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THE HISTORIC AND CURRENT POUNAMU AND TĪTĪ TRIBAL ECONOMIES



MATTHEW ROUT AND JOHN REID

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Introduction

From the 1980s iwi (Maori tribes) across New Zealand began to receive negotiated settlements from the Crown for past breaches of the Treaty of Waitangi. These settlements provided iwi with assets (including land, property, fishing quota, and cash) as a means of supporting independent economic development. From a business perspective, this process has been an unquestionable success, with most tribes significantly growing their asset base over the past two decades. The success may in large-part be attributed to the corporate-beneficiary model, where tribal assets are consolidated and managed by Holdings Corporations on behalf of the tribal constituents – a model the Crown required as part of its settlement negotiations. However, this model conflicts with the traditional economic approach where tribal assets were owned and managed at whānau (extended family) and hapū (subtribe) scales and the economy was embedded within wider social, cultural, political and legal institutions. This conflict is played-out today in political tensions within iwi as many whānau and hapū seek to decentralise asset ownership and reclaim the relative economic independence they had before colonisation.

In this research report we provide an in-depth analysis of two iconic Maori economies found within the South Island iwi, Ngāi Tahu. The first case study, the tītī (muttonbird) economy, provides an example where Ngāi Tahu have managed to maintain a traditional economy – in particular an economy where the ownership and management of assets has been maintained at the whānau and hapū scale. In contrast, the second case study, the pounamu (jade) economy, provides an example where the ownership and control of pounamu was unjustly acquired from whānau and hapū by the Crown then returned through settlement as a consolidated asset to the Ngāi Tahu iwi. However, rather than adopting a corporate-beneficiary model for the management of pounamu, an attempt has been made to establish an institutional structure that resembles traditional configurations where the control of pounamu for economic development purposes sits with hapū. Both case studies provide interesting examples of alternative economic approaches to the orthodox corporate-beneficiary model and as such may offer insights and alternative frameworks for thinking about and supporting whānau, hapū, and iwi economic development in a way that is both congruent with traditional institutions whilst also fitting within the current institutional framework of the settler state.

In the first sections of this report we explain the theoretical approach for our study, outlining our adoption of institutional economics. We then explore each case study, beginning with the tītī

economy followed by the pounamu economy. With each case study we follow a similar format, exploring the cultural, political, legal and economic institutions of each economy and how they have evolved from pre-contact era through to today. We undertake this analysis through drawing upon a combination of current and historical literature, as well as data from extensive interviews with Ngāi Tahu actively involved in the current tītī and pounamu economies. The analysis for each case study ends with a critical discussion exploring structural problems with each economy, as well lessons and insights for supporting whānau, hapū, and iwi economic development. A summary of this discussion can be found in the last chapter of this report, where a framework for future economic development is extrapolated from the two case studies, arguing that when issues lie at the executive level the solutions will generally related to governance structures while for operational level issues the solutions are generally found in leadership styles.

Kaupapa Māori and the Māori Economy

Most economic theories and approaches have their origin in different schools of economics that are underpinned primarily by Western ontological and epistemological assumptions. For example, key underpinnings of neoclassical economics, the current economic orthodoxy, are built upon the notion of humans as individual self-maximising actors that has its roots in Western ideas of individual disembodied selves and consciousness. This means that the Māori economy is predominantly approached and viewed through the prism of these assumptions, which leads to a distorted picture or view of what the Māori economy was, or could be in the future. There is an attempt in this study to step clear of these underlying assumptions with the goal of gaining a clear picture of the Māori economy from both a historical and contemporary perspective.

Ironically, to achieve this goal we have drawn upon the theory of institutional economics (IE), which has its roots in Western studies of political economy. We consider that this economic theory is transcultural and provides a framework for investigating and revealing the different economic structures of diverse cultures (Stanfield 1980). At its most basic, institutional economics makes two simple assumptions, both which show why it is transcultural. The first is that economies operate through culturally-specific institutions. These institutions include social norms, rules of conduct, modes of exchanges, and methods of governance. The second assumption is that different cultures have different institutions, and as such the way they work will be different. Consequently, to reveal the way in which the economy of a particular culture operates it is necessary to explore the rules of acting and doing that the culture follows when engaging in economic activity. This is essentially what a kaupapa Māori approach to research demands – the explication of Māori ways of understanding, seeing, and doing to reveal Māori kaupapa.

With this institutional economic framework in mind we have sought to explore the rules of acting and doing that underpin Māori economic activity. The rules of economic activity that Māori have followed have changed over time. Traditional forms of economic activity varied between different groups and regions and changed as Māori society grew more complex, with many hapū transitioning from nomadic hunter-gatherer to settled agrarian life. These traditional forms were again different from forms of economic activity that emerged during early contact and early colonisation – giving rise to rapid economic growth amongst some hapū between the 1820s and 1860s. The disruptive effect of colonisation and the consequences of Crown control over the

rules governing Māori economic activity also had their impact, revealed today in the contemporary corporate-beneficiary models that dominate post-settlement entities.

In this study we are concerned with two traditional Ngāi Tahu industries; the tītī industry and the pounamu industry. We have structured our analysis concerning the 'rules of acting and doing' in relation to historic economic activity to reveal the changes that have occurred from traditional to contemporary tītī and pounamu economies. This comparison provides a critical insight into the impacts of colonisation on Māori economies, whilst providing a point of discussion concerning how Māori economic activity might be structured in a way that embraces Māori cultural values and knowledge – that is creating culturally-matched economies. To begin this process the report begins with a general discussion exploring the traditional Māori economy.

The traditional Māori economy

In this section we provide an outline of different descriptions of the traditional Māori economy. To be clear, 'traditional' here refers to the period often called 'prehistorical' or before 'recorded history', which more accurately is considered before western record history, and means anything before 1769 while the term 'protohistorical' will be retained to refer to that period from 1769 to 1839, after contact but before the creation of the colonial state. Much of the following analysis is built upon observations and oral descriptions made by Māori and Pākehā witnesses during early contact. There is clearly some difficulty in undertaking this analysis given that many observations have in one way or another been influenced by colonial narratives that misrepresent Māori culture and economy. In truth it is unlikely that a picture of the Māori economy completely devoid of this influence can be generated. However, the colonial influence can to some extent be ameliorated through understanding the nature of colonial narratives and how they may misrepresent Māori and indigenous people in general.

During colonisation the misrepresentation of indigenous people as 'uneconomic' was key to the settler colonial project. Typically, indigenous cultures are contrasted with western culture, and presented as esoteric, social, and emotional, with little interest in materiality or facility in commerce (Reid and Rout 2016b). This is in comparison to western culture which is viewed as proficient, technical, scientific and commercial in nature (Reid and Rout 2016b). The reason for this is that it helps justify the land alienation that lies at the heart of settler colonialism. The core to this

justification is 17th-century British philosopher John Locke's theory of property which "embedded within [it]... a vigorous economic and ethical defence of England's colonial activities in the new world" (Arneil 1996, 591). Locke believed that "persons who use the land most productively had the strongest moral claim to its ownership" (Brooking, 1996, 144-145). While Brooking (1996) believes this principle was egalitarian in New Zealand, it was inherently biased towards settlers, as 'productiveness' was intimately connected with western uses of land. This binary portrayal was self-serving, justifying land alienation whilst ameliorating any qualms felt by the settlers.

The upshot of this internalising colonial narrative of 'production' is that anything 'commercial' is often viewed as non-Māori – often even by many Māori themselves (Hokowhitu 2004; Reid et al. 2017; Wall 1997). It is, for obvious reasons, a problematic outcome for indigenous people as rather than being something exclusively western, economics – or the production and exchange of goods and services – is a fundamental component of life in human societies. Yet settler states have tended to reserve this elemental aspect of the human condition to Europeans, except where indigenous labour is required. While much of what follows involves practical suggestions surrounding the institutions that shape economic exchange, we also see the revocation of this 'mind colonisation' as central to the decolonisation project (Reid and Rout 2016b).

The traditional Māori economy was complex and diverse, any summary will necessarily have to elide and simplify certain aspects as there was great variation from the populous top of the North Island to the sparse South (Firth 1972). In fact, even in the sparse South the economy was – *because* of the low numbers of people and the more testing conditions – intricate and layered (Anderson 1980). Nevertheless, there are some generalities and commonalities that can be provided. Firstly, the traditional economy was largely based on reciprocal exchange (Firth 1972). This is part of a worldview that sees relationships as fundamental. Reciprocal interactions are core to Māori because "as these relationships progress each entity shapes the other in meaningful ways" (Reid and Rout 2016a, 429). As Spiller et al. (2011, 155) explain "Māori values advance a relational view of the world that rests upon a profound commitment to developing reciprocal relationships of respect". Exchange was not merely a means of gaining goods or services, but it also helped hold society together politically and spiritually.

