TAONGA - NOT DEAD FISH!

How can the Ethos of Māori Taonga be presented in the Marketplace of New Zealand / Aotearoa Small-Scale Fisheries?

Oliver Kraft



Image Māori fisherman bartering a crayfish for a piece of cloth with Joseph Banks (Tupaia, 1769).

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TANGAROA GIVES

He taonga tuku iho Na Tangaroa he whenua he moana He toi oranga tangata

When Tangaroa takes something away
Like the calm of the sea
He always restores it with something else

Something like ...

The Land of the Long White Cloud
Raindrops and sunshine through rainbows
Straddling our two worlds

When man takes something away

Like oil from Earth

He always replaces it with something else

Something like ...

A dereliction on an empty landscape
Stillbirth in lifeless waters
Smoke at the end of a smouldering gun

Poem Haare Williams, 1 March 2009, Papakura

Mihimihi

Ko Feldberg im Schwarzwald te maunga

Ko Rhein te awa

Ko Südbaden (Tiamana) te iwi

Ko Qantas te waka

Ko Tāngata Aotūroa te iwi

Ko Awatoru te hapū

Ko Jacob Scott te rangatira

Ko Unitec te marae

Ko Oliver Kraft ahau

Whakapapa

The passion for learning from other cultures by immersion is rooted in my parent's love of traveling and inseparable from the subject of food, which is understandable because they both experienced food scarcity following World War 2.

My father Hubertus Kraft, a pharmacist and tennis fanatic, fled from the Russian siege of Poland to settle in southern Germany. The family name Kraftcic was changed to Kraft because the original name sounded Russian and kept clients away from grandfather's medical practice. My father's joy of exploring the world always peaked when he tracked down a small eatery, filled with locals signifying authenticity and quality of place specific specialties, during one of our many, and everlasting family vacations.

My mother Gabriele Wörner comes from a part Jewish family under the name Redetzky. Her mother was a ballet dancer and her father a well regarded film maker focusing on the history and stories of ancient northern African cultures. I don't know how the family managed to escape the Nazi regime exactly, but apparently my grandfather Bernhard Redetzki was a born diplomat with "friends in all circles" who kept us out of trouble. My mother observed the world through the lens of a successful writer of mostly humorous short stories for the German National Radio. Her style of writing is characterized by immaculate clarity, which, she taught me, is only possible if one understands the subject matter completely.

The idea for this project first surfaced during discussions between potential candidates, program designers and United staff at the 'Awatoru MDes Information Hui' staged at the Awataha Marae, Northcote, Auckland on Friday, June 11 & 12, 2010. This coincided with a personal approach by independent fishery consultant and former FAO¹ Fishery Officer Francisco Blaha, who asked me to consider the development of a labelling scheme for Māori fisheries as a design project. He pointed to the 'Seychelles Line & Hook Fishermen' model as a starting point and kindly consulted throughout the project.

Initially I worried about my German heritage, because I was skeptical that a non-Treaty partner could be welcome to research kaupapa Māori. I was proven wrong. Doors into te ao Māori were opened wherever I dared to knock. The obvious was pointed out to me when I presented ideas for feedback: maintaining an outsider view is desirable in this context. After all, this project deals with interpretation and alignment of values from one culture to another.

Acknowledgements

I dedicate this work to my dear friend and advocate for 'culture into politics' Ed Annink (1956 -2012). He devoted research, books, smartphone apps and objects to the work of German graphic designer and anti-fascist Gerd Arntz (1900 - 1988). Annink, shortly before his sad passing away, cleared up the rights to utilize Arntz's wood and vinyl cut pictograms for this project. My deepest gratitude goes to my principal supervisor Marcus Williams for the structure, confidence and support he provided; Kaumātua Haare Williams for his collaboration, tautoko, and blessings (including water-blessing my laptop); Tohunga kaimoana Francisco Blaha for consultancy; the Nga Aho network of Māori design professionals for facilitation, sponsoring and feedback, especially Desna Whaanga-Schollum, Karl Wixon, Carin Wilson, Rau Hoskins and Jacob Scott; the fishermen Daniel Scott, his father Blake Scott and his sons Jayden and Blake Jr. for piloting processes, staging scenarios and hosting film crew and kaumātua; Unitec for adopting Awatoru; Jan Steffen for videography; James Brown for film editing; my fellow Awatoru students for ongoing support and feedback; Joe McClutchy for opening my mind to the value of tikanga on fishing boats; Daryl Sykes (NZ RLIC) for continuous & productive criticism of ideas; Geoff Creighton from Leigh Fisheries for consultancy; Kahu Te Kanawa and Dr David Hawkins for supervision in stage one; Para Matchitt for listening to my ideas and asking uncomfortable questions; Dr Tina Engels-Schwarzpaul for so much more than just proof-reading; Kelly Tarlton's Sealife Aquarium for the lobster shell; and last but not least my wife Amanda Hookham-Kraft for financially and mentally supporting this research; as well as my daughters Ayesha Gabriele, Zara May and Isla Lucia for love & inspiration. My apologies to anyone I forgot.

¹ The Food and Agriculture Organization: An agency of the United Nations.

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INTRODUCTION

Culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, [...] it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs. (UNESCO, 2002, p. 12)

About this project

Artisanal fisheries from the Seychelles – an isolated archipelago in the Indian Ocean, some 1500 kilometers east of mainland Africa, label each fish with a unique code and an Internet address. This enables chefs, retailers and consumers to find out who caught the fish, and also how and where it was caught. Furthermore, they learn that an indepedent organisation frequently verifies that the fishing techniques utilised do in fact mitigate damage to the fragile marine ecosystem (Lagarde & Pommeret, 2010). The Seychelles *ecolabel*² provides a reliable opportunity for consumers to support good practice, and the traceability establishes a link to the fishermen. Furthermore, compared to the market value of identical fish without labelling, the labeled fish achieve higher prices of up to 25%.³

The *Taonga – not dead fish* project started out with the idea that a similar scheme, redesigned for local circumstances, could work for *Aotearoa*⁴ small-scale fisheries. In order to achieve reasonable depth, the research scope was narrowed down to the Rock Lobster⁵ industry, keeping in mind that learnt principles should be applicable to other industries. This choice wasn't random. Working towards healthy Rock Lobster populations is important, because the species is pivotal for the ecosystem it inhabits (Bruce & MacDiarmid, 2012). Other considerations concerned the manageable scale of the fishery (small boats, small crew), and the fact that the Rock Lobster trade has significant cultural and commercial value.⁶

Before the research could center on how such a labelling scheme could operate in New Zealand, however, there was an important question that needed to be addressed: what exactly is it that fisheries with Māori affiliation would want to share with the market?

² Ecolabels are labelling schemes for food and consumer products that originally only verified environmental standards, but since a few years also include social, ethical, and other standards.

³ See case study in Chapter 1 for more information and references.

⁴ New Zealand's te reo Māori name Aotearoa is used in this exegesis to accentuate Māori context.

Rock Lobster is the export name for NZ caught Jasus Edwardsii (Latin) or Kōura Papatea (te reo Māori). Other names are Spiny Rock Lobster, Red Rock Lobster, Spiny Crayfish and Crayfish.

⁶ Chapter 3 has more details, statistics and references referring to the New Zealand Rock Lobster industry.

Haare Williams, a native *te reo*⁷ speaker, poet and artist, pointed out a promising trail when he explained the term *tikanga* ⁸ to me. Tikanga, he explained, stems from *tika* – te reo for "right" or "correct," so tikanga literally means "doing what is right" (H. Williams, kōrero, September 25, 2011). Tikanga Māori, according to Hirini Mead, is commonly used to describe the way(s) things are done according to Māori customs, profoundly reaching into all aspects of life. The concepts underlying tikanga derive from *mātauranga* Māori (Mead, 2003).

In the context of fishing, tikanga often reflect the ideal of *kaitiakitanga* – a complex system Māori have developed over time to keep a balance between themselves and their environment (New Zealand. Waitangi Tribunal, 2011). Kaitiakitanga more often than not consolidates seemingly pragmatic conservational methods – such as *rāhui*,¹⁰ with spiritual concepts – such as *karakia*¹¹ and *tapu*¹² (New Zealand. Waitangi Tribunal, 2011). Chapter one and three interpret and contextualize those and other mātauranga derived principles in more depth, and discuss their significance in contemporary application.

The initial consultation with Haare Williams sparked the idea of certifying commercial fisheries for applying cultural practices that relate to kaitiakitanga in their daily operation. The plan seemed reconfirmed by literature discussing the interdependency of cultures and their environments (for example by Diamond, 2005; Pilgrim & Pretty, 2010). The project had found its focal point: the design of an ecolabel integrating cultural practices.

Following the guidelines for ecolabelling published by the Food and Agriculture Organization¹³ (FAO), compliance of fisheries with 'standards' (which would need to be developed with stakeholders) was going to be verified by an independent, accredited certification body (FAO, 2009). But if tikanga is the context, which standards, or whose standards would candidate fisheries need to comply with? Tikanga is regionally different – even from one bay to another (Mead, 2005; H. Williams, korero, September 25, 2011).

Biocultural diversity conservation, a relatively young field of research manifested by Maffi and Woodley (2010), considers regional differences in cultural practices as important diversity of place-specific TEK (traditional ecological knowledge), that is inextricably interwoven and interdependent with the diversity of the natural environment. Regardless of whether this correlation is examined from a local or a global perspective, it gives a whole new understanding to UNESCO's¹⁴

⁷ Te reo, te reo Māori: The Māori language.

⁸ This exegesis frequently uses the term tikanga as plural to emphasize the diversity of tikanga.

⁹ Mātauranga: Knowledge, wisdom, ways of knowing.

¹⁰ Rāhui: The temporary ban, closed season, or ritual prohibition placed on an area, body of water, or other resource.

¹¹ Karakia: Prayer, incantation, ritual chant.

¹² Tapu: Taboo, protected, sacred, off limit.

¹³ FAO: an agency of the United Nations (UN).

UNESCO: United Nations Educational, Scientific, and Cultural Organization. An agency of the United Nations established in 1945 to promote the exchange of information, ideas, and culture.

visionary declaration (2001), that cultural diversity "as a source of exchange, innovation and creativity is as necessary for humankind as biodiversity is for nature" (Article 1). Seen from that perspective, local differences are one of tikanga's very valuable qualities. By contrast, a linear certification system that regards differences as difficulties might contradict, possibly even corrupt, the diversity of tikanga. In any event, a process solely based on 'western' methods might be counterproductive and unlikely to find much support from Māori fisheries.

Clearly, the initial concept of 'verifying cultural standards' needed more thinking and exploration. The focus of the research consequently shifted on creating a scheme that, while being guided by ecolabelling, would follow cultural protocol and integrate the diversity of tikanga. It needed a fresh approach, one that aligns certification criteria and processes better with Māori culture and the ideas of biocultural diversity conservation.

What this project is not about

Originally, *Awatoru*¹⁵ research methodology included the collaboration of several students on one project. Therefore, this project started out assuming that a group of postgraduate design students – including designers with experience in authentic Māori imagery – would partner up for the realization. Unfortunately, there weren't enough students to form such a team; there was also uncertainty about assessing students' individual contribution to collective work at master degree level.

As a result, the scope of the *Taonga - not dead fish* project needed to be narrowed down to something more manageable. The project now aims at laying a foundation and a framework. Therefore, it encompasses a contextual literature review, consultation with potential stakeholders, the design of processes and communication flow for a labelling system blueprint, as well as some practical communication solutions to illustrate the concept. It is important to emphasize that this project is not about a façade of labels, logos, or blogs, et cetera, representing indigenous industries. The communication elements featured in this exegesis are solely designed to demonstrate and test principles.

Is this design?

While the communication aspect of labelling schemes need design skills from a range of disciplines, such as graphic design, product design, and design management to name a few, the main inquiry of this exegesis is of a strategic and interdisciplinary nature. How can designers achieve – through thoughtful expression of culture – a change in the relationship between Aotearoa's fisheries and their clients that is based on a deeper affinity of understanding, pertinent to a cultural perspective that soars beyond commercial value?

My professional interest concerns the question, whether design or design thinking can contribute to projects that are embedded in a very specific context: at least in principle, New Zealand's

¹⁵ See Chapter 1 for information on Awatoru.

terms of reference as a nation derive from the *Treaty of Waitangi* (hereafter also the 'Treaty') – a unique contract promising partnership between Māori and English cultures which, to begin with, shared no common cultural roots. New Zealanders identities are shaped by both cultures and, while not without problems, this exciting weave runs through the daily life of all 'Kiwis', while also shaping the ways in which the country is perceived from the outside (New Zealand. Waitangi Tribunal, 2011).

In 2011, more than 170 years after the signing of the Treaty of Waitangi, the Waitangi Tribunal released *Ko Aotearoa Tēnei* ('This is Aotearoa' or 'This is New Zealand'; hereafter the *Wai 262 report*). It is a comprehensive report into the 262nd formal claim brought by Māori concerning breaches of the Treaty. The report recommends far reaching reforms – mainly concerning law and government policies – to foster the transition of the nation into an era of partnership beyond grievance. While the report acknowledges that Māori culture and identity contribute aspects of New Zealand's hegemonic culture and identity, the tribunal warns that Māori culture will struggle to survive if Māori and their worldviews continue to be excluded from important decision-making.

