharhinus carcharias*) is identified as a *taonga* (or treasured) species to the Ngāi Tahu *iwi* (tribe) of New Zealand.² Ngāi Tahu’s tribal grounds include Murihiku.

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Mythlore

It is widely recognised that the Polynesians ancestors of the Māori believed that sharks could take on *kaitiaki*-like roles, as guardian spirits. Ethnologists have documented cases of this form of spiritual guardianship linked to the widely recognised concept of the *aumakua*. Polynesian traditions also depict shark deities, such as Tumuitearetoka—a king of the sharks, who had a dark nature, but undertook a significant function within Pacific cosmology. In the nineteenth century, the folklorist Gill recorded customary beliefs that Tumuitearetoka ‘fed exclusively upon human flesh’ (Gill and Müller, 1876: 225). Therefore, it is to say that the shark held a pluralistic cosmological role within the Pacific, as both guardian and predator.

Within Māori myth, sharks played an equally significant role. From their tales of creation we learn that the godhead Māui set the mythic shark Te Māngōroa across the sky—as the Milky Way. A symbolic māngōroa pattern in the Māori visual aesthetic is used in *tukutuku* panels throughout New Zealand, representing the Milky Way—and hence the place of this sacred shark. A *tukutuku* panel is a panel on a building that has been ornamented with woven patterns. Each pattern signifies important information about the tribe/region within whose bounds it was created, ranging across elements such as their cosmological, social, or folkloric history and culture. Keeping with that maritime theme for celestial bodies, Māori, like other Polynesian peoples, popularly linked

² See the Ngāi Tahu Claim Documents: H1, p. 6, 37, 66; H2, p. 60, 62; H3, p. 34, 38; H57, p. 42, 43; J10, p. 81, 82, 97; J18, p. 22; J19, p. 206 Fishing at Potikohua for sharks; J45, p. 8. See also Habib, 1989.

the constellation of Scorpius with their legendary Māui—likening it to his fishhook. Coupled with Te Māngōroa, other elements of the ocean were also transcended into the celestial bodies, and the realm of the gods, in traditional lore. Further, many sea creatures, including sharks, were thought to be the descendants of the god Punga. Punga was the child of Tangaroa—the god of the sea. Consequently, sharks were linked through their *whakapapa*, or genealogy, directly to the god of the sea. That hereditary position might, arguably, have been influential in securing the symbolic position of the shark within Māori cosmology.

Those myths have seeped into contemporary popular culture, and today they are even associated with a wide variety of international organisations—sometimes helping promote conservation messages. One interesting example is the imagery of shark godheads from the Pacific being adopted by the World Wildlife Fund, in an effort to ‘reinforce the message that sharks are important both ecologically and culturally’ (Radio New Zealand 2014).

Two Supernatural Sharks of Murihiku

Amongst Murihiku’s lore there are several references to sharks and shark-like supernatural beings. One interesting example is the *taepo* of the Taieri River. A *taepo* is generally thought to be some kind of spectral beast which has increased power at night. Beattie recorded an episode where an elderly Māori woman informed him of sighting the *taepo* in her youth. The tale states that the local elders had informed youngsters not to go to a particular part of the river due to the danger of the *taepo* that dwelt within it. The children went to that part of the river despite those warnings, and, after taunting the *taepo*, it appeared from a hole within the river bank as a shark-like beast (Beattie, 2004: 164).

The folkloric shark Kaitiaki-o-Tukete (‘the Guardian of Tukete’) was thought to live within Foveaux Strait, and particularly around the passage between Codfish Island and Stewart Island—in the far south of New Zealand. We know from several sources that Kaitiaki-o-Tukete was thought to be a *taniwha* which had taken the form of either a shark or a monstrously large fish. We also know that Kaitiaki-o-Tukete was spiritually connected to the Kati-Mamoe Chief, Tukete. Beattie recorded a traditional belief that after Tukete’s death in a battle on Stewart Island, the shark-like beast remained within the coastal region where he fell ‘to haunt the coast’ (Beattie, 2004: 192). Several geographic studies, over recent years, have attempted to classify and decode the deeper meanings of the Kaitiaki-o-Tukete tales. The attempts focussed on analysing the possible functions of traditional mythic knowledge about southern landscapes, as a possible representation of destructive geographic land processes within the Foveaux Strait region (Cochran, Clark, and Strong,