The Māori economy was fully embedded in Māori society, it emerged out of Māori society, the sinews of exchange held whānau, hapū and iwi together. It was a 'moral economy', "a type of economy where the relations of production are based on kinship and in which the mechanisms of redistribution tend to play a levelling role amongst the members of a given community. The premise is that in times of hardship the basic items of consumption necessary for survival will be accessible to those in need" (McCormack 2008, 46). As Spiller et al. (2011, 225), quoting Henare, explain, before colonisation "Māori had an existing economic framework with stable, well-established protocols for the conduct of trade to meet the needs of the individual and the collective. Their distribution systems were far reaching, and trading relationships were secured and strengthened through an 'economy of affection'". For Māori, their economy was not just a pragmatic system of exchange but a means of connection, though the former was not totally eclipsed by the latter. Even use of the term 'economy' is problematic as in much of orthodox economic thinking, exchange is considered separate from the rest of the society, when for Māori and other indigenous peoples the concept of economy is inseparable from society (Sahlins 1972). That is to say, that the traditional economy was entwined with every aspect of Māori reality.

Likewise, the idea of 'work' as distinct from other activities was not really made in the traditional economy (Major 1964). Certainly, there were tasks that were largely work-oriented but these always entwined with other aspects of life, from creativity to leisure, from sociability to spirituality. In particular, the spiritual infused virtually everything traditional Māori did, "War... does not exhaust the areas of social life in which atua were involved. Cultivating the kumara, the building of a chief's house, the cutting and dressing of the hair of chiefly persons and childbirth are just four notable examples" of the spiritual permeation of everyday life (Fletcher 2000, 17). In the traditional economy, "the super-natural [was] intertwined with the practical... [for example] Religious ceremony was traditionally incorporated in the collection of food." (Major 1964, 7).

There have been numerous proposed ways of dividing up non-market exchange (Sahlins 1972). For us, it is useful to think of two spectrums. One spectrum delineates the main driver of the exchange, with utilitarian 'barter' at one end and 'gifting' as a form of social obligation at the other. The second spectrum is focused on the group dynamics, with the hierarchical and centralised 'redistribution' exchange within a group at one end and the flat inter-group 'disbursal' exchange at the other. To be clear, these are represented as being on spectrums because often exchanges involved degrees of both, particularly on the barter-gifting spectrum.

The traditional Māori economy had examples of exchanges along both spectrums, though gifting rather than barter was certainly the most common driver. As Petrie (2006) explains, mutual benefit was the key motivator in most exchanges between individuals and groups in Māori society. The majority of traditional Māori life was regulated by a set of obligations; that is, the understanding that a transaction obliged the receiver at a future date to provide an item or service of equal or greater 'value' back to the giver. In fact, as Metge (2002, 317) has argued, "the delay in making the return and the obligation to give more than an equivalent produce a continuing state of imbalance in relations between the individuals or groups concerned... [creating] a see-sawing of obligation and hence of mana from one to the other which lasts for many years and many generations". Gifting works best when it is delayed, and more is given as the return gift as it ties the parties together.

Thus, while barter exchange was most likely used for small trades between individuals and longdistance trades of highly prized commodities, the majority of exchanges in the traditional economy were based on 'gifting,' whether through redistribution or dispersal. However, it needs to be stressed that these were not hard and fast binary categories but that rather there was a fluidity to how these exchanges were interpreted. Monin (in the words of O'Malley 2012, 113) has "suggested there was less of a leap between Māori forms of gift exchange and outright trade so much as a continuum of the former, which at its closest was sufficiently similar to European forms of commerce to allow transactions to take place between Māori and Pākehā from the outset". This conforms with the idea of the barter-gifting spectrum, though it is important to reassert how embedded exchange was and how even the most utilitarian transaction would probably have had some degree of sociality to it. As Williams (2004, 88) explains, "[h]okohoko [barter] was usually an irregular event involving groups without rights to the desired resources. If regular trade became established, it was ritualised... to a form of gift exchange". In other words, as the connections between groups grew the previously utilitarian trades would take on a greater social significance. It is also likely that the social significance depended on the power differentials between the groups, such that viewed from two perspectives the same exchange could have a different level of significance.

The power of 'gifting' as the dominant form of exchange came from a range of core values and principles, though we will just explore two of the most salient here. The first of these is utu, one

of the backbones of Māori society. While usually translated as 'revenge' it is more properly understood as 'reciprocity' (King 2003, 81). Utu regulated the relations between individuals and groupings by "mutual obligation and an implicit keeping of social accounts: A favour bestowed, which increased the mana of the donor, required an eventual favour in return from the recipient" (King 2003, 82). Critically, utu required that the gift (whether goods, specialist skills, or labour) 'given' be returned with at least the equivalent value, though a return gift that was in excess of the equivalent value was highly encouraged, for reasons explored below (Firth 1972). Consequently, gifting might be better thought of as an investment with future returns. In our above scheme, utu is regulating redistributive and dispersal gifting, though it would also likely have played a role in barter exchanges if there had been an issue. The system of utu is encapsulated in the phrase 'takeutu-ea'; that is "there would be an action (take), which requires an appropriate resolution (utu), which would hopefully resolve the matter and there would be a state of ea (restoring balance and thereby maintaining whanaungatanga)" (Gallagher, 2003). So called 'positive utu' maintained social stability as favours given led to favours returned and utu laid the foundation for co-operative relationships, though in its negative form it also obliged negative reciprocity as well. (King 2003, 82-84). Utu can be viewed as analogous to legislation regarding money, it created a framework of exchange with rules and means of enforcement.

If utu was the legislative framework of exchange, then mana was the medium of exchange. Mana has been variously defined as prestige, authority, control, power, influence, status, spiritual power, charisma etc. (Bowden 1979; Firth 1940 Mead 2006). Mana was central to the interactions within Māori society, as Mead (2006, 37) notes, "Personal and group relationships [were] always mediated and guided by the high value placed upon mana. Mana has to do with the place of the individual in the social group". In one articulation of mana, Gallager (2003) presents mana as having three sources: "mana atua - God given power; mana tupuna - power handed down from by one's ancestors; and mana tangata – authority derived from personal attributes". People inherited mana, but they could also gain or lose it through their actions (Petrie 2006). This dynamic tripartite nature is crucial, while Gallagher (2003) states that it "explains the dynamics of Māori status and leadership and the lines of accountability between leaders and their people", mana could also be framed as the 'currency of power', as a significant enough loss of chiefly mana would mean a loss of power. What makes mana even more interesting as a form of currency is that it encouraged more to be gifted than received as this increased mana. There was an ongoing demand to return gifts 'with interest' and, in turn, maintain and grow mana (Reid and Rout 2016b). This encouraged production increases and the accumulation and circulation of wealth. Consequently, gifting was

empowered by a moral force, which attributed mana to obligated 'benevolence,' but it also provided a sense of security in that a reservoir of surplus goods, labour, and skills, could be drawn upon as and when needed (Reid and Rout 2016b). It has been shown that the wealth held by chiefs through this system was not much in excess of that of other tribal members (Toft 1984, 39) The primary difference lay in the reservoir of goods, skills, and labour that was obligated to them and which could be called upon as and when necessary (Reid and Rout, 2016b). Consequently, the sign of status was linked to the amount of wealth that 'passed through their hands,' which could be directed (e.g. in the case of obligated labour) as needed into productive activities (Firth, 1972). In other words, ability to provide to others was one of the core sources of mana – a chief's power came not so much from their ability to accumulate but rather in their capacity to redistribute or disperse. As Petrie (2006) explains, "mana (power and authority) of the chief was much enhanced by an ability to husband and manage communally-owned resources for maximum benefit to the community, these benefits being realised by the distribution of wealth". Because "mana is bestowed by others, leaders who sought to maintain their standing needed to be very conscious of their people's needs, ensure their defence, and keep them well fed and generally happy" (Petrie 2006, 2). Mana functioned not only as a currency of individual power, but also regulated individual wealth accumulation whilst providing a form of emergency security.

It needs to be emphasized that while the Māori economy was dominated by 'gifting,' more pragmatic barter exchange also occurred. Petrie (2006, 22-23) explains that there is a "tendency for modern scholars to categorise all exchanges of goods as 'gift exchange' in the traditional Māori economy and that this "ignores the element of negotiation in the more mundane exchanges of commodities". She goes on to further explain how Marsden had noted Māori proficiency in all the subtleties of trade and appreciated that scarcity and utility lay behind the different scales of value and that in many early examples of trade with Europeans 'Māori... were trading within the 'market' principle of supply and demand" (Petrie 2006, 24). O'Malley (2011), referencing both Firth and Monin, makes a similar point. This facility was not newly developed, it is believed, but rather came from the pragmatic barter exchanges of the traditional economy. Or rather, to be more accurate, we would argue that it pre-dated Cook's arrival but had been growing in recent centuries. As a number of scholars (Anderson 2016) have indicated, Māori society went through a number of phases before contact and by the 17th Century had grown in complexity, to the point where utilitarian trade would have been increasingly necessary.