The recommended reforms are undeniably important, however, the research of the *Taonga – not dead fish* project focuses on identifying nongovernmental, people, or market-driven instruments that might cultivate this transition. Would consumers possibly support brands that communicate their commitment to Māori culture? Presumably in Aotearoa – but what about international markets? What other incentives might encourage businesses to integrate tikanga, facilitate cultural vitality, and proactively engage in passing mātauranga Māori on to the next generations, in one way or another?

Michael E. Conroy (2007) shows that market-driven initiatives, such as *Fairtrade* or the *Marine Stewardship Council* (which offer validated alternatives to products from companies with questionable corporate culture), can achieve positive change in targeted industries. He predicts that the number of consumers considering ethical and cultural aspects in their buying decisions will continue to grow, and that they represent a significant market segment in which verification of sound practices counts as added value. Certification of goods and services has become a distinguishing factor in consumers' brand perception and has thereby entered – whether intended or not – the domain of design.

While the face-to-face contact between producer and consumer where information flows both ways is probably the most tried and tested method of informed trading, the majority of today's marketplaces look very different. However, the continuous popularity of local farmers' markets signals that consumers still desire to learn about people and provenance behind products – and passionate producers still aspire to share their stories, and to learn about their customers and their needs.

There are different layers to this project. On one hand, it concentrates on promoting Aotearoa fisheries that care about sustaining Māori culture and engage in transposing time-proven values

from the past into the future. On the other hand, it explores how design might humanize globalized trade by enabling consumers to experience, again, important aspects of the farmers' market at point-of-sale: getting to know the producer, listening to stories, learning about the cultural significance of the product, et cetera.

But it doesn't end here: good communication is not a monologue, and producers need to be equipped to hear back and learn from their customers. Thus, the project aims to prototype a practical tool for a complex task. It is a designer's contribution to a much bigger picture – part of a dynamic, collective and possibly infinite mosaic: the identity of Aotearoa New Zealand.

Navigation

This exegesis is structured into four chapters. Chapter one discusses purpose and context of the project and explores the concepts of biocultural diversity conservation, product certification and their relevance to New Zealand. It includes two case studies: of the Seychelles Long Line Fishermen's ecolabel and of the organic label *Hua Parakore* from Aotearoa. Chapter two explains the project's research methods. Chapter 3 gives a brief account of pre- and post Treaty Māori fisheries – before zooming in on the current New Zealand Rock Lobster industry. It then discusses how the application of ancient cultural concepts derived from mātauranga Māori could improve contemporary fishery management, and explores whether or not such effort might be valued and rewarded by the market. Chapter 4 describes and explains the design proposition. The exegesis concludes with reflections on design process, limitations and outcome of the research.

RATIONALE & CONTEXT (Chapter 1)

Fehlbaum believes that [...] the purpose of industry is to fund culture and social progress. (Kalman, 1997, Back cover)¹⁶

Awatoru

This project is embedded within the framework of Awatoru, a business development program not unlike the *Better by Design*¹⁷ initiative. In both models, design and design thinking are taken to a strategic level to enable positive economic transformation (New Zealand Trade & Enterprise, 2011).

The difference of Awatoru is steeped in its culturally based approach and its prime objective to improve Māori economic development – as a stepping stone to social and cultural advancement for all of New Zealand. The Awatoru 'philosophy' describes design as a critical investigative process that is able to provide innovative solutions for the appropriate attachment of Māori culture to relationships, products, services and experiences in order to give them points of difference in the market place. Awatoru's ambition is to inform design through holistic research that is informed by mātauranga Māori and tikanga, as well as western approaches. The academic vision is to establish a platform where interdisciplinary teams (comprising students, as well as practitioners) collaborate in action research – ideally on real world projects.

Awatoru students are invited to become members of *Nga Aho*, a professional network of Māori design professionals, and to attend and present at the annual hui.¹⁸ For the *Taonga – not dead fish* project, being a member of Nga Aho provided me with invaluable insights through immersion into *te ao Māori* ¹⁹ and created opportunities to present and discuss ideas with a contextually competent audience.

The Awatoru framework, and the relationship with Nga Aho, has also enabled (and on many occasions sponsored) my participation in seminars, functions and hui related to subject matter such as Māori economics and indigenous ways of knowing. The learning occurred both in tangible (as referenced throughout this exegesis) and intangible (and unreferenced) modes. Dealing with the intangible is an exciting and essential aspect of research involving indigenous ways of knowing, and so is the integration of traditional ecological knowledge (TEK) in a contemporary approach to conservation, both of which are central themes in biocultural diversity conservation.

¹⁶ Quote: Tibor Kalman in *Chairman*: the biography of Rolf Fehlbaum (the chairman emeritus of Vitra).

¹⁷ 'Better by Design' is a specialist group within New Zealand Trade and Enterprise, NZ's national economic development agency. The group coaches companies in integrating design principles right across various aspects of their business to increase competitiveness (New Zealand Trade & Enterprise, 2011).

¹⁸ Hui: Meeting, gathering, assembly.

¹⁹ Te ao Māori: The Māori world.

Protecting the fabric of life holistically: Biocultural diversity conservation

... researchers, conservation managers and restoration ecologists come to recognize that 'natural' ecosystems are in fact 'cultural' landscapes that are human-modified ... (Wehi, Whaanga & Roa, 2009, p. 202)

Biocultural diversity conservation is an interdisciplinary socio-ecological approach that emphatically jettisons the once common tendency of 'western science' to exclude humans from the study of ecology and vice versa (Berkes, Colding & Folke, 2003). It is a young field of practice and research, based on the proposition that life rests on biological, cultural and linguistic diversity. These aspects are interrelated and more than likely to have coevolved (Maffi & Woodley, 2010).

Researchers and practitioners who explore those links on a scale ranging from the local to the global have created surprising outcomes: for instance, maps that show how geological areas with high cultural and linguistic diversity correlate with a high diversity in floral and faunal species (Terralingua, 2013). Biocultural diversity conservationists apply those principles in action research, and integrate the maintenance and revival of cultural diversity as an essential strategy to protect or restore the 'fabric of life' (Maffi & Woodley, 2010).

Equally, there are analogies and causal links between social and ecological systems concerning resilience – the ability of systems to bounce back to their original function, structure, and identity after experiencing different levels of disturbance (Walker, Holling, Carpenter & Kinzig, 2004).

Maffi & Woodley adduce evidence that cultural diversity is as essential for social and cultural resilience as biodiversity is for the resilience of ecosystems (2010). The authors point out that global homogenization of policies displaces diversity and with it willingness of individuals to comply, because peoples find themselves detached from their own cultural practices and traditional knowledge that had been accumulated, approved, and transferred from generation to generation.

Rotarangi and Russel (2009) believe that "to be indigenous is to be resilient" (p. 209), and discuss how resilience thinkers aim to learn from indigenous communities that have managed to maintain culture and identity despite great ecological and social disturbances from the outside. While resilience theorists tend to reduce dynamic processes involving interaction of living individuals and their attitudes to black boxes in diagrams, their recommendations, such as the "promotion of strong networks, access to resources, fostering strong leadership, building confidence and sense of self, facilitating a sense of group purpose, and finding new ways to learn" (p. 211) are useful and support resilience in indigenous societies.

In conclusion, a holistic approach to sustainability links the conservation or restoration of ecological with cultural diversity. A good starting point is to support indigenous and other traditional communities' resilience by enabling communities to adapt to external changes in their own ways, which are rooted in their own culture and include their spirituality, beliefs, and epistemologies.

The ethos of taonga & te tino rangatiratanga: New Zealand's biocultural diversity efforts

We argue that oral traditions offer a wealth of information that is frequently overlooked, in part because of a lack of knowledge of te reo Māori (the Māori language) and, further, a lack of recognition of the inextricable link between biological and cultural diversity. (Wehi et al., 2009, p. 201)

Retrospectively, a biocultural diversity conservationist could argue that, in some respect, signing the Treaty of Waitangi triggered – intentionally or not – the beginning of a gigantic biocultural diversity project. It started a dynamic and evolving process reaching into many aspects of New Zealand's society. The process features prevailing elements of biocultural diversity conservation theory and practice that range from respecting the differences between cultures, to power sharing and partnership in resource management, through to the challenge of dealing with the translation of core concepts which, historically, too often involved misinterpretation or misrepresentation from one culture to another (Waitangi Tribunal, 2011).

The second article of the te reo Māori version of the Treaty of Waitangi (*Tiriti*) guarantees Māori "te tino rangatiratanga" regarding their "lands, villages, and all their property and treasures" (New Zealand Ministry for Culture and Heritage, 2012, para. 11). The actual word used in the Tiriti to translate 'treasures' is *taonga*, defined in the Wai262 report as "treasured possession, including property, resources, and abstract concepts such as language, cultural knowledge, and relationships" (Waitangi Tribunal, 2011, p. 254).

Very likely consequences of the Treaty are repeated attempts to include both mātauranga and western science in conservation projects (Stephenson & Moller, 2009). One of the most significant projects of this kind was the collaboration of Rakiura Māori kaitiaki with scientists from the University of Otago. The 'Tītī project' started in the early 90's and continued into the mid-2000s (Wehi, Whaanga, & Roa, 2009). The principal objectives were to interface mātauranga Māori with western science (Stephenson & Moller, 2009) in assessing the sustainability of current customary harvest practices of Tītī (Muttonbird) and identifying ways of securing future abundance. Another aim was to compare mātauranga and western science as different ways of knowing in the management of natural resources.

I consulted literature that discusses the Tītī project to identify (1) rationale for promoting mātauranga and tikanga, (2) methods and incentives to transfer mātauranga and tikanga to the next generations, (3) recommendations for protocol in projects involving Māori. The following is a list of summarized conclusions:

• For Māori, spiritual dimensions and associated social regulations are vital to good resource management. Rather than bringing their own judgment to the process, researchers should lis-

ten with an open mind. Particularly, non-indigenous researchers should suspend their 'tools of inquiry' when dealing with spirituality. It is up to knowledge-holders themselves to make decisions about what are wise choices based on their spiritual and ethical worldview (Stephenson & Moller, 2009).

- Mātauranga Māori should be examined as process rather than content. Indigenous elders, or knowledge-holders, might not be able to use traditional knowledge to explain global climate change, as those things fall outside site-specific accumulated knowledge, but they can teach young people what to look for, and how to look for unusual occurrences. Those interactions between generations are important 'institutions of knowledge' that help frame observations (Berkes, 2009).
- The Māori equation to environmental knowledge is: "Knowledge Base + Sound Practice + Social regulations + Ritual control = Group morality" (Williams, 2009, p. 168). Strong obligation to the community in preference to self-interest, is a vital element of environmental sustainability, which can be driven by social regulations and ritual control so long as the community has faith in the whole 'cultural package'. "Ideological colonization" (p. 168) discredited mātauranga Māori to replace it with western worldviews, affecting not only legislation but also people's thinking and identification. To gain new faith, traditional values need to be reconstructed and recontextualized.
- 'Indigenous ways of knowing' should be seen as cultivated, dynamic, adaptive and reflective ways of meeting local needs and ambitions, rather than as static packages of knowledge, belief and practice. An open-minded approach, combined with a process of trust building, faith keeping, and benefit sharing, enables the establishment of inclusive 'communities of learning' in which stakeholders with diverse philosophies and resources share knowledge that inform decision-making (Robson, Miller, Idrobo, Burlando, Deutsch, Kocko-Schellenberg, ... Turner, 2009)
- Participants in cross-cultural collaborations often need "to agree to differ" (Gaze & Smith, 2009, p. 193). A good approach is to consent on joint goals while recognizing different prime responsibilities: for example the conservation of wildlife and the sustainability of culture. Joint monitoring can enhance such partnership, improve understanding regarding methodology, and build confidence in joint management decisions.
- Māori express cultural concepts predominantly obliquely, for instance through the use of ancestral sayings, myths, stories, prayer and song. The invaluable richness of mātauranga Māori, accumulated over a long period of time, is recorded in those eternally relevant metaphorical

vehicles and in the language itself. Their underlying messages can be difficult to grasp for outsiders, and there is always the risk of mistranslation. It is therefore crucial to appoint recognized cultural and linguistic experts from the relevant iwi in any attempt of interpretation and transfer of TEK (Wehi, Whaanga & Roa, 2009).