2014; King, Goff, and Skipper, 2007; King and Goff, 2006; King and Goff, 2010). This differs considerably from the usual interpretation of the supernatural shark Ruamano, who dwelt in the far north. Much like the maritime *kaitiaki* role often associated with whale *taniwha*, Ruamano was thought to be able to be called upon if a *waka* (canoe) overturned—and to assist the people who were in it to safely travel to shore—and hence, has not been linked to destructive geographic land processes.

It is generally accepted that myth is a tool for explaining not only the built environment of a society, but also the natural landscape and geographic land processes within the spacial region that a society deems its territory. In the context of sharks, this obviously applies equally to both landscapes and oceanscapes. A classic example of this function for myth within Māori cosmology is the way that they see the godhead Rūaumoko to explain earthquakes and volcanoes.³ In this light, the lore of Kaitiaki-o-Tukete and the *taepo* probably reflect traditional knowledge of either geographic hazards (in the case of Kaitiaki-o-Tukete), or, of ongoing natural wildlife hazards through the *taepo* tale.

The Shark and the Murihiku Shaman

In a similar belief to that recorded through the Ruamano myths, Beattie recorded a Murihiku tradition which held 'that in storms at sea an efficient *tohuka* (or *tohunga*, i.e. a wise man) could call up great fish to protect the canoe. Even the fierce shark, the *mako-ururoa* could be made to obey the will of the *tohuka*. Any whale, or shark, or big fish, or *taniwha*, or monster of the deep thus called up was called a *takaroa*, or *tangaroa*, and all were 'paid with a hair from the human head' (Beattie, 1994: 154). This can be identified as a form of shamanic animal helping spirit. Generally, in identifying the helping animal spirit analogies, we look for instances where animals 'transcend the abilities of that animal in its ordinary existence' (Pratt, 2007: 25). Consequently, a shark, as a supreme marine predator, clearly meets the criteria to be considered a shamanic animal helping spirit when functioning in the role of protecting a canoe and its human occupants.

Shaman interacting with sharks is also a documented phenomenon outside the traditions of the Pacific. In the Arctic, Inuit shaman are known to be able to access sharks as helping animal spirits (Rasmussen,

³ In the Māori myth of the sky-father and the earth-mother, Ranginui and Papatūānuku, we see those eternal lovers separated, and forced apart, by the deeds of their own children. At the time of the parting Rūaumoko, their child, was still feeding at his mother's breast—so when she rolled over and was shaped into the form of the land he was trapped beneath her. In the mythic lore he was given fire for warmth in that dark place. Consequently, the shaking noises associated with earthquakes and other geographic land processes are linked to his movements as a child—and the eruption of volcanoes is also linked to him, through his fire.

1930: 113; Weyer, 1932: 425-28). Rasmussen (a Danish Anthropologist who several scholars recognise as the father of Eskimology), noted that an Inuit's shark helping animal spirit may approach the shaman whilst he was paddling a kayak at significant times. He documented the use of particular types of song by Inuit shaman when the shark approached their kayaks (Rasmussen, 1930: 119-20). Those aspects of Inuit shamanic culture are discussed by Eliade in his important work on shamanism: *Shamanism: Archaic techniques of ecstasy*. Eliade stressed the idea that, following these interactions, the shaman would have an ecstatic state—and the spiritual significance of the interactions would be highlighted. He noted that the ecstatic state was most likely due (at least in part) to the mortal danger that the shaman has faced through such successful interactions with the apex predators (Eliade, 1988: 91). This might be considered as a tie back to the levels of primal fear, and processes that would be experienced by the shaman, during human/ shark interactions, if we consider it in the terms of Jung's theory of Collective Unconsciousness (Jung, 1962).