With respect to Ngāi Tahu, Anderson et al. (2015) explain that trade in the 17th Century was still ad hoc, but by the 18th Century it had become far more organised. Likewise, Petrie (2006, 17) explains that "the level of trade eventually established required a large body of porters who were constantly employed carrying heavy loads between South Island pa... because they were usually given more than one load to carry, depots were established between which porters travelled back and forth, providing a system of through carriage". Generally, these utilitarian trades that did not have a strong social-bonding component were either for mundane commodities or services within a whānau or hapū or for long-distance trades of some important commodities that were geographically-specific. While it would be wrong to portray these exchanges as completely pragmatic and devoid of any politico-spiritual context, they were less infused with these meanings than the more ritualised gift exchange. The point being that traditional Māori forms of exchange were not solely premised on political and spiritual considerations but were based on more mundane drivers. It was no accident that when Europeans arrived in New Zealand Māori began trading. As Mitchell and Mitchell (2007, 242) write, Māori had an "understanding of principles of supply and demand, and of practices to enhance their bargaining positions. Among the earliest records of direct social contacts between Maori and European are observations of Maori alertness in barter exchanges". For Māori present at the time of contact the very first exchanges they sought were economic due to an existing understanding of pragmatic transactions (Reid and Rout 2016b).

Furthermore, while much is made of the collective nature of traditional Māori society, there is evidence that there was a relative degree of individual liberty regarding exchanges. As Petrie (2006) has argued, certainly obligations created by gifting helped to tie groups together, yet individual Māori had a high degree of personal autonomy in which to express enterprise and initiative. As she (2006, 4) explains, it is "clear that individuals generally enjoyed a high level of personal autonomy and participated in the kin-based economy on a voluntary basis. Mutual benefit was the key motivator... Ties of kinship bound communities together, but the strength of cohesion and degree of control exercised by the leaders depended upon their personality, powers of persuasion, and economic wealth... Personal autonomy gave individuals the freedom to pursue their own economic initiatives, but if incentives of security were present, that individual's gains in terms of skill or wealth were typically shared with the wider group". There was, then, across the Māori economy a flexibility in exchange that enabled individual gain yet also ameliorated the worst excesses of inequality whilst also providing a form of safety net in times of emergency. Māori economic activity "followed customary patterns that had evolved over aeons" (Petrie 2006, 1).

The nature of political authority was, clearly from the above discussion, entwinned with exchange. Political authority was also interlinked with land rights and a brief exploration of the interaction between these three is useful. Mana, in all three forms, was the source of political authority, yet it was also an expression of their authority. A chief's mana grew because of their ability to allocate resources but they also had mana, or the ultimate control, over the resources – with the land and water of a hapū (most commonly) as an extension of their own personal mana (Head 2006). Critically, as Melbourne (quoted in Hill 2004, 65) notes, "Land is the very basis of Maori, of mana Maori motuhake, of tribal sovereignty. So once the land goes, the mana of the chief goes with it'. Of course, the loss of land was also a major impactor on economic outcomes as well, showing the intricate connection between the political, legal and economic in traditional society. As Overall, Tapsell and Woods (2010, 153) note "Māori have a strong affinity with the land, and with the substantial loss of this resource through continued expropriation, they became subject to economic decline and a critical loss of "mana" or ancestrally validated decision-making authority". Traditional Māori land rights are best defined as resource user rights and while individuals, whānau and hapū used the resources, it was the chief who was the arbiter of who got to use the resources (Tau 2016). There were four common ways a user right could be proven or exchanged – ahikāroa, occupation and use; tāketuku, payment for temporary access; raupatu, conquering new territory; and whakamoe, marriage - though it was the chief who underpinned these and who made the ultimate judgement if there were any disputes or issues (Firth 1972). The chief's authority was not absolute, but rather was governed by their dynamic mana and the relative mana of others. Perceptions of chiefly authority have been clouded due to colonisation, much like economic aspects. As O'Malley (2011, 33) explains, "many early European observers perceived Maori society in hierarchical terms – much like the highly class-bound communities from which they themselves had come – and viewed the authority of the chiefs as absolute". Traditionally, a chief's authority was probably best described as coercive or persuasive rather than commanding or total (Bowden 1979). That said, during times of war or other crisis situations the chief had greater power (O'Malley 2011). Buck (quoted in Bowden 1979, 57) notes that the "mana of a chief . . . was not a mysterious indefinable quality flowing from super natural sources; it was basically the result of successive and successful human achievement". Ongoing authority was based on competence, with a degree of this premised on the chief's ability to allocate resources. Mana was a currency, but it measured more than the exchange of goods and services but rather underpinned the entire society.

Settler colonialism

While every colonial project is unique, colonisation is generally divided up into two key forms: extractive and settler, the former focused on resources and the latter on land (Veracini 2010). Making this distinction is critical for understanding how colonisation impacted and impacts those affected, for whether a colony is extractive, or settler will have a significant influence on the indigenous experience. New Zealand was/is a settler colony, and the reasoning for that past/present duality will become clear soon. The primary objective of settler colonialism is the permanent settlement of an area by a group whose aim is dominating the area and its resources, creating an enduring regime of control despite any previous inhabitation (Belich 2009; Veracini, 2010). While extractive colonialism uses indigenous labour to extricate value, settler colonialism is focused on gaining permanent control of the territory by replacing the previous inhabitants. As Wolfe (1999, 2) incisively explains, "Settler colonies were (are) premised on the elimination of the native societies. The split tensing reflects a determinate feature of settler colonization. The colonisers come to stay – invasion is a structure not an event". Thus, while extractive colonies can endure, this is not their specific intent, they are premised on gaining as many resources as possible. Settler colonies, on the other hand, are first and foremost focused on ongoing domination. Morgenson (2011, 57) provides more detail, explaining that "settler colonialism establishes western law within a white supremacist political economy premised upon the perpetual elimination of Indigenous peoples". He (2011, 59) then goes on to explain that "colonialism's continuation despite its nominal demise... attends on [decolonization's] failure to be sufficiently extended to settler states and the institutions through which they project settler colonial power in the contemporary world". While the wave of decolonisation that swept the world after World War Two saw the extractive colonies gain independence, the settler states remain dominated by the settler. As Veracini (2010, 53) explains, these states have a "special type of sovereign entitlement that is claim by a specific class of settlers: those who have come to stay, those who will not return 'home". Wolfe (2006, 402) notes that "settler colonialism is relatively impervious to regime change".

If holding onto the land is the key aim of settler colonialism, then the means by which this aim is achieved is the creation and maintenance of a cultural, political, legal and economic edifice that facilitates this lasting control. This edifice can best be understood as an institutional framework of domination. Settler colonisation was/is "a radical force for institutional change" that "marginalised indigenous structures and excluded local people from the management or regulation of the new

ones" (Brett, 1998, 207). The creation of a settler state inevitably involves the near-total loss of indigenous political sovereignty, economic autonomy and societal control (Hogan, 2000; Wolfe, 2006). The European praxis of regime is such that it cannot broke a competing sovereign power within the state, meaning that it must possess the highest political power over a territory – certainly, settler states themselves may take federalist forms but these are settler entities whose sovereignty is nested rather than independent. Wolfe (2006, 391) explains that even "where native sovereignty was recognized, however, ultimate dominion over the territory in question was held to inhere in the European sovereign in whose name it had been 'discovered'." Settlers claim a "special sovereign charge" (Veracini 2010, 3). European sovereignty will always supersede indigenous sovereignty, not that the latter is often recognised, as the declarations of 'terra nullius' over parts of North America and all of Australia reinforce (Banner 2005). As Wolfe (2006, 391) notes, "[p]reemption sanctioned European priority but not Indigenous freedom of choice". While this loss of political, economic and societal control can be slow and uneven it was essentially inexorable across the many settler states, as the indigenous inhabitants were inevitably enveloped by the growing enormity of the settler state and society. Māori were/are immersed in the settler state institutional framework, one that essentially still endures today even if some ameliorating changes have been made. It is this framework that sees indigenous people lose sovereignty, economic autonomy and societal control which, in turn, inhibits indigenous economic development. To understand how this works we need to gain an understanding of how institutions shape economies and economics, but first we will outline how the dominant economic school ignores the role of institutions and, consequently, reinforces the colonial narrative that indigenous people are 'not economic' and remain poor because of their own actions rather than the enduring settler institutional structure.

Neoclassical economics

While economic theory and policy have changed much over time, since the late 18th Century the field has been dominated by classical and neoclassical economics. Neoclassical economics is a metatheory, built upon a set of implicit rules which are deemed necessary for the creation of appropriate economic theories. There fundamental assumptions of neoclassical economics which are not open to discussion amongst neoclassical economists:

- 1. Individuals have rational preferences between outcomes that can be identified and associated with values.
- 2. Individuals maximize utility and firms maximize profits.

3. Individuals act independently based on full and relevant information.

Any theory of economics based upon or guided by these three assumptions can be considered a neoclassical economic theory. These assumptions are normative in that they describe and ideal situation rather than reality. The core insights upon which these schools are built have however, become dogma amongst the ruling elite (Backhouse 2004). There have been times when the orthodoxy of neoclassical economics has been challenged, one period being from the 1930s to the 1980s, where like much of the rest of the west's settler colonies' economics operated under Keynesian principles. Still, this is a useful characterisation to make as the classical and neoclassical schools have had the most influence and, particularly regarding the neoclassical, continue to have the most sway in western, including settler, economics and economies. In fact, we would argue that a large part of the reason that these schools have had such a long running and widespread influence is that they emerge out of the core principles of the western worldview – in particular, individualism, rationalism and progressivism (Berman 1983; Best and Kellner, 1997). Thus, even as Keynes' more collective theories towards progress held sway, the individualism, if it can be purged of its defects and its abuses, is the best safeguard of personal liberty".