- In teams including Māori and non-Māori, sharing spiritual practices such as "karakia (prayers), whaikorero (oratory), waiata (song), whakairo (carving), taha toi (art) and story telling" (Uhlmann & Almstadt, 2009, p. 216) can be instrumental in trust building, as well as increase mutual understanding and consensus.
- If cross-cultural research teams focus on constructing empowering and respectful relationships, participants acknowledge limits and strength of their respective epistemologies, and science is applied to generate data by assessing TEK in appropriate depth of context, solutions can be generated that will resonate with many people from around the world, independent of their own culture (Lyver, Jones & Moller, 2009).
- "Consultation, collaboration, and dissemination" (Lowe, Carr, McCallum, Myers, Gorham, Holmes, ... Kanawa, 2009, p. 225) is a recommended framework for kaupapa research that draws from mātauranga and western science. Stakeholders should be structured into groups, and project specific protocols regarding the frequency and formality of meetings should be established. For example:
 - 1. The immediate project team, consisting of research participants from different cultural and professional backgrounds, meets frequently (once a month) at the least formal level;
 - 2. A focus group, consisting of Māori kaumātua (elder, tikanga advisor) and industry experts, meets with the project team infrequently but maintains a primarily formal relationship;
 - 3. At the most formal level, the wider community of interest and its associates, including Māori and non-Māori, are invited to formal hui at the beginning, in the middle and at the end of the project.
- Since environmental and natural resource management problems have become more critical, and finding solutions more complex in the past 20 years, cross-cultural and cross-disciplinary approaches involving a multitude of stakeholders, and integrating diverse ideas, world-views and ways of knowledge, have become more commonplace and need to become even more so (Allen, Ataria, Apgar, Harmsworth & Tremblay, 2009 / Ramstad, Paine, Dunning, Geary, Keall & Nelson, 2009).
- Traditionally, many indigenous peoples' ways of knowing, explaining and protecting the world
 include the creation of relationships between all beings and all things in the cosmos and the

maintenance of those relationships through shared values, social regulation and communal obligation. In Aotearoa, *mō ngā uri whakatipu* (for the coming generations) is a very common value, which is sustained through the narrative concept of *whakapapa*²⁰ and the duty of kaitiakitanga (Allen, Ataria, Apgar, Harmsworth & Tremblay, 2009).

There are many lessons to be learnt from the Tītī project. Presenting Māori ways of knowing to non-Māori stakeholders in a culture-to-culture encounter requires appropriate protocol and thorough contextualization, to protect knowledge-holders from intellectual exploitation and knowledge from misinterpretation and degradation. Notwithstanding this, as the world faces increasingly complex, interlinked environmental and social challenges that demand increasingly complex, inclusive and holistic approaches, knowledge from all sources needs to be considered (Berkes, Folke & Colding, 2000). In such collaborations, an important question concerns structure: what framework is appropriate to support and communicate values, protocols and principles in a culture-to-culture setting? Could some form of certification or ecolabelling be useful?

Teachings of the kumara: Why considering third party certification to present Māori culture?

First party certification, in simple terms, says "I am good" (Dovetail Partners, Inc., 2013, para. 2) and is some kind of assertion by a company that their product or service meets self-defined standards. Second party certification, using the same simple terms, says: "We are good" (para. 2) and is usually some form of compliance guarantee given by a professional association to their members. Accordingly, third party certification says: "They are good" (para. 3).

Karl Wixon²¹ suggests that providing better evidence of provenance for Aotearoa's seafood counters commodity pricing, and that such efforts are about "mana maintenance" (14.10.2010). There is no actual equivalent term in English for *mana*, but the WAl262 report renders it as "authority, prestige, reputation, spiritual power" (Waitangi Tribunal, 2011, p. 252).

The Māori proverb "Kāore te kumara e kōrero mō tōna ake reka – it is not for the kumara to speak of its own sweetness" (Speake, 2003, under 'K' for kumara) illustrates that mana cannot be obtained through self-praise. For instance, the mana of a Māori community is enhanced through validation of correctly performed rituals and tikanga by visiting experts from other iwi or hapu (Mead, 2003). Whether this project is about mana maintenance or about branding, third party certification principles offer analogies to tikanga Māori that are worth considering.

Conroy (2007) argues that some nongovernmental organizations (NGOs), such as Greenpeace or World Wildlife Fund (WWF), use market campaigns not only to inform consumers about unethical practices but also, as in some prominent campaigns in the 1990s, to cause targeted

²⁰ Whakapapa: Genealogy, ancestral connections, lineage.

²¹ Karl Wixon's tribal affiliation: Moriori, Ngāti Toa Rangatira, Kāi Tahu, Kati Mamoe, Waitaha.

companies to cooperate when their brand value came under threat. These unlikely collaborations resulted in the establishment of third party certification schemes that are now common brand insurance in industries such as forestry (e.g. the Forest Stewardship Council) and fisheries (e.g. the Marine Stewardship Council). Conroy uses the term 'certification revolution' because the impact certification has had on global corporations in the past two decades is remarkable; positive change was not triggered by legislation but by the market-driven instrument of certification.

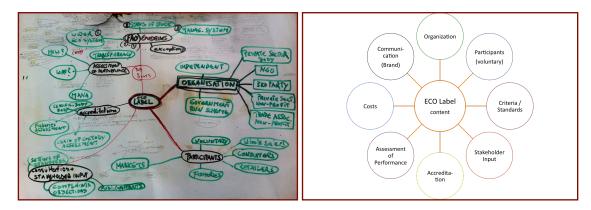
Recent Greenpeace campaigns against destructive fishing practices involving Māori owned fishing companies (Thomas, 2013) have created additional incentives to consider certification, or ecolabelling. Ecolabelling is not only a culturally appropriate instrument to promote good practice and enhance brand value, it also has the potential of protecting the mana of the people involved and their associated whānau, hapu and iwi.

The FAO guidelines

Third party certification is the most senior form of verification and is defined by FAO (2009) as the operation by which an independent organization (the third party) provides "written or equivalent assurance that a product, process or service conforms to specified requirements" (p. 4). Participating companies are usually audited by an accredited certifier and are allowed to use the certification mark if they meet certain standards (Parkes, Walmsley, Cambridge, Trumble, Clarke, Lamberts, ... White, 2010). Criteria are commonly negotiated with stakeholders including industry representatives as well as social, environmental, and community organizations (Conroy, 2007).

Schemes that verify environmental sustainability are commonly referred to as ecolabel. The demand for the latter has increased to such an extent, that the FAO published "Guidelines for the Ecolabelling of Fish And Fishery Products from Marine Capture Fisheries" (thereafter also the 'FAO guidelines') in 2005, and a revised edition in 2009. The FAO guidelines provide voluntary recommendations, definitions and principles, such as information on how to set up standards or how to audit candidates. They also feature three minimum issues that ecolabels should address, which are the management system, the status of the stock under consideration, and the wider ecosystem. The information provided is invaluable for ecolabelling projects, but hardly covers cultural or social considerations. Interesting is the repeated notion that relevant traditional, fisher or community knowledge should be included, but only if "its validity can be objectively verified" (p. 2, p. 7, p. 8 & p. 10); in fact, neither the term 'culture' nor 'indigenous' appears in any of the 108 pages (FAO, 2009).

The FAO guidelines do not intend to guide the cultural approach attempted here, but serve well as a starting point. The FAO principles, plus a peer reviewed report on current ecolabels from around the world (Parkes et al., 2010), formed a presentable framework for adaption and refinement through feedback from potential stakeholders and opened the path to the final purpose of presenting the ethos of taonga.



Images (1) An early attempt to visualize aspects found in the 'Guidelines for the ecolabelling of fish and fishery products from marine capture fisheries' (FAO (Rome), 2009). (2) A simplified sketch of main elements used to explain ecolabelling in early feedback presentations.

Following are two case studies that explore how principles of third party certification and ecolabelling, have been adopted in different cultural contexts.

Case Study 1. The 'Seychelles Hook And Line Fishermen'

This ecolabel is managed by members of the Fishing Boat Owners Association (FBOA), and has utilized the FAO guidelines in the design process. The fisheries entitled to use the certification mark are mainly traditional small-scale fisheries that use fishing techniques that mitigate damage to the fragile marine ecosystem around the Seychelles. The fishermen themselves initiated the labelling program to gain acknowledgment, and to add value to their catch through traceability and independent verification of responsible fishing approach.

In partnership with the Seychelles Fishing Authority and the Seychelles Bureau of Standard, an independent agency with ISO 9001 certification status, a similar program from France was adapted to suit local circumstances. The commitments, criteria, and control mechanisms have been developed in collaboration with those partners and through consultation with associated clients (restaurants, hotels and retailers).

Certification is granted after two steps: (1) an initial audit by the FBOA (the second party) which, in case of a positive outcome, is completed once the boat owner and fishermen have signed a commitment letter; and (2) an assessment conducted by the SBS (the third party). The SBS conducts a minimum of one random compliance check per year and boat, and more in case there are complaints. Non-conformity issues are reported to the fishing boat owner and the FBOA, after which a three-month period for rectification is granted before a further assessment is undertaken.

There are 20 criteria/standards that must be respected by the fishermen regarding fishing technique, characteristics of boat and crew (Boats and crew need to be 'Seychellos' – based in the Seychelles), processing and labelling of the catch, storage of fish on board, as well as storage and disposal of waste. If fishing units refuse cooperation with the SBS, or if non-conformities haven't

been rectified within the three-month period, participation in the program is suspended or with-

The communication of the scheme is innovative as it includes the design of seven specific tags that physically attach to the fish and provide complete traceability. The tags are made from plastic and are fastened to the fish's gill flap with nylon string identical to the ones found on new clothing. Six of the seven tags immediately identify the fish as one of the main targeted species, while one is generic for all remaining species caught occasionally. The tags are color-coded and feature a reference number that needs to be entered manually onto a website to trace the fish.

Once the reference number is entered onto the specified website, information regarding the fishermen that caught the fish, the approximate fishing location, as well as the fishing gear used is provided. The text is complimented with a photo of the boat, the captain and the crew. The generic website of the organization is kept concise and consumer friendly. It provides acceptable transparency regarding the certification process, and offers authentic Seychelles seafood recipes, photos, links, et cetera.

The first labelled load of fish was delivered to the Rungis wholesale food market in Paris in December, 2009, and sold for 25 percent more than usual, despite a generally depressed market at that point.

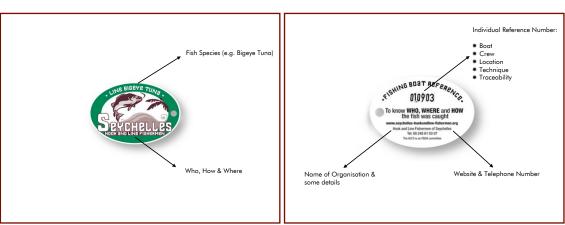
Sources for Case Study 1:

Seychelles Hook and Line fishermen & Fishing Boat Owners Association. (2013). Seychelles Hook and Line Fishermen. Retrieved May 8, 2013, from http://seychelles-hookandline-fishermen.org/Lagarde, V., & Pommeret, G. (2010). Labels from Paradise. Samudra Report: The Triannual Journal of the International Collective in Support of Fishworkers, 1(56), 46–49.

Email correspondence with Virginie Lagarde, the Program Manager, FBOA, Seychelles.

[End of case study 1]





Images Four slides I used during presentation of ideas for feedback.

There are a few things to learn from the Seychelles model. The Seychelles system seems simple and accessible but also credible and professional. The general tone seems to fit the purpose and to reflect the origin without being too exotic for overseas customers.

The fishermen use ecolabelling to market their fish without mentioning the fact that parts of the certified methods are actually regulated by government legislation in the Seychelles. This can be applied to a New Zealand label as well, because the management of marine resources is regulated by New Zealand legislation (see chapter 3) and enjoys an outstanding international reputation for good performance – backed up by peer reviewed research (Alder, Cullis-Suzuki, Karpouzi, Kaschner, Mondoux, Swartz, ... Pauly, 2010; Worm, Hilborn, Baum, Branch, Collie, Costello, ... Zeller, 2009).

While it became apparent, from conversations (I had) with fishermen, that not everybody agrees with all aspects, there is good reason to communicate the positives of New Zealand's fisheries management system, but also to facilitate debate that can inform standards of the proposed program and fill gaps where the system has weaknesses.

The set of criteria concerning the characteristics of boat and crew are interesting and pose the question how to handle the issue of Māori and non-Māori participation. In the Seychelles part of the objectives are to secure food sovereignty, and to strengthen the local economy, therefore the regulations are designed to keep foreign vessels and foreign crew out of the system. In the spirit of

Awatoru and the Wai 262 report, the New Zealand model should focus on strengthening Māori economy and culture, but also facilitate reconciliation of the Treaty partners. Excluding non-Māori New Zealanders from participation in this process seems counterproductive.

The criteria of the Seychelles model regarding handling and storing of fish covers issues such as quality assurance (and animal welfare) that address important market requirements, and that should be considered for inclusion into a New Zealand based labelling scheme as well. This could possibly happen by locating corresponding traditional tikanga where possible, or by creating 'new' tikanga that concern those issues.

Case Study 2. Hua Parakore

Hua Parakore is an indigenous scheme mainly designed to verify 'pure' authentic Māori food and food production (mahinga kai), but also expanding into other areas such as wool, bee keeping, forestry and traditional medicine.

The development of the scheme was facilitated by its umbrella organization, the National Māori Organics Authority of Aotearoa (Te Waka Kai Ora), which also hosts Hua Parakore's online presence in form of a Wordpress blog. There were ten fully certified farms and ten further registered candidates by the end of 2012.

The inclusion and development of indigenous knowledge (mātauranga) and cultural practices (tikanga) fills a niche in the organics sector. The process of becoming certified itself is streamlined with Māori etiquette and provides for diversity of local approaches in fulfilling Hua Parakore criteria / principles.