We know from several parallel accounts—such as the legendary tale of the brothers Ruatapu and Kahutia-te-rangi—that Māori tradition holds that when a *taniwha* was called forth to help people in trouble on a canoe—such as is discussed by Beattie above—it was at times either following, or during the use of, a powerful *karakia* (sacred incantation). *Karakia* were often recited, by *tohunga*, during shamanic events, similar much like we know that Inuit used their own shamanic songs. This would suggest a parallel between these aspects of Inuit and Māori shamanism.

In more of the role of a straight protector and communicator with animals, it was recognised, by Beattie, that 'if a shark came up to a canoe to do harm to the crew the *tohuka* would give it a hair and it would go away' (Beattie, 1994: 209). Shaman forming spiritual bonds with, and/or communicating with, predatory animals is a common theme within both sacred and critical literatures. Other common helping spirit animals who are usually considered supreme predators include: wolves, bears and big cats. These various comparative links highlight the broader spiritual tradition within which this aspect of traditional views of sharks within Murihiku rests.

Tohukas, or *tohungas*, were said to also have visions that included shark imagery, to provide them with warnings that foretold serious events. We know that leading up to when:

Pouho made his raid on Tukurau (in 1836), Niho (of Westland), who was a *tohuka* and the son of a *tohuka*, had a dream that a great shark lay across Te Wai Pounamu, and he warned Puoho not to come further, and told him what would happen to him, but

Pouho scorned the warning and went on to his fate.’ (Beattie, 2004: 99).

It is also known that shark products were employed by shaman in conducting rituals with the dead. In 1918 Beattie recorded an ancient practice among the southern Māori, one whereby the dead could be preserved through a process called *whakataumiro*. He described how the process involved the dead being left in a cool and dark cave, preferably one that had a cold draught. The body was then prepared with a specific mixture of shark oils, woodhen oils and red clay known as *maukoroa*. He noted that the practice was very ancient, and that ‘after Waitaha times the Kati-Mamoe carried on the process until comparatively recent times’ (Beattie, 1918: 150). This practice is of significance, as it provides

another example as to how the shark might have been seen to be a potent commodity for sacred and spiritual ritualistic practices—hence positioning them as an animal, and a symbol, of innate spiritual and cultural significance.



*Jaws-like shark rendering by
Raj S. Aich*

Shark Behaviour, or, Perceptions of Shark Behaviour

The gap between the general population’s perception of shark behaviour, versus actual shark behaviour, is arguably quite large. Over the past 40 years, since the release of *Jaws*, the media of Western nations has largely built up the image of sharks as mindless ‘man eaters’. That *Jaws-ian* imagery has also pervaded a wide range of popular culture texts—even if we just consider other films the list of such texts is far too long to recite, with just a sampling being: *Spring Break Shark Attack* (Shapiro, 2005), *Raging Sharks* (Lerner, 2005), *Shark in Venice* (Lerner,

2008), *Soul Surfer* (McNamara, 2011), *Shark Night* (Ellis, 2011), and, *Jersey Shore Shark Attack* (Shepphird, 2012).

The significant level of fear and mistrust represented by this proliferation of popular culture texts may, at least in part, be an extension of our instinctual responses to the shark, as an apex predator, considered in light of Jung's theories (1962). Using Jung's theory of the Collective Unconscious, applied to predatory animals, we are presented with the notion that Adah Maurer aptly describes:

Although the boy lives in the midst of the trappings of civilization, and the descendants of the wolf have been tamed to family pets; yet deeply submerged is the tribal fear, built in perhaps to the neutral network present but dormant at birth.' (Maurer, 1965: 267)

While the theory of the Collective Unconsciousness, and in particular this aspect of human-animal relations, is contested by some animal ecologists and psycho-analysts, it is pertinent to consider it in terms of the present debate—as it highlights important ways in which theorists have suggested that predatory animals (such as sharks) and humans may be interacting with each other—as deeply as on a biological level.