Classical economics is usually traced back to Adam Smith and his influential book The Wealth of Nations which was published in 1776. The key assertion of classical economics is that markets function best with minimal government interference, that is that a free market is self-regulating because 'economic man' is, to quote the 19th century British philosopher John Stuart Mill (1948, 137) "a being who desires to possess wealth, and who is capable of judging of the comparative efficiency of means for obtaining that end". However, while the classical school was largely dominated by the emphasis on individual economic liberty, as Keynes (2008, 347) explains, the "classical theory has itself called attention to various conditions in which the free play of economic forces may need to be curbed or guided". That is, there were cases where the classical school believe that individual economic liberty was not as important as collective social good. While the differences between the classical and neoclassical are hotly debated by economists, we view the now dominant neoclassical school as a more reductionist version of the classical school. Where Smith believed there were some areas where the market could not serve the common good, the neoclassical school has virtually deified the market, viewing it as a near-perfect entity so long as the government does not interfere (Saul 2009). This belief stems from the neoclassical emphasis on the forces of supply and demand as the key regulators of an economy.

Part of the increased focus on supply and demand came from the ascendancy of rationality. Underpinning neoclassical economics is the belief of 'rational choice theory'. As Granovetter (1985, 482 – emphasis in original) states, "neoclassical economics operates... with an atomized, *under*socialized conception of human action". Granted this is now largely promoted as 'bounded rationality', nevertheless the core emphasis on humans as rational 'consumers' remains. This theory posits that the market is made up of individuals making logical, sensible, reflective and consistent consumption choices to maximize their happiness, or utility. Neoclassical economics assumes "a world of self-interested but law abiding and social responsible individuals who choose freely between competing alternatives on the basis of perfect information" (Brett, 1998, 204). In Veblen's (quoted in Commons 1934, 228) memorable phrasing, this 'economic man' is akin to "a lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift about the area but leave him intact."

This belief means that neoclassical economics essentially ignores everything outside its narrow 'exchange sphere'. Even the tentative acknowledgement by the classical school that the market is not the ideal solution to every problem has been flensed by the neoclassical formulation. In this formulation culture, politics, law, all are considered irrelevant to economic understanding, for if every exchange is influenced only by 'rationality' then these make no difference. Granovetter (1985, 482) explains that the consensus across most social sciences is that "behavior was heavily embedded in social relations in premarket societies but became much more autonomous with modernization. This view sees the economy as an increasingly separate, differentiated sphere in modern society, with economic transactions defined no longer by the social or kinship obligations of those transacting but by rational calculations of individual gain". However, most economists believe that the economy has always been separate from society (Granovetter, 1985). Neoclassical economics has perused a course of "scientificasition' and 'mathmatisation' as a means to establish legitimacy amongst other positivist disciplines. Through its reductionist focus on market forces the neoclassical paradigm misses out on the significant influence of any and everything except for the market (Granovetter, 1985). As Machado (2011) writes:

"the formalist approach is based on an ontological scarcity of the means for providing to human needs, and takes as its object of analysis the discrete ("rational") individual who seeks to maximize his gains, i.e., it stays within the predicates of *homo economicus*. According to Polanyi, the formalist schema – based on the neoclassical model of economic theory – can

only be applied to the study of modern capitalist economies, where price-making markets play a crucial role".

Formalists, however, believe that "embeddedness in earlier societies was not substantially greater than the low level found in modern markets" and that "even in tribal societies, economic behaviour was sufficiently independent of social relations for standard neoclassical analysis to be useful" (Granovetter, 1985, 482). The neoclassical school believes that even the traditional Māori economy could be examined and understood by assuming all exchanges were conducted 'rationally', when its own concept of 'rationality' is its own projection.

To examine the contemporary Māori economy requires a far deeper conception of economics than the neoclassical, or even classical, school can provide. To ignore both the contemporary and historic political, legal, social and cultural context is to miss the most important and informative aspects of economic reality, particularly for those who exist at the margins and have suffered from decades and centuries of living under institutional structures designed to divorce them from their property and institutions. Through the neoclassical theoretical framework, indigenous peoples who either retain significant reservations or receive land settlements but are unable to profit are seen as either not maximizing the utility of their asset because of lack of business acumen or because there is no 'market' for their land (Rosser 2005). This woefully simplistic understanding of what has to be one of the most intractable issues facing indigenous communities around the world has limited progress for many years.

Institutional economics

There is a body of scholarship referred to as 'institutional economics' that provides a comprehensive means of examining the contemporary Māori economy. The core insight of institutional economics is that institutions structure incentives in economic exchange (North 1990; Williamson 2000). As defined by one of the leading academics in this field, institutions "are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction" (North 1990, 3). They are generally divided into formal and informal, where "formal institutions are openly codified, in the sense that they are established and communicated through channels that are widely accepted as official... [while] informal institutions are socially shared rules, usually unwritten, that are created, communicated, and enforced outside of officially

sanctioned channels" (Helmke and Levitsky 2004, 5). In short and simplified, informal institutions encompass the cultural traditions while formal institutions are state-enforced rules. An example of the former would be creating space to allow other drivers to merge in traffic while an example of the latter is that it is illegal to go through a red light. The first is not legislated by the government but rather is informed by cultural beliefs in 'politeness' and enforced by social opprobrium or possibly even just a frustrated hand gesture or toot of the horn. The red-light law is informed by the need for public safety and is enforced by the state legal institutions - including the police, courts and prisons. Institutions, both formal and informal, shape behaviour by providing a framework of incentives and constraints that guide actions. Formal institutions rely on largely punitive measures to shape behaviour while informal institutions work through both punitive measures – including social opprobrium – and positive reinforcement – such as social inclusion. Ultimately, however, as Cornell and Kalt (1995; 2000) argue, it is culture that functions as the 'meta-enforcer' within a society as it is the final arbiter on what is normal, fair, right and proper. While the terms 'formal' and 'informal' are often used as if they are mutually exclusive categories, it is more helpful to see them on a continuum. At one end are the most highly prescriptive, detailed, and specific written rules that a society may codify, while at the other – beyond even the informal institutions themselves - is the underlying general cognitive orientation of a society, the base framework through which they understand reality, and which informs their culture and all of the institutions. Furthermore, the flow of influence does not run equally in either direction on this continuum but rather that the cognitive orientation is more influential on the prescriptive, detailed and specific written rules than the other way around.

Where the neoclassical school believes that institutions develop to meet a society's economic needs in a logical manner, institutional economics understands that institutions are not controlled by a rational market, that rather that it is the nature of the institutions that structure economic opportunities (Brett 1998). This is a major insight of institutional economics: that the transaction costs of economic exchange, which neoclassical economic theory assumed were zero, are crucial to understanding economic outcomes (Wallis and North 1986). North (1990) has argued that if the institutional framework is working properly then they are able to reduce transactions costs, though when understood with respect to the settler state transaction costs take on a different aspect. The settler state is focused on shifting the transaction costs to the indigenous actor. The most powerful example of this in New Zealand history can be found in the Māori (originally Native) Land Court (Williams 1999). As Boast (2008, 259) explains:

"Maori were saddled with enormously high transaction costs in that they could sell their lands only after subjecting themselves to the burdensome and costly Native Land Court process. Although Maori were supposedly free to sell their interests in a free market, this was illusory. The Maori land market, even after the establishment of the Native Land Court, continued to be dominated by the Government. The market was in fact highly regulated and manipulated by the Government to coerce sales and drive down prices".

This weighting of transaction costs and ongoing institutional manipulation were key strategies in Banner's 'conquest by contract'. As he explains (2000, 71), the "process of converting Maori property rights into tradeable form was proving very costly, and the Maori were bearing virtually all those costs". Specifically, the "particular model of title individualization followed in New Zealand was punitively costly", the identification of owners and insertion into Land Transfer Act titles was "an expensive and trying business both for the Native Land Court and for the Maori owners, given that it was the policy of the New Zealand government and of the Native Land Acts that Maori owners had to bear the costs of surveys themselves" (Boast 2008, 154). Many Māori complained "about the expense of the process – not so much the direct costs of hearing fees and surveys, although these were punitive enough, but rather the indirect costs of attending the hearings and paying for food and lodging in the various court towns". In some cases, these costs were the same as the amount they received for their land. As Boast (2008, 155) explains, "To put the matter into the jargon of law and economics, value was absorbed by transaction costs, the transaction being that of obtaining the clear individualized freehold title that the law required as a prerequisite to alienation". Survey costs, which Māori had to meet, where a major transaction cost, Boast (2008) notes that in one case up to 13% of the land being surveyed went to the Crown to cover the costs of the survey. Furthermore, the costs of the process drove Māori to sell even more land to pay their court fees (Tough and Dimmer 2012). The Waitangi Tribunal (quoted in Williams, 1999, 5) found that "with the Crown assisting the sellers, the non-sellers were disadvantaged".