The objectives of Hua Parakore include local food sovereignty and security, uncontaminated quality food, authentication and protection of seeds, as well as contribution to community and family wellbeing, self-sufficiency, and kaitiakitanga.

A scholar and community based research team was formed for the development of Hua Parakore. The main methods apart from literature research were rigorous community consultation and collaboration informed by the ISEAL Standard-Setting Code (ISEAL Alliance, 2010), and included systematically staged hui (meetings), *wananga* (Māori learning space), and interviews with stakeholders coming from mixed backgrounds ranging from regional community sector through the organic sector to the government sector. The collected data was synthesized to form the framework and the six main principles guiding the verification process of Hua Parakore producers:

Whakapapa (genealogy, ancestral connections, lineage)

Producers need to:

- provide documentation of who is working the land
- provide provenance of plants, seeds and livestock

- describe the way they understand the relationship and interaction between the spiritual world, themselves, the products and the land
- · describe their way of securing purity of all elements (no non-natural input at any stage)
- describe their way of processing and packaging
- · describe their local tikanga regarding whakapapa

Wairua (spirit, soul)

Producers need to describe their way of:

- maintaining spiritual health of land, people and product
- approaching above through tikanga (for example through incantation or karakia)
- implementing further tikanga regarding wairua

Mana (authority, prestige, reputation, spiritual power)

Producers need to describe their way of:

- sharing benefits and success with the wider community (reciprocity and exchange)
- maintaining community relationships (networking, working bees, sharing workloads, employment schemes, mentoring)
- working towards food sovereignty, food security, conservation of energy and resources
- defending Te Tiriti o Waitangi (through education, wānanga, maintaining tino rangatiratanga)
- enhancing the Mana of their family and community through tikanga

Māramatanga (enlightenment, insight, understanding, light, meaning, significance, brainwave)

Producers need to describe their way of:

- implementing 'other' types of knowledge and 'other' ways of knowing in their practice
- identifying natural cycles and indicators that guide their actions (for example seasons and customary planting calendar)
- achieving māramatanga for themselves and others through cultural practices they already use,
 and they will start to use in the future

Te ao tūroa (world, earth, nature, light of day, the entirety of the natural world)

Producers need to:

- produce a list of inputs for verification that all product is "completely free of unsafe inputs such as chemical fertilizers, pesticides, herbicides, pharmaceutical medications, GM and nanotechnology based products" (Hutchings, Tipene, Carney, Greensill, Skelton & Baker, 2012, p. 140)
- produce a soil test in some instances
- explain how they avoid pollution through exposure of substances from external origin (for example through the use of equipment, spray drift, contaminated water, waste)

Mauri (the life principle or living essence contained in all things, animate and inanimate) Producers need to answer questions regarding:

- Cultural practices to evaluate and enhance mauri in the product (for example through the use
 of kaitiaki, water and soil testing, environmental indicators)
- Cultural practices that enhance diversity in their production (for example through a variety of live stock, diverse seed stocks, companion planting, et cetera)
- Cultural practices they use to maintain healthy soils
- · Composting and the use of live stock for soil productivity (fertilization)

Becoming Hua Parakore verified comprises three stages. In stage one, candidates become kakano (seed) members. Here they support and promote Hua Parakore but also receive access to resources they need to become a verified Hua Parakore producer. In stage two, candidates are Tipu Ranga (growing seedling) members that commit to transforming their production according to Hua Parakore standards. Community elders, regional officers, farmers and Hua Parakore planning resources now support the candidates in self-evaluating their place specific knowledge and associated cultural practices in relation to the Hua Parakore requirements. This is followed by the design and implementation of a strategy to meet verification criteria. In stage three, candidates are awarded the Hua Parakore verification status through executive members of Te Waka Kai Ora as well as community representatives if all present are satisfied that requirements have been met.

Sources for Case Study 2

Hutchings, J., Tipene, P., Carney, G., Greensill, A., Skelton, P., & Baker, M. (2012). Hua Parakore: An indigenous food sovereignty initiative and hallmark of excellence for food and product production. *Mai Journal, 1*(2), 131 – 145. Retrieved May 10, 2013, from http://www.journal.mai.ac.nz/content/hua-parakore-indigenous-food-sovereignty-initiative-an d-hallmark-excellence-food-and-product

Te Waka Kai Ora. (n.d.). Hua Parakore. *Te Waka Kai Ora.* Retrieved May 10, 2013, from http://tewakakaiora.wordpress.com/huaparakore/

[End of Case Study 2]

The Hua Parakore scheme proposes as well as validates a range of approaches to vital themes appearing within the *Taonga – not dead fish* project, such as a cultural appropriate protocol for the verification process, the sourcing and explanation of concepts important to Māori, the alignment of Māori principles with market requirements, or the provision for diversity of cultural practices, by allowing different methodology to satisfy objectives.

METHODOLOGY & APPROACH (Chapter 2)

Presenting Māori culture in the marketplace through an ecolabelling inspired process requires a culturally considerate, human centered and interdisciplinary design approach. As discussed in the introduction, the task is of stereoscopic nature: promoting fisheries that engage themselves in sustaining Māori culture on one side, as well as enabling consumers to regain 'farmer's market experiences' on the other side. Apart from the principal methodology of coauthoring the proposition through *kaupapa Māori* research principles, methods for gathering data that focused on pragmatic or logistic aspects of the project borrowed approaches found in *service design*.

Service design methodology

Homlid and Evenson (2008) as well as Morelli (2007) describe service design as the systematic application of design concepts to the design of services. The above authors' ideas in synthesis form the logistic methodology module of the *Taonga – not dead fish* project:

Stakeholder centered approach

- Facilitating stakeholder input throughout the design process: The stakeholders become codesigners, the designer drives, nourishes and facilitates that process
- Identifying, analyzing and mapping the "actors" (Morelli, 2007, p.11) and their relationships: visualizing who the stakeholders are, what they do, how they interact, why they do what they do, what their skills are and what facilities they provide. This usually results in a modular diagram that provides a tool for intuitive innovation that assists, stimulates, and even provokes stakeholder input.²²

Interdisciplinary design approach

- Using scenarios to illustrate, explain and explore innovations of a service / system: the modular diagrams are deconstructed, recomposed or re-imagined to create new scenarios that explore effect of alternative sequencing.
- Using prototyping to illustrate, explain and explore interfaces and experiences. In the Taonga not dead fish project for instance, prototype QR²³ labels link to blueprint Internet blogs.
- Using dramaturgic methods to illustrate and explore solutions: for instance, the filming of staged scenarios (possibly using the prototypes).

²² Provoking stakeholder input occured especially when I made mistakes.

²³ QR or QR code (Quick Response Code) is a kind of barcode that is able, amongst other things, to connect customers instantly to specific websites through the use of smart-phones with built in cameras and the relevant open-source software.

Kaupapa research principles for non-Māori

It starts with us, it involves us, it ends with us and that is simple, unfortunately the us is not simple. Māori society is a complicated society – and a diverse society, so it takes a long time to even begin to understand what we are like. I think the best way to start is to assume that you love Māori. Start with that position. (Smith, 2008)²⁴

Linda Tuhiwoi-Smith (1999) describes a range of models for non-indigenous researchers working on projects that involve Māori, of which three were considered in planning and conducting this research for the *Taonga – not dead fish* project:

(1) Tiaki or Mentoring Model

Conveyed by Graham Smith (1992, as cited in Smith, 1999): the non-Māori researcher is guided and sponsored by Māori.

This was primarily approached through formal supervision by Te Kahutoi Te Kanawa initially,²⁵ and Haare Williams ²⁶ finally. In addition, Nga Aho sponsored participation at a range of seminars, workshops and hui (gatherings) that provided opportunities to present, receive feedback, as well as discuss the proposition.

(2) Power-sharing model

Another proposition by Graham Smith (Smith, 1992, as cited in Smith, 1999): the non-indigenous researcher needs to "seek the assistance of the community to meaningfully support the development of a research enterprise" (p.177).

On the fishing industry side, following the power-sharing model was attempted through consultation with fishermen from small-scale Māori fisheries. A number of conversations with commercial Ngāti Porou and Apanui fishermen, community and kaitiaki during a dedicated research journey around the East Cape of New Zealand's North Island in April 2011 failed to establish formal research relationships, but informed the project in intangible ways.

A much firmer relationship was established with fisherman Daniel Scott and his whānau.²⁷ Daniel Scott is an experienced commercial fisherman, professional diver, fishing quota and boat owner, who is fishing for Rock Lobster from Tairua, Coromandel Peninsula. Daniel Scott's father

²⁴ Quote: Linda Tuhiwai Smith about kaupapa Māori theory & research.

²⁵ Te Kahutoi Te Kanawa: Puna Ako (arts) and coordinator for Masters of Applied Indigenous Knowledge at Te Wanaga O Aotearoa; Cert Ed Tech, PGDipFA, MA&D, PhD (candidate AUT). Tribal affiliation: Ngāti Maniapoto, Waikato, Tuwharetoa and Rarua (Iwi); Ngāti Kinohaku and Uekaha (Hapu).

²⁶ Haare Williams: Artist and poet; executive advisor for Auckland War Memorial Museum and Voyager Maritime Museum. Tribal affiliation: Te Aitanga-a-Mahaki, Rongowhakaata and Tuhoe.

²⁷ Daniel Scott's tribal affiliation: Te Arawa, Te Atiawa, Ngāti Kahungunu.

Blake Scott also offers extensive experience as commercial fisherman, *Pāua* ²⁸ diver, as well as fishing quota and boat owner. The Scott family has been fishing commercially for many generations, and their passion for fishing is endless, their knowledge and experience is deep and rich, their fishing stories are numerous, and their success is remarkable and well known in the industry.

Consultation with Daniel Scott and his family happened exclusively in face-to-face meetings including undocumented conversations at Daniel Scott's home, as well as audiovisual recordings on and off his fishing vessel. Consultation turned into collaboration, when the family kindly hosted a film team for a weekend, and not only demonstrated their way of fishing for the camera, but also staged scenarios to illustrate aspects of the proposed verification scheme.

In regard to design and communication aspects, following the power-sharing model was approached through the presentation of evolving work during three consecutive annual meetings of Nga Aho, the professional network of Māori design professionals. The feedback, discussions, ideas, leads, and advice have shaped the project.

(3) Bicultural model or Partnership model

Both indigenous and non-indigenous researchers are working and shaping the research together.

Following the third model was going to be achieved through collaboration with graphic artist Desna Whaanga-Schollum,²⁹ who intended to facilitate the inclusion of a fishery from Mahia Peninsula associated to her through whakapapa. Sadly, the research partnership ceased in mutual consent after six month because Desna Whaanga-Schollum was required in a number of critical projects that needed her full attention. Nevertheless, significant outcomes were achieved in collaboration with Desna Whaanga-Schollum including the development of a case specific model for intercultural research partnership (see image), valuable discussions that lead to cultural insights, and the joint accomplished initial consultation with Haare Williams.

Initially approached as a consultant, Haare Williams became a formal supervisor, a mentor, and a collaborator that contributed with principal concepts and ideas. He worked on this project by editing as well as composing text, poetry and karakia, and by conducting interviews, staging scenarios and addressing stakeholders on audiovisual recordings.

²⁸ Pāua (te reo Māori): Abalone, Sea Ear, Haliotis Iris (Greek)

Desna Whaanga-Schollum: Bachelor of Design (visual communication); executive at Nga Aho; Toi Iho. Tribal affiliation: Ngāti Rongomaiwahine, Ngāti Kahungunu.

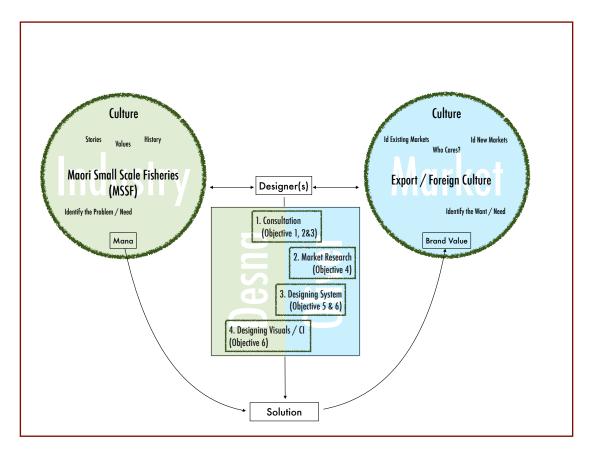


Image The framework for a culture-to-culture research partnership with Desna Whaanga-Schollum. The square in the middle illustrates the mapping of responsibilities and objectives between the insider, or Māori researcher ("Desna") and the outsider, or non-Māori researcher ("Oliver").

THE INDUSTRY, THE MARKET, THE OPPORTUNITIES (Chapter 3)

We need to commercialize our culture ...

John Panoho, Navigator Tours (as cited in Wixon, 2007).

... and we need to culturalize our commerce.

Ropata Taylor, Wakatu Incorporation (as cited in Wixon, 2007).

The two quotes above serve as a reminder for the different layers of this project. The design proposition that is detailed in the next chapter intends to address both ambitions in chorus by interfacing Aotearoa's Rock Lobster industry with their clients through a tracing and verification scheme promoting cultural vitality as a key to holistic sustainability.