Notably, however, 'during the 1900s, it was generally believed in the United States that sharks were harmless' (Francis, 2012: 46). So, the idea that prior to the 1916 shark attacks at Beach Haven, New Jersey, we do not see widespread media negativity about sharks, gives reason to further consider the way that Jung's theories might function in this case. One possible way to interpret them is through the Maurer (*ibid.*) explanation that 'humans [...] generally are considered to have lost their instincts and to have become dependent upon learning.' The exposure to popular culture and media negative shark imagery might then be considered to be 'teaching' populations to fear the shark—and in some lights—reawakening the submerged primal levels of fear discussed in Jung's theory of Collective Unconsciousness.

In conflict with this perception of sharks is the fact that, among more than 350 species of sharks, only a handful have been known to have attacked humans. Most of the time, the three species generally considered to be dangerous to humans are: the Great White shark, the Tiger shark, and the Bull shark; however, some other species have also been linked to unprovoked attacks on humans. Those other species, that have participated in unprovoked attacks, are: the Great Hammerhead, Oceanic Whitetip, Lemon, Dusky, Blacktip Reef, and, the Blue shark (De Maddalena, 2012). Even so, most of the attacks have been considered to be a matter of mistaken identity, and at times exploratory (Ferreira,

2011), accidental, or even in either perceived or actual self-defence (Gruber, 1988; Maxwell, 1949).

As Christopher Neff mentions in *Sharks, Conservation, Governance and Management*—public perception of sharks has long been that of ‘great reverence as well as great fear’. Fishing activities in the Pacific Ocean probably gave rise to these initial interactions—however, it was a two-way interaction, and the shark had an active agency in influencing and helping shape the human community, dependent on them for nutritional and other resources. However, he notes:

the more dominant public perception has been one of shark as a threat to survival, with the rise of recreational water-use and shark bite incidents. The result has been a political tension between public perceptions of sharks, shark bite prevention policies and shark conservation that has implications for shark conservation governance. (Neff, 2014: 107)

Neff further notes that ‘perceptions about sharks and shark bites can impact shark conservation and improve management’, so it follows that the issue of addressing the entrenched human perception of sharks is becoming pertinent in this day and age, where: conservation, animal welfare, ecological management, and, environmental sustainability; are becoming phrases with a greater political weight. He stresses that as a consequence of those factors:

governments must address a ‘predator policy paradox’ which is a very important contribution of perception of action of the governmental policies in managing predators such as sharks ‘in which policy makers face decisions about protecting shark species that may harm the public. (Neff, 2014: 107)

Neff believes that, in many such instances—such as on issues like cage diving with Great White sharks—the stances of governments are tinged by emotional reasoning and unfair perceptions, instead of relying upon scientific facts.

In 2012, the Western Australian government took a strong stance in banning cage dive operations off its coastline. Norman Moor, the Western Australian Fisheries minister, said:

While there was no determination from the study about the longer-term effects on shark behaviour or outside the study area, I would prefer to take no risks until more is known. (Australian Associated Press, 2012)

This became another lever to push Neff into the public debate about the differences between actual shark behaviour and public perceptions of shark behaviour. This year, in 2015, Neff proposed that powerful films, such as *Jaws* not only influence public perceptions of the animals that they portray, but that they also shape the responses, and policy making decisions, of the politicians who live within populations influenced by those texts, and who, most likely, have been audience members of those films (Neff 2015). Alongside Neff's argument, Catlin, Hughes, Jones and Jones have stressed that the Western Australian Government's decision was reactive based on an isolated spate of higher shark attack numbers—ignoring the bigger picture that the ban will both remove an aspect of the state's eco and adventure tourism industry, and, worsen an already negative public perception of an important animal that holds high natural heritage value (Catlin *et al.*, 2014).

Returning to the Sharks of Stewart Island and Murihiku

Clinton Duffy, a shark expert from the New Zealand Department of Conservation who has worked with and studied sharks in multiple countries, has suggested that the shark numbers around Stewart Island are most likely not increasing. Alternatively, he believes that people are seeing more sharks simply because sharks- 'are certainly capable of learning and some of the sharks have learned that when they hear a boat in those particular places they come up and check them out' (Duffy in: McCracken, 2014). This highlights the ability of sharks to learn, and be situationally adaptive in their behavioural patterns, based on their positive experiences with the presence of boats. Duffy also draws attention to recent Australian research which has found that sharks will identify when cage diving boats are scheduled to arrive to an area, and ensure that they are there slightly prior to that time, in order to take up strategic positions and ensure their access to the feed baits that will be dropped. Arguably further extenuating the shift in the public's perception of shark presence, are the two factors: people are wearing anti-glare glasses (and are hence able to see sharks more clearly below the surface), and, people are generally hyper-aware of sharks whilst in those environments - due to media coverage, which, research suggests, can result in them spotting more sharks (Elliott, 2014).