The limitations of the neoclassical school become starkly apparent when examining settler colonial history. Settler institutions may act in a predatory manner, particularly when they act to transfer land, and consequently power, to the settler (Wolfe 2006). Institutional economics has a problematic approach to colonisation. Certainly, some academics have applied institutional economics to colonisation, but overall the focus is western-centric. As Bayly (2008) argues, the

influential work of Acemoglu et al. (2001) is neo-colonialist, denying indigenous agency by implying that institutions were and are developed unidirectionally, with no input from non-western sources. The falsity of such a proposition may be challenged with a persuasive example of how indigenous actors shaped contemporary 'western' institutions: the modern form of democracy was itself influenced by the Native American Iroquois Confederacy (Johansen 1982).

One means of understanding institutional economics regarding colonisation is through North's (1981) contract and predatory state theories. On contract theory, North (1981) describes the state and its institutions as providing the legal framework that ensures private contracts reduce transaction costs while the second sees the state as an instrument for transferring resources from one group to another. On the predatory state theory, Weingast (1995, 1) states that the "fundamental political dilemma of an economic system is this: A government strong enough to protect property rights and enforce contracts is also strong enough to confiscate the wealth of its citizens". North believes good institutions are simultaneously able to support private contracts while restraining the predatory nature of the state. While this may be true in a 'normal' state, the division within a colonising state is vastly different. In this situation, the contract perspective applies more appropriately to settlers and the predatory perspective being more accurate for the indigenous populace. Contract theory focuses on the conflicts of interest between citizens, while predatory theory is more interested in the possible clash between citizens and the state. While North himself was not specifically interested in settler states, per se, by putting these two views of the state together we can actually get a good insight into the nature of the settler state, one where the institutions are designed to protect the settlers' contracts whilst also functioning as a means of transferring resources from the indigenous to the settler: a predatory-contract state.

There are two primary schools of institutional economics, the 'old' and the 'new'. Sardin (2013, 281) argues that while the 'old institutional economics' (OIE) "rose up against neoclassical orthodoxy and viewed economic relations first and foremost as social constructs" he criticizes the 'new' school as remaining in the neoclassical rational-choice paradigm. Granovetter (1985) and Richter (2015) both make a similar if less pointed distinction, and while this paper will use material from the 'new institutional economics' (NIE) school, it is largely informed by the OIE perspective on economic relations: that is, that they are first and foremost social constructs, that trying to examine or understand them without examining the society in which they are occurring is misleading. This is a mistake that has been made in international and internal economic

development projects over the past half century and it is to these oversights that we turn now for insight.

Economic development

Since the end of World War Two and the success of the Marshall Plan in 're-developing' war ruined 'developed' states, there has been a prodigious interest in the 'development' of what has been variously referred to as the 'undeveloped', 'underdeveloped', 'least developed' or 'developing' sections of the world, be they whole states or populations within states, by the 'developed' states. As the scare quotes indicate, 'development' is a highly contentious area. Just as revealing is that, in some senses, 'developed' is a synonym of 'western' while the assorted terms used to describe its antonymic other could be a synonym for 'non-western'. This synonymic relationship was overtly recognised in the early post-war period, where the major focus of development was on Rostow's (1960) linear-stages-of-growth model, which understands development as having five well defined stages of capital accumulation, with the last 'developed' stage embodied by western states. This model was the template for development for many decades but by the 1970s it was apparent that it had failed to deliver the progress that it mapped out. Ever since, for many academics and practitioners the major puzzle has always been why international development has so often failed around the world.

There have been several imputed reasons provided to explain the failure of the development programmes. The dependence model, in vogue during the 1970s and 1980s, argued that developed countries and multinational corporations dominated developing countries, with free trade serving as a conduit of ongoing exploitation meaning the only way they could develop was by severing their ties with the developed states (Cohen, 1973). In other words, the dependence model posited that it was the very states leading the international development programme that were the problem. However, those states, like India, that attempted to institute autarky, stagnated in comparison to other states, like the four Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan) (Mabogunje 2015). Spurred on by the success of the Asian Tigers, whose achievements were built on trade with developed states, by the 1980s dependence theory was being challenged by the neoclassicists, who believed that the free market was the solution rather than the problem and that underdevelopment was caused by issues of state economic interference and ineptitude (Meier and Rauch 1995). The neoclassical solution, then, was for a deregulated free market, meaning implementing policies of liberalisation, stabilisation and privatisation as the pathway to

development. However, just as with dependence theory, these solutions have had, at best, a mixed outcome (Mabogunje 2015).

The development agenda has largely failed around the globe, both for states and in states. Rather than creating a world populated by identical, prosperous, industrialised capitalist states, it has left academics and practitioners puzzling over the inability to get a return from the prodigious capital investment. The wreckage of the development project has already been pawed over many times (Cohen, 1973; Mabogunje, 2015), suffice to say here that several of its major failings also provide insight into how it went so wrong so many times. There are, specifically, two important lessons provided by the early decades of development. First, one of the problems with development was that it sought to apply a single universal solution to the numerous, diverse developing states and peoples. In other words, it ignored the wider context in which the economic relations where occurring. A second related flaw has been that development has historically been externally imposed by these developed states. In other words, 'development' has failed precisely because it has been led by western states who have sought to turn non-western peoples and cultures into simulacra of themselves.

While this critique is most often applied to international development, it also has powerful resonance with the experience of indigenous peoples living in settler states, including Māori. For many decades, Māori development was state-imposed, aimed at turning Māori into productive interchangeable cogs within the wider settler economy, if mostly occupying the lower pay and skill levels. Durie (2003) identifies four distinct phases of Māori development: 1900-1925 – recovery; 1925-1950 - rural development; 1950-1975 - urbanisation; and, 1975-2000 - claims, settlement, autonomy. Māori have been increasingly become involved in, and taken leadership of, their own development, particularly from the 1980s (Fitzgerald 2004), yet even if ameliorated the same fundamental issues remain, largely because Māori still remain embedded in the settler economy. As Durie (2003, 92) notes, "While it appeared Māori now had a much greater degree of control and autonomy than at any other time this century, the broad developmental directions were also linked to the introduction of free-market economic policies". These policies were a double-edged sword. Māori suffered greater unemployment than the wider populace after their adoption. As Minto (2007) explains, the "number of Maori in paid work dropped by 15 per cent between 1986 and 1991 while total unemployment fell just 6 per cent. Maori unemployment peaked at a staggering 26 per cent in 1991 while the non-Maori rate was just 9 per cent. However, at the same

time Māori corporations, including tribally-owned ones, emerged as economic powerhouses – with some criticizing the development of what they see as a 'tribal elite' (Poata-Smith 2013; Rata 2011). That said, they were and are still operating in the settler economy, playing by the settler state's rules. As will be shown, this is not enough to ensure long-lasting and widespread economic, social and cultural development. For development to succeed for Māori, and for other non-western cultures, both the strategies and outcomes need to be 'owned' by these peoples, they need to determine how they define 'developed' and how they will get themselves there and they need to match the cultural values of the people. The solution, then, requires the development of an actual 'Māori economy', one that is designed by Māori.

Culturally-matched institutions

Stephen Cornell and Joseph P. Kalt, the founders of the Harvard Project on American Indian Economic Development, have worked extensively in the field of indigenous economic development for decades and their insights are extremely useful for analysing the historic and contemporary Māori economy and for guiding Māori economic and social development. The Harvard Project seeks to answer the question, "If natural, human, and financial resources aren't the key to economic development – if they cannot explain the development pattern in Indian Country – then what can?" (Cornell and Kalt, 1998, 5). In sum, over the course of almost three decades, the Project's key research findings are:

- "Sovereignty Matters. When Native nations make their own decisions about what
 development approaches to take, they consistently out-perform external decision
 makers on matters as diverse as governmental form, natural resource management,
 economic development, health care, and social service provision.
- Institutions Matter. For development to take hold, assertions of sovereignty must be backed by capable institutions of governance. Nations do this as they adopt stable decision rules, establish fair and independent mechanisms for dispute resolution, and separate politics from day-to-day business and program management.
- Culture Matters. Successful economies stand on the shoulders of legitimate,
 culturally grounded institutions of self-government. Indigenous societies are

- diverse; each nation must equip itself with a governing structure, economic system, policies, and procedures that fit its own contemporary culture.
- Leadership Matters. Nation building requires leaders who introduce new knowledge and experiences, challenge assumptions, and propose change. Such leaders, whether elected, community, or spiritual, convince people that things can be different and inspire them to take action" (Harvard Project, 2015).

While all four are crucial, the following will largely focus on institutions and culture, specifically 'culturally-matched' institutions. That is, institutions that have a resonance with a society's knowledge system, values framework and operating principles. Sovereignty and leadership are clearly important, sovereignty facilitates the development and maintenance of culturally-matched institutions while leadership can be seen to make the most of advantages within those institutions. As Cornell and Kalt (2003, 15) note, "Like other nations around the world, Native nations can fall on their faces if assertions of sovereignty are not supported by the [culturally-matched] institutional capacity for effective self-rule".