In order to explore further opportunities for the design process, this chapter looks at the history of New Zealand's fisheries, predominantly from a Māori point of view, before focusing on the culture, the actors and the parameters of Aotearoa's Rock Lobster trade.

The Wai 22 report

The information presented in this, and in the next two sections (covering Aotearoa's fishing history) is sourced, unless referenced differently, from the *Report of the Waitangi Tribunal on the Muriwhenua Fishing Claim* or *Wai 22* (New Zealand & Waitangi Tribunal, 1988), which corresponds to the 22nd formal claim against breaches of the Treaty of Waitangi handled by the Waitangi Tribunal.

The report provides extensive historic portrayal of Māori fishing tradition, based on hearings of knowledge holders, mostly elders, of the five Muriwhenua tribes of the far north of New Zealand. The Waitangi Tribunal additionally commissioned independent senior fisheries consultant Dr Habib to substantiate and supplement the findings through further research.³⁰

The publication coincided and consequently became instrumental in challenging the introduction of the *Quota Management System* (QMS), which is New Zealand's principal fisheries management system since the mid 1980s.

³⁰ Habib's report drew from archaeological evidence, works of other scholars, as well as historic letters, journals, log books, theses, et cetera from early explorers and settlers. Many of Habib's sources are not obtainable as they contain confidential information, e.g. precise fishing locations. It is for this reason, and for the reason that his report was of highly analytical nature in itself, that his primary sources are not referenced here in most cases.

Māori fishing Aotearoa's waters before 1840

Tribal variations of traditional Māori narratives referring to Aotearoa's origin and discovery have in common that they are all fishing stories. The Polynesian hero Maui fished up *Te Ika A Maui* ('Maui's fish': the name of New Zealand's North Island), while fishing from *Te Waka a Maui* (the 'canoe of Maui'), which remains a traditional name for Aotearoa's South Island in some areas. The famous Polynesian explorer Kupe on the other hand, was chasing behind a great octopus when he discovered Aotearoa for the people of Hawaiki, who, after being advised by Kupe about the abundance and quality of marine resources in particular, came to settle. These stories are fundamental to the Māori worldview and just two of the countless accounts that evidence the significant role fishing plays in Māori culture.

One of the most remarkable traditions of Māori fisheries is to be non-traditional. Māori are naturally progressive learners and innovators. Their methodology of managing territorial fishing rights, ecological knowledge, and especially their trading skills and sophisticated fishing techniques were admired and documented by early European settlers, traders and adventurers. Their evolving methods responded to the many changes of environment and other circumstances that the great Polynesian explorers experienced in their unparalleled migration. After their arrival to Aotearoa from Hawaiki, Māori reinvented and refined fishing gear and methods they had brought with them to adapt to their new found home, and the many species they hadn't encountered before. When the first Europeans arrived, fishing effort was diversified with Māori targeting about 120 individual species in and around Aotearoa.

The fishing methods included many forms of line and hook fishing. Lines of different length and strength were manufactured from *harakeke*³¹ and of such good quality that early European traders purchased them for big game fishing. Māori used a huge range of species-specific hooks made from bones, shells and timber, and a large variety of different lures for trolling. Other methods used were trapping, diving, and netting. More than 30 different names in te reo Māori for different kinds of fishing nets are identified in the Wai 22 report, ranging from small hand nets to huge seine nets. The latter have reached up to nine meters deep with a length of 900 meters or more. Some accounts doubling that length again. Joseph Banks, botanist on the Endeavor, noted on his visit to the Bay of Islands in 1769, that Māori laughed at the fishing nets they brought from Europe.

The making of those bigger nets employed entire villages over a long period of time, and were used for communal fishing events that could go on for several days and include more than 1000 people in the fishing activity. Those were social events on tribal level that facilitated mingling and bonding of many whānau and hapu. A major chief that coordinated the entire event with assistance of subordinate leaders typically divided the catch.

Both sides learnt from each other. Māori learned new whaling techniques, eagerly engaged in new forms of trade and integrated new imported materials to improve existing fishing tackle, while

³¹ Harakeke: New Zealand plant similar to flax.

Europeans learnt from the rich variety of Māori fishing gear, their innovative fishing methods as well as particulars of their social structure that continued to dominate New Zealand's society until the 1860s.

Much to the detriment of natural resources, there are some quintessential aspects of Māori culture that Europeans have always struggled to understand. In strong contrast to the constantly evolving methods for achieving tangible objectives of everyday life, the deeply customary value of protecting resources for future generations always remained fundamental to Māori.

Before further investigating ancient Māori values and principles that withstood the test of time, it is necessary to understand what happened in New Zealand in regards to fishing after 1840, after the Treaty of Waitangi was signed that supposedly granted Māori the unrestricted right to their fisheries as long as they wished.

Fishing the slack tide: Māori fisheries after 1840

Fishing continued in pretty much the same manner for the next three decades after the signing of the Treaty of Waitangi in 1840. Māori had no major concerns about sharing their resources with non-Māori fishermen because marine life was abundant and at that time non-Māori fished predominately for recreation or subsistence.

The tide started to turn slack for Māori fisheries from the late 1860s. Britain handed over political control to the settlers who by now outnumbered Māori. War was declared on some iwi and racial hostility increased. The New Zealand government incorrectly determined that traditional Māori fisheries were limited in scope, and decided that the Crown should manage Māori use of marine and freshwater resources. The government started to pass laws that weren't in the spirit of the Treaty of Waitangi. Instead, according to the Wai 22 report, legislation was intended to restrict Māori access to their resources, and to break their ambitious trading habits.

These were the beginnings of government misinterpretation of the unrestricted fishing rights of Māori that were clearly articulated in the Treaty of Waitangi. Māori access to the resource was now treated as a non-exclusive right to fish for personal use only. Over time, this attitude became the mainstream conception that came to be reflected in all fishing policies and in the enforcement of the law.

New Zealand's first fishing legislation, the Oyster Fisheries Act of 1866 prohibited Māori to commercially exploit their traditional oyster beds disguised as legislation regulating supply for the Auckland market. In practice, the beds were leased out to commercial non-Māori fisheries and entirely depleted. To mitigate those policies, reserves were promised for customary take, but Māori waited a long time before they received a few oyster beds in 1913, and even then, they were not allowed to commercialize them.

Further legislation prohibited the use of traditional Māori fishing nets as a precaution of alleged overfishing, and more Māori fisheries were taken over by non-Māori as a result. In addition, during

the last three decades of the 19th Century, trout and salmon were introduced into New Zealand rivers and lakes, displacing many indigenous freshwater species that were an important food source of inland tribes.

From the end of the 19th Century the Māori fisheries were in a constant state of decline, and with it the social structures of many whānau, hapu and iwi. The happy days of communal fishing events disappeared entirely and Māori became victims of an ongoing siege that displaced their way of life.

In stark contrast, and not without ongoing Māori protest and claims, the national fishery that was now entirely driven by non-Māori grew out of hand. According to the WAI 22 report, the inshore fishery of the continental shelf showed clear signs of overfishing from the 1960s. Nevertheless, the Government decided to remove the precautionary restrictions on fishing licenses they had introduced in the 1930s, and replaced them with open access management policies and further incentives designed to expand the industry. Trawlers ventured further and further away from their base, and also started invading and depleting fishing grounds that had been nurtured by Māori for hundreds of years.

Lock & Leslie (2007) state, that in order to clear the way and save money for the introduction of a new quota system designed to manage the fisheries better (see next section), the New Zealand government took the disastrous decision, manifested in the Fisheries Act 1983, to remove all small-scale and part time fisheries from the commercial fishing industry. Anyone that had an annual income of less than NZ\$ 10.000 or earned less than 80 percent of income through fishing wasn't eligible for quota and had to leave the industry without compensation. Fishing rights were now in the hands of fewer fishermen, and many Māori were amongst the victims.

The declining number of Māori that had stayed on ancestral land by carefully patching together a livelihood from juggling part-time fishing and part-time farming now literally had to watch strangers plundering their traditional fishing grounds – authorized to do so by the same Treaty partner that once had promised them unrestricted access to their fisheries. To conclude, from the 1860s to the 1980s, Māori were forced out of their fisheries and their "ancient association with the seas was virtually ended" (New Zealand. Waitangi Tribunal, 1988, p. 11).

A lifeline? The Quota Management System

Bjørn Hersoug (2003) states that New Zealand's inshore fishery was exhausted by the end of the 1970's, and urgent action was required to save the fishing industry. Firstly, the Government extended the *Exclusive Economic Zone* (EEZ) to 200 nautical miles, and secondly they tested a new management system, the QMS (Quota Management System). New Zealand became a "marine superpower" (page 128) in control of the fifth largest EEZ in the world.

The QMS was introduced in 1986. Its novelty was to restrict the quantity of fish extraction per year, instead of moderating the fishing effort. The following explanation is based on information found on a website by the Ministry for Primary Industries (2010).

The *Total Allowable Catch* (TAC) is the total amount that can be fished from New Zealand's EEZ per year. *The Total Allowable Commercial Catch* (TACC) is the portion of the TAC allocated for commercial fisheries after allowances for recreational, customary and other sources of fish related mortality have been made.

The TAC is not set for all fish around New Zealand eternally, but annually for specific *stocks* because geographically isolated populations (stocks) need to be managed individually to secure the overall sustainability of the species. These individual populations, or stocks are defined by *Quota Management Areas* (QMA). This is the reason Auckland's amateur fishermen are allowed to keep 10 Snapper per day when they fish the Manukau Harbour, but only six when they fish the Waitemata Harbour. They are fishing from different populations of snapper that need different levels of protection.

The Total Allowable Catch (TAC) is set by the Minister of Fisheries and represents the scientifically estimated maximum harvest before a stock's continuous productivity is diminished. The Total Allowable Commercial Catch (TACC) is divided into a number of *Individual Transferable Quotas* (ITQ), that may be owned, leased, and transferred like any property. All catch needs to be landed to *Licensed Fish Receivers* (LFR) as part of monitoring that allocated quota is not exceeded.

Initially, ITQs for fish species that were introduced into the QMS were given at no cost and in perpetuity to the people who held commercial fishing permits for those species. The allocation was based on *catch history*: the amount fish permit holders had caught over previous years.

The QMS is continually evolving, but Fishserve's website (www.fishserve.co.nz) disseminates latest developments. A well-researched summary and evaluation of the system's first 20 years has been compiled by Lock & Leslie (2007).

The QMS wasn't designed to reconcile the Treaty of Waitangi parties. In fact, when the QMS was introduced, it must have felt like the final blow to most Māori. Just as the Waitangi Tribunal was given a widened mandate to investigate Treaty claims all the way back to 1840, which was instrumental to the huge increase of claimants in a now more favorable national and international climate regarding indigenous rights, the Government started to gift exclusive fishing rights in perpetuity, that were clearly guaranteed to Māori through the Treaty, to exactly the same people that were responsible for depleting their resources (New Zealand. Waitangi Tribunal, 1988).

Hersoug (2003) recounts how the Waitangi Tribunal, that had just released the Wai 22 claim of the Muriwhenua tribe, recommended the Government to stop the new management scheme until all affected tribes have been consulted. Parallel to that, numerous iwi and other Māori organizations applied for an injunction of the QMS, which was granted in November 1987.

Nevertheless, quota eventually became the "currency" for settlements with iwi, which Hersoug describes as "probably the best deal ever made with any aboriginal people in terms of fisheries" (2003, p. 134).³² Negotiations between the Crown and Māori parties eventually resulted in the Māori Fisheries Act (1989) that allocated an interim 10 percent of all then current ³³ quota to Māori.³⁴ The Crown additionally provided NZ\$ 10 million for the formation and running of the Māori Fishery Commission (MFC) – the "steward" of the settlement and settlement assets (D. Sykes, kōrero, October 21, 2013). MFC installed a commercial branch, Aotearoa Fisheries Limited, to start utilizing the quota and with mandate to acquire further assets. The Māori Fisheries Act also introduced taiāpure, which are coastal areas of cultural significance for local Māori. These areas are managed by the community with involvment of the local hapu and iwi, once a complex consulting process with all local stakeholders has been completed successfully.

From a Māori point of view, so Hersoug (2003) illuminates, this initial settlement was not satisfactory and iwi continued to press their claims. Negotiations stalled until Sealord, a major player of New Zealand's seafood industry, went up for sale in 1992. The New Zealand government purchased 50 percent of Sealord and handed it over. Māori now owned 23 percent of all existing ITQs.

Andrew Day (2004) explains how the energy created from these events also triggered the Māori Settlement Act in September 1992, that allocated 20 percent of future quota (for species yet to be included in the QMS) to Māori. The Act also created Māori seats on fisheries statutory bodies, acknowledged the special relationship of Māori and the Crown, and legislated customary fishing as a different entity, that would be managed separately and have priority over recreational and commercial interest. Iwi were asked to accept the act as full and final settlement and cease current and future legal action concerning their fisheries.

Not all iwi endorsed the settlement (20 percent were opposed), and the distribution of assets to lwi were far from resolution, but in the Quota Management System the nation had found a tool that helped set milestones on the road to final settlement of fishery disputes between the Treaty parties.