Traditional knowledge of shark behaviour by Murihiku Māori, and the use of bait or fish-heads causing shifts in that behaviour, has been documented for almost a century: 'in the old Maori days there were very few sharks about—they have only come in any numbers since the European fishermen throw the fish-heads back into the sea' (Beattie, 1994: 176). When directly asked his opinion of the validity of that traditional Māori knowledge, in light of the current claims being made

about shark behavioural changes around Stewart Island and Bluff due to shark cage diving, Duffy made several key points:

- Sharks, like most other vertebrates, are capable of learning when and where food can be predictably be found—this includes when and where feeding/provisioning by tour operators occurs, or when and where offal is discharged; my experience of the shark feed in the Caribbean also suggested that some species may be able to recognise the sound of the vessel involved in these activities.
- I have no doubt that some white sharks at Stewart Island have learned that they can sometimes get a meal from vessels (primarily but not exclusively cage diving vessels) anchored at Edwards Island.
- I also have no doubt that white sharks scavenge around fishing boats and were doing this long before cage diving began at Stewart Island (the island has long been renown for white sharks—that’s why we decided to have a look for them there).
- I am sceptical of claims that cage diving increases the risk to humans, given the long history of commercial fishing at Stewart Island, the fact that the way in which sharks encounter humans in cage diving operations is completely unlike the way they would naturally encounter people in the water, and the close proximity of shark cage diving to human habitation and recreational areas in South Africa.’ (Duffy, 2015)

Kaitiakitanga: New Zealand Shark Conservation Movements

Considering all of these facts, it is very interesting that New Zealand is currently displaying a strong interest in developing an active *kaitiakitanga* approach toward sharks—despite the negative image of sharks that exists in the media and popular culture. *Kaitiakitanga* is a Māori word for guardianship, and providing protection. Maritime *kaitiakitanga* is an important part of modern New Zealand political and environmental thought—with more widely known movements including the role that New Zealand has taken to help protect whales through the International Court of Justice.⁴

The Great White shark was listed, since 2007, as a globally ‘vulnerable’ species by the IUCN (The International Union for Conservation of Nature), and is fully protected in New Zealand waters under the Fisheries Act 1996 and Wild-life Act 1953. They are also protected from fishing by Fishery Act of 1996 (Department of Conservation). Strengthening those protections, in October 2014, New Zealand introduced new regulations on shark finning (Warne, 2015: 48). Then, on 6th July 2015, New Zealand signed the international

⁴ A.A. Jøn discussed this at length in an earlier article in *Australian Folklore* (No. 29, 2014, pp. 87-116) titled: ‘The Whale Road: Transitioning from Spiritual Links to Whaling to Whale Watching in Aotearoa New Zealand’. In some respects, this current article can be seen to follow on from that one.

Memorandum of Understanding on the Conservation of Migratory Sharks, to help protect and conserve migratory shark species. Primary Industries Minister Nathan Guy, and Conservation Minister Maggie Barry, signed the memorandum which sets out to help save seven species that are vulnerable to exploitation, including the: Basking Shark (*Cetorhinus maximus*), Great White Shark (*Carcharodon carcharias*), Longfin Mako Shark (*Isurus paucus*), Porbeagle (*Lamna nasus*), Shortfin Mako Shark (*Isurus oxyrinchus*), Spiny Dogfish (*Squalus acanthias*), Whale Shark (*Rhincodon typus*). It was suggested that some of these species of sharks, including the Great White, have been severely depleted by both: the global increase in unregulated fisheries, and, markets targeting sharks and their fins. This treaty was an active step curb both of those practices. This international memorandum was the first global instrument of its kind, and has (at this time) 38 other signatories (Radio New Zealand, 2015).