Regarding 'culturally-matched' institutions, Cornell and Kalt's (2000, 447) have stressed the "paramount importance of [Native American] tribes' institutions of self-governance as causal factors" in the success or failure of economic development. They have persuasively argued that "to be effective and productive of economic progress, formal institutions of government require [a] widely shared extra-constitutional agreement" that is culturally grounded (Cornell and Kalt, 1995, 405). As they (2000, 453) have explained, "culture 'matters' in a particular way: Cultural norms form the glue that holds a society's formal and informal institutions of social control and organization together". This is because "the formal institutions of governance are public goods that are ultimately produced by a society's culture – where 'culture' refers to 1) the cognitive paradigms through which people define and communicate the proper and possible, and 2) the corresponding informal norms and implicit contracts by which groups of people reward and penalize each other for the group-affecting behaviour they engage in" (Cornell and Kalt, 2000, 447). Thus, to deliver economic and social development institutions must not only be pragmatically efficient and effective (possible) but they must also be perceived as culturally congruent (proper).

Developing an analytical framework

Cornell and Kalt (1995) provide an analytical framework for assessing the cultural match between traditional institutions and contemporaneous externally-imposed forms. Specifically, they distinguish between four primary dimensions of authority: the structure of authority – the division of powers and responsibilities across the executive, legislative and judicial; the scope of authority – the range of powers and responsibilities wielded by the government; the location of authority – the level of social organization in which political power is vested; and, the source of authority – the mechanisms by which individuals who assume governmental roles gain legitimate authority. They apply this to two different Native American tribes who have experienced different economic outcomes, showing that the traditional institutions of the tribe who has seen greater economic success – despite having less resources – are more closely matched with the externally imposed institutions that they currently operate under (Cornell and Kalt, 1995).

While this framework offers a useful way of examining the cultural match of institutions relating to authority, it is not comprehensive enough for this project, which is where the broader scholarship on institutional economics can help. Specifically, Williamson's (2000) influential delineation of the four levels of institutional analysis. The highest is the social embeddedness level, taking in a society's norms, customs, mores and traditions, the next level down is the 'formal rules of the game', such as a society's constitution and laws, while the third level is the 'play of the game', including contracts, and finally the lowest level is the market (Williamson, 2000). While somewhat simplistic, these can be categorised as cultural, political, legal and economic institutions, respectively, with the understanding that there is a lot of 'bleed' between these categories – particularly the political and legal – and that they could all be classified as 'cultural institutions' (Joskow, 2008). Related to this, Williamson (2000) explains that the higher levels impose 'constraints' on the lower levels while 'feedback' flows from lower levels up and that each has its own timescale, with the highest level changing over the course of 100-1000 years, the second over 10-100 years, the third at around 1-10 years, while the market experiences constant change.

The cultural level is generally not one examined by NIE theorists, as it "is taken as given by most institutional economists" due to its supposedly long timescales, despite the obvious constraints it places on the lower levels (Williamson, 2000, 596). The concept of 'embeddedness' in economics dates to Polanyi – a proponent of OIE – who understood it as the degree to which economic activity is constrained by non-economic institutions. Embeddedness, for Polanyi, means that the

"economy is immersed in social relations" (Machado, 2011). Sardan (2013) is scathing of NIE's general disinterest in this critical context. While this level "provides the basic foundations for a society's institutions" (Joskow, 2008, 7), it is one that few foci on. For North (1990, 37), this level encapsulates norms that "are a part of the heritage that we call culture", he believes that this level has a pervasive influence on economic decision making, transaction costs, and economic performance and acknowledges it needs more attention from NIE. However, as Sardan (2013) notes, there are two core, contrasting conceptions of embeddedness, the first where the "economy is ingrained in society chiefly through relations of force (relations of production and relations of power)" and the second where "it is through homogeneous social norms derived from a shared past". While NIE academics like North generally focus on norms, within the context of colonisation, the former perspective is more insightful. Williamson (2000, 596) explains that these "informal constraints" of social embeddedness can be "cognitive, cultural, structural, and political" and believes that it is mainly spontaneous in origin.

Pertinently, while Williamson's timescales may conform to the experiences of many western societies, for those that have been colonised change across the higher levels is far faster because it was externally-imposed. Colonisation was "a radical force for institutional change" that "marginalized indigenous structures and excluded local people from the management or regulation of the new ones" (Brett, 1998, 207). Thus, while the 'new' institutional economics scholars have largely ignored the social embeddedness level it is crucial for understanding the failure of the lower level institutions for indigenous peoples. When Joskow (2008, 8) notes that in a "society in a dynamic equilibrium, a given set of basic institutions at this [second] level will be compatible with society's social foundations at any particular point in time" he is inadvertently exposing the problem of uncritically applying these levels to colonised societies. Colonised societies are far from being in a 'dynamic equilibrium'. Furthermore, the drastically reduced timescales and the external imposition of these institutions by a 'predatory' settler state, which serves as an instrument for transferring resources from one group to another, means that often the already blurry lines between the different levels are even less easily distinguished because they are in usually in flux. For example, while Williamson (2000, 598) locates property rights at the second level, because "Once property rights have been defined and their enforcement assured, the government steps aside", the cynical and ongoing manipulation by settler states as a mechanism of land alienation means that they can appear to more rightly be seen as a third level 'play of the game'.

Thus, while institutional economics provides the context critical for understanding colonisation, as it outlines the various levels that must be considered to get a comprehensive understanding of the impacts, its frame of reference needs to be shifted to encompass the indigenous perspective where all the levels of institution were changed in a relatively short span of time. There was no leisurely evolution at the cultural level, as Māori culture, norms and values were attacked by the settler state, with assimilation policies designed to convert Māori to the western view of the world. Not only must the timescales of institutional economics be adjusted when applied from an indigenous perspective, but the frame must also be lifted an extra level. When Brett (1998, 203) explains that the colonial state "introduced a distorted set of capitalist structures which blocked indigenous opportunities for growth and reinforced many of the regressive characteristics of traditional institutions" he provides most of the answer, but the vital highest level is somewhat truncated in this statement. For when indigenous people were colonised, it was both physical and psychological and this 'mind colonisation' needs to be examined when considering institutional economics from an indigenous perspective – it cannot be 'taken as given'.

Nevertheless, Williamson's four levels and institutional economics in general provide us with the necessary scope to construct a comprehensive analytical framework, with the caveat that they are being adapted to purpose rather than strictly adhered to. Thus, the analysis will use these four levels to examine the tītī and pounamu economies, or more specifically the most pertinent aspects from each of the levels. Cornell and Kalt's (1995, 2000) dimensions of authority can be largely located at the political level, though they are clearly informed by the cultural level. This higher-level influence is critical to the development of the framework, as the cultural level is seen as providing such an important baseline for analysis that it will be used to gauge the other three levels. The cultural level provides the overriding 'incentives and constraints' that shape the lower levels and it will be considered in this way. The analytical framework is as follows:

- The cultural institutions: Here the focus will be on 'knowledge', specifically between the
 dominant Māori and western epistemologies, contrasting between pre and post-contact
 changes that have occurred.
- The political institutions: In this section the intent is to examine the political institutions that constrain 'authority'. This section will offer an outline of the society's traditional political institutions, before comparing them to the contemporary situation.

- The legal institutions: This section will examine the nature of 'rights' before and after contact, with the aim of understanding how the changes have constrained the respective industries.
- The economic institutions: In this section the economic institutions of the traditional market will be assessed, before contrasting them with the contemporary situation, with a focus on means of 'exchange'.

Each of these levels will be examined to assess how they have constrained the respective economies.

Method

The following analysis of the tītī and pounamu economies draws upon data and information from two different sources. Firstly, historical literature pertaining to each institutional level of the pounamu and tītī economies is examined to outline the way economic institutions have shifted and adapted overtime in response to colonisation and other pressures. Secondly, the analysis draws upon data gathered from 40 interviews with key leaders and participants, across a range of ages, in the tītī and pounamu economies. These interviews were designed to draw-out oral history pertaining to the institutions of each economy and gather reflections on their contemporary operations and structure. There were 20 interviews undertaken and transcribed in relation to each economy. The structure of the following discussion follows the above method, with the literature pertaining to the institutions of each economy examined first, followed by in-depth qualitative analysis of dominant themes emerging through interviews. Through this approach the stories of those 'living' each economy provides 'flesh' to the 'bones' of the literature analysis.