As a management system, "the QMS is not perfect, but is perfectible" (F. Blaha, kōrero, October 19, 2013), and even though it rates highly in international reviews (Hersoug, 2004; Ministry of Fisheries, 2010), it has opponents and there is room for improvement.

A detailed investigation of sociological, ecological, economical and cultural matter in questions concerning the QMS, such as fairness of quota distribution, is beyond the scope of this paper, but

³² Bjørn Hersoug is a researcher from Finland.

³³ At that point in time, the QMS covered 29 species (correlating to 80% of the total catch).

In circumstances where the Government could not purchase quota to meet the 10% commitment, a cash payment to the equivalent was made.

the following issues compiled by Day (2004) are acknowledged as challenges and opportunities for the *NOA label*:³⁵

- The sustainability of species through the current QMS is still open to doubt.
- There is risk fishermen neglect personal stewardship of the wider ecosystem as interests are narrowed to property rights in one or several species.
- Fishermen that lease quota cease to have the long-term incentives of owners.
- · The division between recreational, commercial, and customary use creates competing interests
- The QMS is a private-property system and vulnerable to single-mindedness.36

Before exploring whether Māori tikanga and mātauranga offer solutions to some of the above problems, it is important to have a closer look at New Zealand's Rock Lobster industry, as it represents the pilot case for the design proposition.

New Zealand's Rock Lobster fishery: Small in volume, big in value

The Polynesian navigator Tupaia, traveling with Captain Cook on the Endeavor, painted a water-color in 1769 (see title page). It pictures Joseph Banks, the botanist of Cook's team trying to swap a piece of cloth for a Rock Lobster with an unidentified Māori of chiefly rank. The picture suggests three interesting things about Rock Lobster in the context of the *Taonga – not dead fish* project: (1) It is a culturally important species to Māori, (2) it is a traditional trading entity for Māori, and (3) the value has significantly increased since than.³⁷

The New Zealand Rock Lobster industry today consists of many small-scale fisheries (small boats, small crew) that target the single most valuable species. The following statistics are from New Zealand's Seafood Industry Council (2013) and refer to the entire year of 2012. The total landed catch of Rock Lobster was 2,780 tons, of which 2500 tons were exported live. Domestic sales and other forms of crayfish product made up the rest. All seafood exports totaled at 304,000 tons with a value of NZ\$ 1,569 million. With 2,598 tons, Rock Lobster constituted less than one percent of the total seafood export in volume, but with NZ\$ 223 million, it contributed 14 percent (NZ\$ 1,569 million) in dollar terms. This makes it New Zealand's top earner regarding seafood. It is followed by Hoki, a deepwater species and by Green Lipped Mussels, which are farmed. The favorable ratio between volume and value qualifies Rock Lobster for piloting the proposed labelling scheme, but how would it fit in with the industry? What are the processes from the 'boat to the plate' that need to be considered for the design of such a scheme?

NOA is the name of the proposed labelling scheme, which is explained in chapter 4.

E. g. over-capitalization resulting from high quota costs, loss of employment, *high-grading* (dumping of unwanted fish), and incentives to illegal fishing are some of the concerns.

³⁷ I don't actually know if the deal went through.

How New Zealand's Rock Lobster industry operates

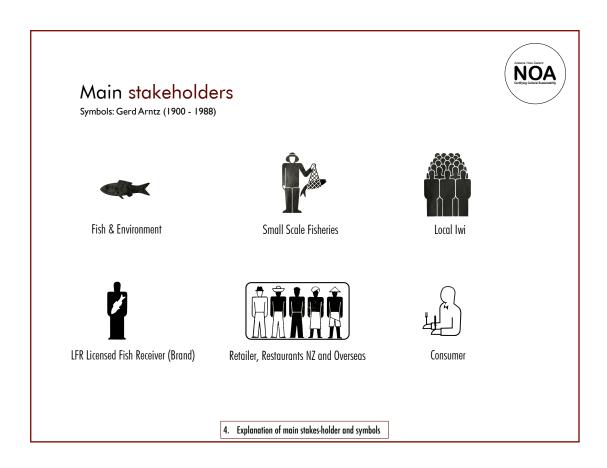
The information in this section stems from ongoing consultation mainly by email with Daryl Sykes, Executive Officer of the NZ Rock Lobster Industry Council (NZ RLIC), and from interviews with Blake and Daniel Scott, who are fishermen and quota owners operating from Waiheke Island and Tairua (Coromandel Peninsula). Geoff Creighton who works for Leigh Lobster (LFR, brand and exporter) was consulted additionally (kōrero, several dates).

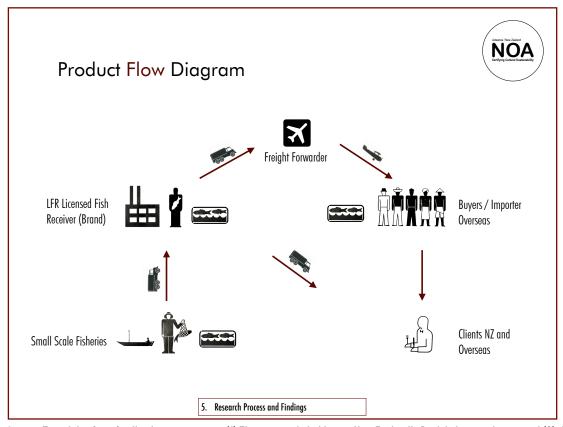
Rock Lobsters are mainly caught with baited traps popularly known as 'craypots'. The devices feature special escape gaps of statutory size to reduce retention of undersized Rock Lobsters. By-catch, the incidental catch of non-targeted marine life is very rare, and in most cases released alive and unharmed. The Rock Lobsters are usually stored in live-tanks aboard the fishing vessel.

The catch is then landed to the Licensed Fish Receiver (LFR), which in most cases is also the company and the brand that manages processing, domestic sales and export. Some fishermen, especially in remote locations, own or share shore-based live-tanks that keep Rock Lobsters alive until there is a worthwhile amount for collection and landing to the LFR.

Once the Rock Lobsters reach LFR premises, they are inspected and graded for size, weight and condition. A small quantity is destined for domestic clients, but the main bulk is transferred to holding tanks and conditioned for export. This is done by slowly cooling them down until they arrive at a state of hibernation (they become dormant). The lobsters are eventually packed on straw in polystyrene boxes (10 - 12 kg per box) and generally reach their destination within 40 hours on international flights. Some of the importers have their own holding tank facilities; others move boxes straight to customers, which are predominantly restaurants.

CRAMACs are the regional commercial stakeholder organisations for Rock Lobster quota owners, processors, exporters, and fishermen in each of the nine management areas (CRA being the acronym for Rock Lobsters in the Quota Management System). The NZ Rock Lobster Industry Council (NZ RLIC) is the national umbrella organization and principal service provider to the CRAMACs.





Images Two slides from feedback presentations. (1) The main stakeholders in New Zealand's Rock Lobster industry, and (2) the product flow.

Fishing for Māori values

The underlying management themes are utilization whilst ensuring sustainability. Management interventions include protection of breeding stocks and limits to extraction (ITQs). The notions of stewardship and custodial attitude are evident across lobster fisheries and there is a great deal of collective action by commercial rights holders in support of enhancing stock abundance; constraining illegal unreported removals, and making management decisions based on credible science. Kaitiakitanga. (D. Sykes, kōrero, August 6, 2012)³⁸

For the purpose of building criteria and protocol for the proposed labelling scheme, Māori tradition was predominantly considered to identify culturally important principles and time-honoured values that draw on (but do not insist on) established customary practices.³⁹ The Wai 22 report (Waitangi Tribunal, 1988) clearly states that tikanga varies regionally, is adaptable and dynamic by nature, and manifests the correct way ('tika') for managing tasks in harmony with the Māori worldview (see also Mead, 2003).

Tikanga includes modern methods and ideas (even many that originated in other cultures) as long as they pass the test of Māori core values and cultural principles (Mead, 2003). In specific contexts like branding or certification, 'new tikanga' should be co-developed or, according to Maffi & Woodley (2010), adapted from tikanga of the communities involved, rather than imposed from the outside. It is particularly critical that such new rules and methods are accepted and believed by fishermen of small-scale fisheries, because continuous monitoring and enforcement is hardly feasible.

The next section explores how the current stakeholder requirements of New Zealand's Rock Lobster industry can be aligned with ancient values and underlying principles of Māori culture. This exploration could be continued with Aotearoa's fishermen to foster codevelopment of new tikanga, as well as consolidation of ancestral tikanga in contemporary context. This collective exercise could be facilitated through a *community of learning* minimally comprising cultural experts and fishermen. Such a process is very likely to result in better compliance with relevant policies than the contrasting model of imposed regulations and enforced compliance through sanction. The feedback Daryl Sykes (NZ RLIC) provided on these ideas was crucial in weighing optimistic designer objectives against the industry's realities and economic interest.⁴⁰

³⁸ Daryl Sykes is Executive Officer for the New Zealand's Rock Lobster Industry Council (NZ RLIC).

³⁹ I am discussing cultural principles, concepts, beliefs et cetera often systematically throughout this exegesis, but in practice, these elements must not be dissected and utilized in isolation, because all elements work together in a non-linear combination.

⁴⁰ Daryl Sykes generous participation should not be understood as personal endorsement for the project.

Principles that withstand the test of time

Maui brought with him many Polynesian gods, including Tangaroa, the father of all marine fish apart from sharks ⁴¹ (Waitangi Tribunal, 1988). Accordingly, it is a long-established Māori belief that only Tangaroa can give permission to take some of his children for consumption. This belief accords with the traditional Māori principle of *rangatiratanga*, which grants all forms of life the right to determine their own destiny (H. Williams, kōrero, September 25, 2011).

As a consequence, Māori tradition regards all forms of life as principally *tapu*. Rock Lobsters for instance, are only culturally safe for consumption if the state of tapu is actively changed to the state of *noa*. This can be achieved by applying appropriate and locally varying tikanga, which more often than not comprises ritual action and karakia (H. Williams, kōrero, September 25, 2011).

Mead (2003) describes noa as a state of balance, within a cycle of *take* (cause, issue) – *utu* (response) – *noa*. If the issue is an overfished reef, tikanga is the critical response, or the utu that enables the reef to rebuild its ecosystem (in this case almost certainly the tikanga rāhui). Once the ecosystem is back to a state of balance, it will eventually be declared noa, most likely through a tapu-lifting ceremony. The ritual itself is in fact tikanga, probably the last part of utu before the reef is an ordinary ⁴² reef again, free of restrictions to be fished.

This *noa cycle* is both, the base of the name for the proposed NOA label, and its principle of inquiry: What is the cause of known imbalances, what are the responses of fisheries to resolve those issues, and when can the situation be declared noa? Finding the answers to those questions will nurture a reciprocal relationship, because the fishing grounds are protected by the same fishermen it will provide for: Haare Williams repeatedly articulated that *good fishermen are "takers & keepers"* (kōrero, several dates).

Contrary to historic misperception of New Zealand government (see chapter 3, *Fishing the slack tide: Māori fisheries after 1840*), Māori developed *kaitiakitanga* principles not exclusively to sustain subsistence, or in absence of trade. Māori traded fish long before European contact. Soon after the arrival of the first Europeans, and long before 1840 (the signing of the Treaty) Māori also started trading fish commercially on western lines (Waitangi Tribunal, 1988). In principle, kaitiakitanga entails practices and regulations that create a balance between people and their environments, and which take into account short-term and long-term economic gain. Traditionally, those practices and regulations were mainly controlled and enforced through social and spiritual means (Mead, 2003; Waitangi Tribunal, 2011).

New Zealand's fishing legislation replaced, and in some instances possibly absorbed (D. Sykes, kōrero, several dates) traditional kaitiakitanga principles, but there are many things fisheries can do additionally to improve resource sustainability. Sykes identified precedents in his industry, in-

⁴¹ His father was Punga, who also arrived with Maui.

Noa is occasionally translated with ordinary, a term that can have a negative connotation. It shouldn't have though, because the origin of the word *ordinarius* (Latin) literally means orderly.

cluding voluntary restraints concerning catch entitlement and renunciation of fishing for specific periods. Those methods are analogous to the concept of rāhui. Another example, according to Sykes, is the active participation in research aimed at the long-term abundance of the resource, which is analogous to the principle of *mō ngā uri whakatipu*.⁴³

In order to be effective, many conservation measures need the collective efforts of all fishermen targeting the same ecosystem. In the Rock Lobster industry, fishermen have collectively and voluntarily lowered their commercial catch entitlements (New Zealand Government, 2007). This course of action correlates with Mead's (2003) interpretation of the 'extended' *whanaungatanga* principle and value, which obliges members of a group to support a common cause. It is also consistent with Jim Williams' (2009) argument that an attitude oriented by obligation to the community, rather than self-interest, is vital for environmental sustainability.

Candidate fishermen aiming for NOA verification, then, could be asked how they respond to collective decisions forwarded by the industry association NZ RLIC. Collective measures that have been discussed by members recently include effort spreading,⁴⁴ area closures, seasonal closures, alternative size limits, gear specifications, reporting of illegal fishing, specified harvesting practices, and reporting all data concerning catch and environment (Gibbs, 2011).