Further strengthening those legal efforts to increase shark conservation, the New Zealand Department of Conservation has recently finished a decade long research project, in collaboration with NIWA (the National Institute of Water and Atmospheric Research), on Great White shark population and migration. The desired outcome of that collaborative research was to further assist conservation efforts (Francis and Duffy, 2014).

We can also see serious contributions to Great White shark conservation from New Zealand based organisations such as the White Shark Conservation Trust <<http://whitesharkconservationtrust.org/>>. The White Shark Conservation Trust was founded in 2009 by Bruce Goorney and Kate Amiria, and, since that time, has set out to attempt to combat the negative public perception of this important animal and to assist in conservation efforts with a view to ensuring the long term survival of the species. It is officially registered with the NZ Charities Commission as a Charitable Trust and it produces a bi-monthly newsletter along with engaging in a range of conservation activities such as: shark tagging (to allow better study of shark behaviour), fund raising and public education projects. Consequently, in Murihiku, and New Zealand, shifts from a *Jaws-ian* stance toward sharks toward a *kaitiakitanga* approach, that recognises their sacred place within traditional culture, are clear.

Final Thoughts: Multispecies Ethnography

There is a growing body of scholarly discourse in the subfield of multispecies ethnography highlighting the way that interactions between animals and humans can influence the lives of both species (Fuentes, 2010; Haraway, 2008; Kirksey and Helmreich, 2010; Locke, 2013; Malone *et al.*, 2014). From the above, we can see that the active agency

of Great White sharks in altering the perception and behaviour of humans becomes as prevalent as that agency and influence occurring the other way around. This gives us a peek at the existence that these two sentient species have shared, in this region, for generations. Specifically shark centred multispecies ethnography is still an emerging field, however, some offerings have been made, including Nason's Master of Arts thesis: 'Jaws of Significance: The conservationist's perception of the shark in South Florida' - which was produced at Florida Atlantic University. Akin to many other commentators, Nason found that through the influence of shark attack reports, films, literature and other encounters (including tourism based ones), 'a metaphysical shark has emerged which has in many ways superseded the influence of the physical animal's toothy reality' (Nason, 2012: 86). It is clear that the broader use of multispecies ethnography flavored theoretical frameworks could add much to our understanding of human/ shark interactions.

Our Stance

This present paper has been an endeavour to add to this novel approach of looking at human- shark interactions, more precisely from the New Zealand perspectives in light of historical and current interaction with the species. New Zealand is a prime contact zone for Great White sharks and humans, as mentioned by the Department of conservation: 'New Zealand is recognized as one of the world's hot spots for White sharks, along with the waters off California (US), South Africa, Australia and Japan' (Department of Conservation). Because of that 'hot spot' location, with maximised human/ shark interactions, New Zealand is among only a handful places in the world with regular and predictable enough Great White shark traffic to enable successful cage diving adventure tourism operations. Cage diving is the only relatively safe way that people can come in close proximity of the white shark. It would be a tragedy if the current controversy over cage diving operations led to a situation, like that in Western Australia, where humans lost the ability to see this spectacular natural *taonga* in such a powerful way. Increased interactions with these animals, with the relative safety that cage diving provides, may help drive conservation efforts for this species.

Jaws, and the media reporting that it has influenced, generated mixed results in terms of the outcomes for sharks. As Francis recognised in her 2012 study, the film not only inspired unnecessarily sensationalist media reports and a mass of people hunting sharks for trophies, but it also empowered additional funding for shark research—and that research, as well as the knowledge that it produced, inspired improvements to shark conservation regimes (Francis, 2012). As those conservation efforts continue to grow, and people are exposed to more positive shark imagery, it could be speculated that the interpretation of non-intrusive

human/ shark interactions might shift to a less demonstrative one. Those shifts in interpretation and general perception of sharks might also enable communities to engage more meaningfully with some of the positive aspects of traditional shark knowledge and lore.

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