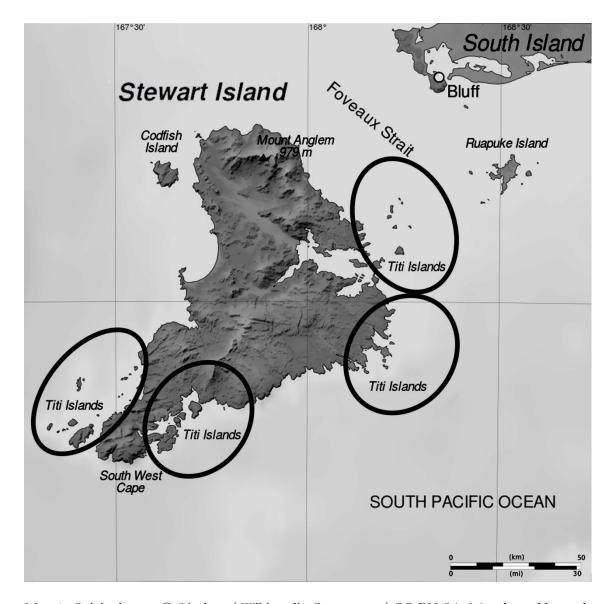
Tītī Economy

Tītī (sooty shearwater, colloquially known as muttonbird) are a pelagic seabird whose chicks have been harvested by Māori for many centuries across numerous small, isolated "Tītī Islands' near Rakiura [Stewart Island, New Zealand's third largest island] (Kitson 2006). After migrating across the globe, essentially doing a circuit of the Pacific Ocean on an annual basis, the vast numbers of tītī—numbering in their millions—return to Rakiura every year to nest in the same place. They are "probably the most ecologically important seabird in New Zealand" (Kitson and Moller, 2008, 162). They also were and remain one of the most economically and culturally important to Rakiura Māori. As Wanhalla (2009, 123) writes, "[m]uttonbirding was not just a food-gathering exercise

but a major social, economic and cultural enterprise, one that was crucial to reinforcing kinship links, maintaining access rights to resources, and preserving cultural knowledge". Stevens (2013, 106) reinforces this, explaining that "[t]hroughout the late nineteenth and early twentieth centuries the harvest acted as a partial bulwark against the tyranny of poverty, and as a social bonding agent that helped maintain a sense of tribal polity in the face of widespread intergenerational interracial marriage and government commitment to an idea of racial amalgamation". Kitson and Moller (2008, 162) express a similar sentiment, explaining that the "harvest is a defining cultural activity for Rakiura Māori that generates social cohesion and group identity". While the exact nature of the traditional tītī harvest is debated, by the protohistoric period it was a sizeable operation (Anderson 1980). There are many reports from European whalers, sealers, explorers, and missionaries around Rakiura in the early 19th Century who attest to large numbers of birders and tens if not hundreds of thousands of birds preserved and ready to be distributed through various kin/trade networks (Anderson 1980, 1997; Stevens 2006; Williams 2004). Rakiura Māori have harvested these birds for many centuries and, largely because of innovations in preservation, tītī were a prized luxury good in the traditional economy, one that was traded the length and breadth of New Zealand (Anderson, 1980). What makes the tītī industry so useful as a case study is that unlike other aspects of the traditional Māori economy, it has continued almost completely uninterrupted into the contemporary era. Stevens (2006, 288) referring to Belich, emphasises "the importance of the 'muttonbirding industry' in the way that it preserved a degree of Kai Tahu economic and social autonomy". Furthermore, because of legal permutations, the islands where the birds are harvested were split into two groups, one with almost no Crown intrusion and the other where the Crown had authority, essentially providing control and treatment groups for our analysis.

In the traditional and protohistoric periods, the tītī industry was politically, economically and socially important, and consequently when the Crown was negotiating the purchase of Rakiura in the early 1860s local Māori requested that all the Tītī islands be excluded from the purchase. It is unclear exactly why only twenty-one named islands were reserved (hereafter: the Beneficial Islands), but the Waitangi Tribunal in its 1991 report on the Ngāi Tahu claim found that all the islands should have been reserved (Waitangi Tribunal 1991). On its own this is remarkable as the harvest remains one of the last of its kind around the world, enshrined in settler state laws where most other indigenous customary rights – including pounamu – were extinguished by these same institutions. Not only were some of the Tītī Islands included in the purchase, many people who had the ancestral right to harvest were not listed on the 1864 Deed of Cession (Stevens 2006;

Williams 2004). This created numerous problems and in 1912 the islands not listed on the Deed (hereafter: The Crown Islands) were (legally) opened by the Crown to those who had the right to bird through whakapapa (genealogy) but had been left off the Deed (Kitson and Moller 2008). As part of the wider Treaty of Waitangi settlement that saw reparations paid for grievances during colonisation, these Crown Islands were returned to Ngāi Tahu, or more specifically the tribal governing council Te Runanga o Ngāi Tahu or the Ngāi Tahu tribal council, which is composed of 18 Papatipu Runanga (regional councils). The favourable finding from the Waitangi Tribunal helped Ngāi Tahu negotiators include it in their settlement, despite the opposition of some third-party interests such as conservationists, public access advocates and tramping groups. The Crown had initially attempted to return the islands with a marginal strip (or Queen's Chain as it has previously been known), effectively retaining some land for the Crown despite ostensibly marking its return. Determined opposition from Ngāi Tahu negotiators meant the islands were returned unencumbered by any marginal strips (Fisher 2015). The map below shows Rakiura and the location of the Tītī Islands, though it should be noted the Beneficial and Crown Islands are not geographically distinct regions:



Map 1: Original map, © Sémhur / Wikimedia Commons / CC-BY-SA-3.0, adapted by authors.

As well as the many political and legal issues birders have experienced over the past 150 years, muttonbirding has been dramatically impacted by Ngāi Tahu transitioning from their huntergathering life into the capitalist market economy of the settler state and by advances in technology, with birders now taking helicopters rather than sailing and/or paddling waka (canoes). Still, as many have concluded, the practice of muttonbirding remains a core expression of cultural identity for those who practice it and is seen as a central pillar of whānau (family) cohesion and tribal economic and social autonomy (Dacker 1994; Kitson and Moller 2008; Stevens 2006; Taiepa, Lyver, Horsley, Davis, Brag and Moller 1997; Williams 2004). Furthermore, while technology has changed much, the basic birding process remains similar to traditional. The season lasts for around two months, seeing fledgling chicks gathered in two phases – in their nest-holes first, then above

ground. Each chick is processed on the island, generally being plucked, salted, then placed into a bucket of between 10-20 birds, ready to be taken back to the mainland for distribution. While information is hard to acquire for the tītī industry and varies vastly depending on season and birder, buckets sell for between roughly \$NZ200-500, our participants talked about individually getting 25-75 buckets as a good season and the overall tītī industry averages between 60,000-120,000 buckets annually.

Tītī cultural institutions

The focus here is on 'knowledge', though with a broad ambit to explore not just 'information' but the way it is gained, ordered and passed on. It is an epistemological inquiry, though this also has knock-on ontological impacts as well. Sadler (2007, 34) provides a useful outline of Māori knowledge, or mātauranga Māori:

"[The Māori] knowledge tradition... had its genesis in ancient Polynesia. It was taken to Aotearoa by the ancestors of the present day Māori where it was further developed by adapting to meet the people's needs as well as to be compatible with the change in environment that they were encountering. It was further refined over a period of about a thousand years and was advanced by the succeeding generations, who added further to the epistemology, into a culture, although having its roots embedded in Polynesia, that was unique, adaptable, and alive and flourished undisturbed until contact with Europeans was made in the 18th Century".

It is knowledge contextualised by place, a relational form of understanding. Western scholars define this as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and the environment" (Berkes quoted in Kitson 2006, 1.5). Māori knowledge is phenomenological and, as Williams (2004, 205) explains, "[u]ndergirding all aspects of the [tītī] harvest was mātauranga Māori according to the Kai Tahu world-view", though as with all mātauranga Māori it was knowledge that was contextualised. It should be noted that while the emphasis here is on mātauranga because of its practice-based nature this also enfolds both tikanga (customs) and kaupapa (praxis), as these emerge from and shape mātauranga Māori. Moller et al. (2009a, 252) emphasize "the way mātauranga embodies much more than practice of

skill and rules for sustainability—rather, practice reinforces a whole suite of beliefs and values". These aspects all work in a dynamic flow.

Before contact, birding knowledge was gained and passed on largely through observation, practicebased experience and narrative; there was, obviously, no competing western epistemology or praxis (Moller et al. 2009a). Subsequent generations of birders learnt from their parents as they harvested, both by watching and through doing the various tasks themselves. The process of birding is complex and "[d]etailed knowledge and skills are essential to harvest and process tītī effectively" (Moller et al. 2009a, 246). In particular, "success for inexperienced muttonbirders was their ability to catch and extract chicks from breeding burrows. To become efficient in the nanao catching technique is difficult for some, even after years of muttonbirding" (Lyver and Moller 1999, 285). Narrative is also a key means of passing on knowledge, "Rakiura Māori used story-telling as a method of passing on traditional knowledge, such as history, legends and whakapapa (genealogy). Birders would gather before or during the harvest season to share their experiences, advice and opinions on current and previous harvest seasons and their recollections of times past" (Moller et al. 2009a, 246). The ordering of knowledge in mātauranga Māori contrasts with western epistemology, which is focused on a reductive understanding. As Royal (quoted in Sadler 2007, 36) explains, Māori use an analytical tool called whakapapa (genealogy), and the "essential theme about whakapapa is that two phenomena come together to create or give birth to a third phenomena. The next conclusion to make, is that when faced with a phenomena, the whakapapa system tells us to look behind the phenomena to find two connected phenomena which have given rise to that phenomena before you. When we have considered the two parent phenomena, we can reapply the tool to find their parent phenomena. Hence the system urges us to consider relationships". Providing further insight into the order, as well as the transmission, Williams (2004, 92) explains that "[a]ccurate recording of knowledge in oral societies requires sophisticated memory management techniques and, in the case of Māori, these were based on whakapapa... whakapapa is the basis of Māori taxonomies". Tītī were not just considered as a crucial commodity but also understood through their whakapapa connections. They were a relation that Māori had an obligation to kaitiaki, this connection was reinforced by the mātauranga epistemology (Reid and Rout 2018). As Kitson (2006, 5.30) notes, animism's "holistic view of the environment, [means] all forms of life are related and Maori see themselves as an intrinsic part of that environment".