Another aspect of kaitiakitanga regards *cultural stewardship*. As discussed in chapter one, and according to principles of biocultural diversity conservation, crucial aspects of holistic resource management are reviving, invigorating, maintaining, fostering and transferring culture. Thus, fishermen could be involved in discussion of how they can contribute to achieve any of these objectives.

The Wai 22 report (Waitangi Tribunal, 1988) describes aspects of traditional Māori economy, which was based on *reciprocal gift exchange (utu)* – occasionally on a personal level, but predominantly on whānau, hapu and intertribal levels. Dried and fermented fish, shellfish and crustacean were highly sought after by inland tribes, who in return gave preserved birds and other, often seasonal delicacies in exchange. It didn't matter when a gift was given in return, but it mattered very much that it was given eventually. The gift that was reciprocated was usually of higher value. This difference in value was not related to compensation for a long wait, but intended to enhance the tribe's mana. The exchange was more than trade; it was a way of establishing and maintaining relationships and communication between tribes throughout Aotearoa.

There are a number of questions that can be put to fishermen concerning utu or reciprocity. Is the crew compensated in a fair way for their work? This is an ethical issue that is addressed by the worldwide Fairtrade label. Or, is Tangaroa acknowledged for taking some of his children for trading? Elders of the Muriwhenua tribe decribed incantations offered to Tangaroa before a fishing

⁴³ For the coming generations.

⁴⁴ For example by fishing less in one location, and more in other locations.

trip, as well as *returning the first catch of the day along with karakia*, as traditional tikanga (Waitangi Tribunal, 1988). Whether or not fisheries decide to return the first catch with karakia, or without many words, it is a powerful demonstration of respect to the resource likely to resonate with many customers. Fishermen could be asked to explain their own tikanga in regard to returning a gift to Tangaroa, or how they would go about integrating such tikanga of the relevant iwi, or hapu.

Mead (2003) explains that the principle and values of *manaakitanga* underpin all tikanga. Manaakitanga is closely associated with *aroha* ⁴⁵ and relates, for instance, to respect for everyone's mana, good behavior and attitude, nurturing relationships, looking after people and being hospitable. Is everybody on board safe? Are all crew members well looked after? What is done to guarantee everyone's wellbeing? ⁴⁶ Sykes also sees connections between manaakitanga and providing consumers with the best seafood experience they can afford, and with the fishermen's pride in the product. How can the crew contribute to achieving the best quality? Questions about handling and storage of Rock Lobsters then become evident.

Mana is associated with the position of an individual within a group (Mead, 2003) and is often translated with 'reputation'. This is relevant in New Zealand's waters, a resource shared by recreational, customary and commercial fisheries, in which tensions between these parties are a reality, as well as a regular preoccupation of popular and social media. Fishermen could be asked what they do to alleviate ill feelings and enhance the mana of their industry. Another real world example recounted by Sykes (kōrero, August 19, 2013) happened when commercial fishermen voluntarily stopped fishing a specific area over the summer months to reduce tensions with recreational fishermen. In discussion with fishermen, more ideas that might enhance the mana of the commercial sector could be identified. Further inquiries into the principle and value of mana can be modelled on the Hua Parakore verification process (see case study in chapter 1). For example, fisheries could be asked to describe their way of sharing benefits and successes with the wider community, thus both maintaining community relationships and enhancing the mana of their fishery and community through tikanga.

Whakapapa is present in all aspects of Māori culture (Mead, 2003), it concerns the tracing of ancestry, heritage and provenance of all living things, including rocks and mountains (Barlow, 1994). Fishermen participating in the NOA labelling scheme would be asked to label captured Rock Lobsters to provide traceability and provenance.

In the spirit of this project, and to satisfy the different layers, the design of the labelling scheme needs to include local concepts, principles, values and practices that respond to the obligation of kaitiakitanga and rangatiratanga, and furthermore align such efforts with market-needs.

⁴⁵ Aroha: Love, respect, compassion.

Please visit Slave Free Seas' (SFS) website (http://slavefreeseas.org/) to find out about labour and human rights abuse on New Zealand waters. The NOA label (see chapter 4) could collaborate with SFS to exclude fisheries that are associated with companies, brands or quota owners that are involved in such abuse.

A market that values values?

The ratio between (small) volume and (high) value, the cultural significance, and the small-scale character of the New Zealand Rock Lobster industry makes it a perfect candidate for piloting the proposed labelling and tracing scheme. Francisco Blaha states, the more valuable a fish species is, the more return on investment can fisheries expect from the market for providing traceability and labelling (kōrero, August 14, 2013). Blaha sees an opportunity to fill an international niche with the kind of cultural certification the NOA label proposes. As labeled Rock Lobsters come with a strong story attached, they will have more value to the increasing number of consumers that love to know everything about their food. Blaha suggests that such a scheme would suit urban as well as expatriate Māori who have no access to the resource, or to customary catch, as it enables them to offer fish, that is connected to them through whakapapa and worldview, to their whānau. This market might be very small and economically insignificant, but it is culturally of a very high importance as part of sustaining cultural diversity and resilience (see chapter 1). Non-Māori New Zealanders will, in Blaha's opinion, appreciate the provenance that is provided with the scheme.

The Economist newspaper reported ("Different scales", 2013), that wild fish is generally heading for luxury status in the high-end market segment, and will enjoy the kind of reputation wild venison now enjoys in the meat market. The article informs us also, that the FAO (Food and Agriculture Organization of the United Nations) price index for wild fish nearly doubled between 1990 and 2012. So despite the fact that New Zealand fishermen can't increase their catch as a consequence of the QMS, it is a good time indeed to be a fisherman, and labelling of Rock Lobsters is more than likely to be expected for the luxury article that they will represent.

Supermarkets in the USA and in Europe drive certification as they seek to insure their own brand (F. Blaha, kōrero, August 10, 2013). Walmart, the biggest supermarket chain of all, warned their fish suppliers in early 2012, that they must actively work towards recognized third-party certification by June 2012 (Walmart Corporate, 2012). Conroy (2007) generally sees a growing market for third-party certification.

Licensed Fish Receiver Geoff Creighton from New Zealand brand Leigh Fisheries considers ecolabelling so common, that it doesn't present a significant competitive advantage anymore, which makes a more cultural approach interesting from his point of view (kōrero, October 19, 2012).

As stated in the case study of the Seychelles Hook & Line Fishermen (see chapter 1), which served as starting point for the NOA label, the first delivery of labeled fish resulted in a 25 percent increase of the average market price despite a sluggish market at that point. The top export destination for New Zealand Rock Lobster by far is China, with 70 percent, followed by Hong Kong with 26 percent, and all other countries totaling to only 4 percent (Seafood Industry Council, 2013).

It would be premature to simply assume that the NOA label would achieve the same results mentioned above today in China, because NOA introduces a different approach to ecolabelling,

and China is a different market. But it would also be biased to think Chinese wouldn't reward what is proposed here now, or in the near future.

In order to investigate aspects of the Awatoru concept (see chapter 1) and how 'Māori branding' would correlate with Chinese seafood clients, a small cohort of design and marketing professionals were commissioned by Awatoru and Aotearoa Fisheries Limited to travel to Shanghai in 2009. In an unpublished report (2009), Karl Wixon & Tony Craig conclude that a culturally based marketing strategy in China could increase market-prices considerably. They suggest that branding should focus on establishing a single 'NZ Māori Brand', but take into consideration that iwi shareholders expressed the wish to maintain mana through acknowledgment of identity and provenance. These latter attributes, can resonate with Chinese, according to the authors, as long as elements are managed in a brand framework without being the brand itself. Quality, food safety, and nutritional value are most important to Chinese consumers of seafood, but product differentiation as well as sustainability issues are the next important factors in their buying decisions.

Karl Wixon agrees with me, that ethical values are very likely to grow in importance as the market matures, but sees the proposition as wider:

It is more than ethics or moral principles, it is about emotional and at some levels spiritual resonance. I recall one of the marketing representatives in Shanghai comparing practices relating to Tangaroa as being like Taoism – that was more about spiritual resonance. I think 'indigeneity' is a broader proposition that includes ethics, emotions, spirituality, distinction, authenticity, provenance etc – and that is a market in itself. It is also just about brand currency – compelling visually and through strong story. (K. Wixon, kōrero, May 28, 2012)

Emotional resonance is an important consideration that would deserve thorough research. It might play a notable role in this context, because it can be assumed that Chinese people understand what it feels like to experience different degrees of suppression relating to cultural activities. Acknowledging common fate is likely to result in an affinity that will counterbalance commercial value. On the other hand, this might go too far, because even though the NOA label has roots in market-driven schemes that certify ethical practice, it is foremost a 'mana-driven' verification and communication tool intended to thoughtfully present Māori culture in the marketplace. It is meant to contribute to a positive future beyond such grievances, a future of mutual acknowledgment and symbiosis, where cultural and biological diversity reign hand in hand.

THE NOA LABEL (Chapter 4)

Scientists, however, do not have a monopoly of wisdom about the sea, and no system will work well if it excludes the knowledge of fishermen, ignores their economic well-being or depends on the fear of sanctions to obtain their cooperation. The trick is to persuade them that their long-term interest, which coincides with that of the fish, trumps their short-term one ... ("An loelandic success," 2008)

This chapter explains the principal design output of the *Taonga – not dead fish* project. Following is a description of formulated processes that endeavor to approach the research question: *How can the ethos of Māori taonga be presented in the marketplace of New Zealand / Aotearoa small-scale fisheries?* A more visual and less detailed version in the form of a booklet aims to inform Aotearoa's Rock Lobster fisheries and their stakeholders of this concept.⁴⁷

What is the NOA label?

The NOA label is a hypothetical tikanga verification scheme built upon principles of ecolabelling in a māoritanga adaptation. It is also a communication tool aimed at connecting participating fisheries with their clients and at promoting Māori culture in New Zealand, as well as overseas. The label provides *provenance* and *authenticity* ⁴⁸ to the market while encouraging fishermen to learn, apply and share tikanga in all its regional variations. The NOA scheme is designed to contribute to humanizing global trade and fostering better understanding between the actors of intercultural trade. While the principles of the scheme should be applicable to other industries, as well, for the purposes of this exegesis, the scope was limited to Aotearoa's Rock Lobster industry.

How does it work?

Participating fisheries are going through a defined verification process to become NOA verified (see below). Upon completion, the successful fisheries receive a set of food-safe and tamper-proof labels⁴⁹ imprinted with a boat-specific QR code.⁵⁰ The labels need to be attached to the

⁴⁷ An electronic version can be viewed on the Internet (www.noa.co.nz/the-noa-label/overview-pdf-booklet).

⁴⁸ In this context provenance refers to origin and authenticity to validated cultural values/tikanga.

⁴⁹ The NZ RLIC has an agency for such labels. The industry is working on better solutions because the existing tags are not perfect. Designing more reliable labels that are easier to attach is an opportunity for product designers.

Or superior technology – as long as it is widespread in the market places. QR codes are common in China (New Zealand's main market for Rock Lobster). More than 7500 restaurants in the Haidian district of Beijing have "recently" (blog-post from October, 2013) introduced QR codes on their menus and business licenses to enable customers to access information about food safety and quality (Powell, 2013).

Rock Lobster by fishermen on board their boat to avoid contamination of lobsters from non-verified fisheries later in the process. The labels travel with the lobsters to the market place. Scanning the QR code (with smart phones) will open a boat-specific website that reveals instantly who caught the Rock Lobster, where it was caught, and how it was caught.

How do fisheries become NOA verified?

Participation is voluntary, but in order to achieve NOA verification, fisheries need to successfully complete two separate steps: *Pre-Assessment* and then the *Audit*.

Pre-Assessment

Applicants need to:

- provide evidence that they operate legally under current New Zealand law.
- be endorsed by their Licensed Fish Receiver (LFR) & associated brand.⁵¹
- identify other stakeholders that they are aware of or associated with.
- meet all criteria from the most recent Basic Requirements. 52
- have capacity and be prepared to label Rock Lobsters on board.
- · demonstrate a commitment to Māori culture.
- sign an agreement to formalize their participation throughout the entire process.

Application and pre-assessment is conducted by personnel of the NOA label and can be done online on the NOA website. Fisheries that have passed pre-assessment are *candidates*. The next and crucial step is a site visit (audit).

Audit (Take a kaumātua fishing!)

The candidate fishery is required to host a kaumātua for a day, whose role is to carry out the audit, assisted by at least one NOA staff. The fishery needs to organize a fishing excursion⁵³ aboard the vessel under verification, and allocate time and place to facilitate an interview. The regular crew needs to be present throughout this process to demonstrate and explain their fishing routine.

The role of the kaumātua is to:

- verify the fishery's cultural commitment.
- learn about the fishermen's approach to kaitiakitanga.
- interview them about their tikanga concerning principles and values of the Māori of Aotearoa.

Licensed Fish Receivers (LFR), exporters & brands (if different) need to cooperate in handling and promoting NOA verified Rock Lobsters. NOA staff will assist in the process of getting consent if desired.

⁵² A 'living document' on the generic NOA website that is regularly updated through stakeholder input. It concerns issues such as size of the fishery, number of crew, character of boat, et cetera.

⁵³ If the conditions are not safe, new arrangements need to be made on a case-by-case basis.

- mediate between their own and other stakeholders' objectives.⁵⁴
- · consolidate tikanga and modern practice.
- coach the fishermen in general and / or regional tikanga (if needed).
- explain tikanga to non-Māori.55

The NOA staff member's role is to:

- assist & support the kaumātua in all aspects.
- · coordinate transport, accommodation (if needed) and catering.
- · make sure important issues are covered during the audit.
- keep detailed minutes of the entire audit.
- collect communication material for the boat-specific website, such as quotes and photos of the audit, the crew, and the kaumātua.⁵⁶

Kaumātua's Report

The auditing team will compile a report. It informs the fishery whether or not they are now NOA verified. It also contains tasks and resources for self-directed research that will become subject in the next (annual) audit. This includes areas of practice, which need work, mutually agreed items for improvement, and identified goals for professional development.

If there are major non-compliance concerns that need to be addressed before verification is granted, the report details these as well. Measures to resolve such issues are discussed with the fishery and dealt with confidentially on a case-by-case basis. It usually comprises more audits and/or coaching, and the interval between audits is defined in the report.

Appointing the auditing kaumātua

NOA staff assists candidates in locating recognized kaumātua with good knowledge of regional tikanga. The selection of the person is similar to the process of nominating external critics in academic post-graduate examination: The fishery can forward suggestions, but NOA staff will consult relevant iwi of the fished management area, and possibly other stakeholders before making a decision. The goal is to find a recognized person with relevant tikanga knowledge and to validate that there is no conflict of interest. Once that person is located and appointed, maintaining and nourishing that relationship (between kaumātua and fishermen) for repeat audits, additional coaching, et cetera is encouraged.

NOA personnel are responsible for briefing the kaumātua on stakeholders' input (if any).

⁵⁶ Non-Māori candidates as well as overseas consumers that read about tikanga on the fishery's website.

I suggest a streamlined format to collect such information. This could include a fixed list of photographs (Boat, Location & Crew), and a list of set questions reflecting consumer's interest (from their feedback).

Briefing the auditing kaumātua

NOA is responsible to brief and guide the kaumātua before auditing occurs. This comprises explaining general guidelines of the verification process as well as providing resources, such as a list of suggestions for subject matter to be covered during the day (see *Principles that withstand the test of time* in chapter 3). Unless it is not the first audit, the report from the previous audit forms an important part of the brief. The objective is to evolve the relationship between auditing kaumātua and fishery to a reciprocal 'community of learning'.

The briefing also includes general and/or boat specific issues stemming from stakeholders' feedback, complaints and comments, if they exist. For example, the associated brand might have forwarded the wish of good clients in Hong Kong that the lobsters should only be handled with cotton gloves. New Zealand NGOs might want inclusion of criteria regarding on board waste management. The professional association (CRAMAC & NZ RLIC) might want to forward collective decisions regarding extraction, et cetera.

Communicating with stakeholders

NOA will supply Rock Lobster tags with QR codes and the corresponding URL to NOA verified fisheries. This enables access to the boat-specific⁵⁷ website via smartphone or PC anywhere that Rock Lobster travels. The website will go live after fishery and brand have reviewed and approved the content.

Scanning the QR label with one of the freely available apps will connect smartphones with Internet connection instantly to the boat-specific website. To cater for clients without smartphone, or without the installed app, the URL is printed beneath the QR code and can be entered into an Internet browser manually. If a smartphone is available at point-of-sale, that isn't connected to the Internet, there is the option of embedding text into the QR code itself, for instance: "Species: Rock Lobster // Certified fishery (NOA) // Fishermen: Daniel Scott (Te Arawa, Te Atiawa, Ngāti Kahungunu) // Point of Capture: Coromandel Peninsula, New Zealand // Brand: Leigh Fisheries // URL: scott.noa.co.nz."

The disadvantages of embedding text into the QR code seem to outweigh advantages, because (1) there is no language choice, (2) imagery can't be displayed, (3) there is not enough space to present cultural material, (4) the QR code becomes more complex and with it less readable, (4) the QR label will not automatically connect smartphones to the website, but display the codified text instead, even if it is connected to the Internet.

The boat-specific website is an interactive *eLabel* that is specifically designed for smartphones,⁵⁸ and can be multilingual according to the marketplace (e.g. te reo Māori, English and Chinese).

The Website identifies the provenance of Rock Lobsters to boat level. A fishery that has more boats with different crews needs separate labels and websites.

⁵⁸ I prototyped a website for the pilot fishery that distinguishes small screens from large screens and displays different layouts accordingly.

The initial ('landing') page needs to be welcoming and could feature a short *karanga*⁵⁹ on video, but at minimum a photograph of the fishermen and some text. The navigation menu links to other pages of the website to inform about: (1) the fishing method, (2) the catch (New Zealand Rock Lobster), (3) the fishing location, (4) the brand / exporter, (5) the NOA label, (6) the fishery (with further photographs and stories of the crew and information about associated iwi/hapu, as well as cultural material, for example the description of applied tikanga in words, photos and possibly video.

Dedicating a page to the brand and possibly other stakeholders of the fishery creates additional incentives for them to participate and promote the scheme. The consumer on the other hand can decide what kind of information, and the level of depth of the same s/he wants to access.

Additionally, the NOA label will operate a generic website that explains the scheme in detail and accumulates information that responds to stakeholders' needs and feedback. Fisheries can start the pre-assessment process online to test eligibility. Dedicated sections show customers how to correctly handle, store, kill and prepare lobster to maximize animal welfare, food safety and quality. Other sections support retailers and restaurants in promoting NOA verified product to their customers.

Closing the circle

Feedback is an important part of improving all aspects of the scheme. Therefore, the boat-specific website and the generic NOA website both have dedicated feedback pages that enables stakeholders in New Zealand and overseas to communicate with NOA directly. All input is monitored, collected, and administered by NOA and forwarded to the relevant body, if the issue cannot be resolved 'in-house'.

Why appointing kaumātua to conduct the NOA audit?

The fact is that a lack of support for mātauranga Māori now will have serious consequences down the track. Every year the number of kaumātua raised in village communities and taught by tohunga diminishes. It was not uncommon for us to hear reference to an elder being the last to practice a particular skill. In these circumstances the task of protecting Māori culture is urgent and cannot wait yet another decade. (New Zealand. Waitangi Tribunal, 2011, p. 246)

Kaumātua, the wise elders of Māori communities, are respected leaders, who are chosen by their people because of ongoing commitment to their whānau, hapu and iwi. Māori do not become kaumātua for the reason of age alone, but for their experience, good knowledge of tikanga, history and te reo Māori, as well as their desire and sagacity to share, teach and guide the next generation

⁵⁹ Karanga is the call out to approaching visitors that starts the powhiri (the Māori welcoming ceremony).

("Customs / traditions - tikanga - what is a kaumātua?", n.d.). Mead (2003) describes the role of kaumātua as the "Guardians of tikanga" (p.14), and Rawinia Higgins and Paul Meredith (2013) explain that traditionally, kaumātua were prominent in "in social control and dispute resolution" (p. 4) and regarded as the "storehouses of knowledge" (p. 3).

Another reason for appointing kaumātua is the alignment of values in intercultural trade. Great respect for elders is a moral code that is intrinsic to both Chinese and Māori culture (New Zealand Trade & Enterprise, 2012).

It became obvious in the process of this research, that designating kaumātua was in itself appropriate tikanga. Kaumātua Haare Williams, who acted as auditor on the pilot voyage run to test the proposed protocols for this project, received instant respect from young and old, on and off the pilot-fishery's vessel. The above quote from the WAI262 claim indicates the pivotal role of kaumātua for Māori communities. It is yet another case of interdependency and co-evolution that has been frequent subject matter in this exegesis – analogous to the symbiotic relationship between people and environment, diversity and resilience, language and culture, ... as well as crayfish and their habitat.

CONCLUSION

This project started out with the idea of designing an eco-labelling scheme for authentic small-scale fisheries in Aotearoa. The research soon showed that such programs are doomed to failure if they are imposed onto communities from the outside. Instead, concepts need to be co-developed with the groups concerned and integrate local culture on an equal footing. The faith of all participants in the whole package is crucial to achieve compliance of attached policies. The enforcement of rules through sanctions might seem like a temporary cure, but as a solution it certainly offers no more sophistication than the administration of a medicine that eases symptoms without healing the cause. It is also a pessimistic approach that depends on monitoring, which is a difficult task in the case of small-scale fisheries.

Design is optimistic by nature; from the outset of this project, therefore, the research focused on identifying common denominators in western and Māori approaches to sustainability, to find a response to ecolabelling unique to Aotearoa, that would resonate with stakeholders in New Zealand and overseas.

Haare Williams set the direction for this investigation, when he explained that rangatiratanga has more layers than the contractually agreed right and duty of Māori to govern their affairs. Rangatiratanga traditionally codifies the universal right of self-determination for all living beings. This *all-life-principle* ⁶⁰ is enforced by tapu, the ritual protection of cultural principles. Under the right circumstances, tikanga Māori may render the state of tapu to the state of noa, for example when a fish's life is sacrificed to feed whānau. This approach is not a static, antiquated protocol based on ancient rituals, but a contemporary, dynamic and dignified methodology that is built on a sound foundation of time-proven values with equivalences and potential appeal in other cultures.

Paradoxically, it was assumptions of cultural incompatibility, if not racist attitude, that corrupted Māori society eventually: English settlers outnumbered *tangata whenua*⁶¹ from the late 1860s, and peaceful settlement turned into an ongoing siege. It was an era characterized by British disregard for the Treaty of Waitangi, and their proactive attempt to separate Māori from their way of life. It resulted in fragmentation of Māori worldviews, which were especially vulnerable because most of

⁶⁰ Carin Wilson used this term in formal feedback (27.10.2011) and drew attention to its central role in this project.

Tangata whenua: Indigenous people of the land; local people with strong whakapapa links to the area.

their interrelated elements were encrypted in te reo Māori; they were context dependent, diverse, protected by tapu, and traditionally transferred orally.

The NOA label facilitates learning processes that help picking up the pieces lost during cultural suppression. The elements need to be reconnected, which is not a simple task: in contrast to a puzzle, there is no pretty picture to guide this process and, instead of a two-dimensional canvas, there is an ever changing multi-dimensional world.

The research methodology combined user-centered service-design concepts with kaupapa Māori research principles and pays homage to the readymade design master Achille Castiglioni. Instead of finding materials in hardware stores to create a new object more valuable than the sum of its elements, this project approached its research question by rummaging the open source digital world, re-contextualizing ecolabelling principles into te ao Māori and utilizing *Web 2.0* ⁶² concepts to update the 'NOA Version 1.0' through user feedback. Finally, the design combines freely available QR technology with blogging software to provide a consumer-focused tracing-tool, which enables clients of Aotearoa's small-scale fishing industry to literally 'get in touch' with the fishermen at point-of-sale.

There is yet more work to be done. The subject matter covers a large 'marinescape' full of uncharted islands teeming with design opportunities that are waiting to be further explored by dedicated researchers. More consultation with a diverse range of fisheries and their stakeholders is desirable to shift the proposition advanced here closer to the real world. The prototyped elements of the NOA label have been designed by a non-Māori designer to illustrate principles – they now need redevelopment by Māori artists.

With this in mind, the project's outcome is a slightly front-loaded waka, but in my opinion, it is seaworthy and able to conquer new territories once again. There will be lost treasure to be found on the journey, and whānau will join and level the boat once it is afloat.

The treasure is kaitiakitanga, a non-linear and complex conservation model that mirrors the organic complexity of life itself. It is a biocultural methodology that aims at establishing an integrated balance between people and environment. It does this by advocating inter-generational, communal obligation over self-interest. Kaitiakitanga has developed over millennia amongst Māori and their Polynesian ancestors, whose association with the sea is unparalleled, and who have set unprecedented standards in seafaring and migration. Its practical implementation is tikanga, the righteous and flexible practices that reflect context, values and principles of mātauranga - an in-

Web 2.0: The second stage of development of the Internet, characterized especially by the change from static web pages to dynamic or user-generated content and the growth of social media.

clusive and progressive, uniquely Māori way of knowing that draws from the status quo of accumulated indigenous knowledge, as well as from external epistemologies.

The Treaty partners seem to advance towards reconciliation and Māori are planning the transformation to productive partnership beyond grievance, as manifested in the WAI262 report. Te reo and tikanga become more commonplace and are not only treasured by Māori, but more and more by the entire nation. Perhaps, a *new* New Zealand is beginning to take shape whose people no longer regard the Treaty as an obligation but as a privilege that provides a unique inspiration to complement each other's imperfections.

The NOA label is intended to nurture this transition, to help in locating and reconnecting the fragments of a shattered worldview, and to facilitate communication about the efforts involved as a meaningful way of presenting Māori culture in the market place. As as an open-minded, dynamic and living culture of chiefly and sophisticated people who know who they are, who take matters into their own hands no matter how complex, and who might just have some answers to the questions of our era. Kaitiakitanga. Te tino rangatiratanga. Aroha.

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