Critically, it may be assumed that in the traditional and protohistorical eras birders gathered at Ruapuke Island before the season began which provided an opportunity share insights and knowledge. As Dacker (1994, 8) notes, "[e]xpeditions to the major resources such as the Titi Islands... often involved smaller hapu groups coalescing into a larger group or primary hapu, then breaking up into smaller groups working a particular resource area to which they had rights". Thus, just as the gatherings at Ruapuke involved rights and exchange (to be discussed below), it is probable that they also served as a means of knowledge transmission, with the various whānau sharing practical techniques and insights as well as debate, discussion and oratory about connections to whenua and the tītī itself. Even into the 1960s, due to shared transportation there was still a gathering of birders and the consequent flow of information. As Moller et al (2009a, 247) note:

"Story-telling continued as birders travelled to the islands. In the past, the only transport to the island was by communal boat. The 'Old' and 'New' Wairua was a government-owned boat that brought many of the birders to the South-West Island group. The journey could last from a few days to 2 weeks, depending on the weather conditions. During this time the birders would share stories and information".

In the contemporary era there has been both continuity and change. While it varies across whanau, many have been able to hold onto the core knowledge that guides and informs their birding. As Clucas et al. (2012, 156) explains, there has been an "[a]ctive maintenance of traditional knowledge through oral traditions [which] has enabled birders to accumulate a body of knowledge (mātauranga) that serves to maximise hunting return for effort". This is accumulation of knowledge is also noted by Kitson's (2006, 5.10) examination of indigenous knowledge in the Tītī Islands, "[p]art of the assessment of a Rakiura Maori knowledge holder is that they: had a good teacher; come from a cohesive family with a good transmission of knowledge through the generations; are experienced harvesters, with current knowledge; and are trustworthy in other aspects of life". It is, in general, the elders who remain the repositories of information. However, as Kitson (2006) warns, while there are still many elders who are well-versed in the mātauranga, tikanga and kaupapa surrounding and guiding birding many of them are worried that the transmission to the next generations will not be as comprehensive in spread or depth as the preceding generations. In effect, they may be the last generation to have learned in a way proximate

to the traditional era, as she concludes (2006, 5.37), there "are indications that current cultural transmission may be deteriorating".

Transmission of knowledge has become increasingly problematic for several key reasons, namely the competing epistemologies, that most birders make their own way to and from their island now and that the whole whānauare of traditional birding has been eroded. With respect to the first, as Moller et al. (2009a, 250) note "knowledge transfer may also be affected by changing styles and approaches in teaching, learning and cognition. In some instances, information may not fully transfer between generations".

Transport has changed dramatically since the 1970s, and now many birders hire their own vessels or helicopters to go straight to their islands, meaning that exchange of information and techniques is less likely to occur. While part of the reason is that the technological advances have allowed for this, another factor is economic. People no longer have the time available to gather beforehand. Furthermore, Birders no longer need to congregate at Ruapuke Island for rangatira (chief/s) to adjudicate on rights and exchange (discussed below), reducing the interactions that would facilitate greater knowledge transmission. This has played a role in the more atomised, individualised nature of contemporary birding, as only some people within whānauare able to bird, meaning that the ability to share knowledge through practice and narrative has declined. Where once the whole whanau group may have gone birding together for the whole season every year, now the attendance is patchier, with only some family members able to go at all and some only making it down for certain parts of the season or only some season (Moller et al. 2009). There has been a decrease in children birding, largely due to school, which makes the transmission of knowledge increasingly difficult.

There have also been concerns amongst birders regarding western knowledge systems as they are seen as being mechanisms of dispossession, there has inevitably been an increase in empirical examination, though this is generally conducted by 'outsiders'. Regarding the joint project between birders and Otago University, Moller et al. (2009b, 222) explain, "[t]here was widespread recognition that the decision to engage in science-mātauranga partnership was both politically dangerous and expedient. One way of protecting the birding was to use science as a way of giving confidence to external agencies that the harvesting was sustainable and that the Tītī Islands were

being managed responsibly... Some birders were cynical about opposition to the science from within their own community which they saw as politically motivated".

While there are certainly clashes between the two forms of knowledge, one interesting area of acceptance has been in the fact that the tikanga relating to muttonbirding has been largely "incorporated into formal New Zealand legislation to help protect the sustainability of the sooty shearwater harvest" (Lyver 2002, 37). In fact, "in 1910 Rakiura Maori petitioned the New Zealand government to recognise most of these rules as legal regulations" (Kitson 2006, 4.25). The rahui has been legally enshrined in the Tītī (Muttonbird) Islands Regulations 1978 and "while the Regulations do not themselves use the word rāhui, they do effectively implement the substance of this rāhui" (Wheen and Ruru 2011, 176-177); likewise many of the resource rules prescribed in the tikanga are "now found in legislation (Department of Lands and Survey 1978) and [are] enforced with prosecution, fines and confiscation of harvest" (Kitson 2006, 5.29). That said, "[c]ompliance with these rules, based on respect and reciprocity, are enforced primarily by fear of divine retribution... [as the] social mechanisms can be far more effective and are less costly than legal compliance and enforcement mechanisms" (Kitson 2006, 5.29). Thus, while the tikanga has been integrated into the settler institutions, both their legitimacy and enforcement are more likely to come from Māori institutions. Nevertheless, it does show that these domains do not always have to be in competition.

Tītī political institutions

Here authority means not only the power or right to issue orders, make decisions and enforce obedience, but also encompasses the personal and charismatic authority emerging from mana (authority, power, prestige). As noted earlier, mana has three sources: mana atua, mana tupuna and mana tangata and this tripartite determined the dynamics of leadership and accountability in Māori society. A loss or gain in mana tangata would result in the equivalent gain or loss of authority, it functioned as the meritocratic stabiliser against inherited status. Anderson (1998, 100) explains that "Ngai Tahu liked to avoid dynastic aspirations by balancing the mana conferred by whakapapa with that acquired by service". Thus, authority in traditional Māoridom was reciprocal, nested and dependent rather than absolute (Gallagher 2003).

One of the most important aspects of authority for this research is the loci of authority. There were three key groupings, whānau, hapū and iwi, with the hapū constituting the most powerful socio-economic grouping in traditional society (Ballara 1998). However, the "popular model of hapū is often found deficient when describing Southern Kai Tahu" both because individuals could "claim mana whenua (related to mana tupuna) through several hapū... [and because] hapū land cannot be mapped as discrete, contiguous blocks" (Williams 2004, 86). Bathgate (quoted in Waitangi Tribunal 1991, 184) believes that while "the Ngai Tahu tribe was an entity in itself, it was comprised of many hapu which were the major units of social organisation above the whanau or family at the local level". Anderson (1980, 3 – emphasis in original) however, writes that the "various hapu of the Ngai Tahu were in fact... a closely related and homogeneous people". Unlike the North Island, Ngāi Tahu "[h]apū were resource based rather than regional, and the resources of various hapū might be intermingled over a wide area or indeed, in some cases, shared" (Williams 2004, viii). As Anderson (1998, 118) explains, "[m]obility, seasonal and non-seasonal, was common in Māori society but it was so much more frequent among Ngāi Tahu that it is almost a defining characteristic of the southern people". This greater mobility and blending of hapu was driven by the need to secure enough resources, it was a survival mechanism (Stevens, 2006).

Thus, while hapū were likely still the most dominant social grouping for Ngāi Tahu, this must be moderated by the higher inter-hapū intermingling and the impacts resources played on authority. Te Waipounamu was colder and more rugged than Te ika a Maui (the North Island), making gathering and accumulating resources more difficult, so it is unsurprising that an abundant, localised and prized resource, such as tītī, would impact authority. With respect to this, in an argument crucial to understanding the tītī industry, Anderson (1980) believes that the birds were so valuable and localised that this resource enabled Ngāi Tahu to maintain a hierarchical tribal structure despite not practicing agriculture, as he notes, maintaining "a stratified tribal society founded upon a hunting-fishing-gathering economic base is quite exceptional". While Anderson (1980, 13) is careful not to overstate his case, he does offer a range of evidence that supports his theory. For example, Ruapuke Island, which serves as a gateway to the Tītī Islands and was "the centre of the muttonbirding activities during the protohistoric period" served as the residence of the Ngāi Tahu rangatira (high chief) (Anderson 1980, 16). Of all the places in the enormous Ngāi Tahu takiwa, a small island in the notoriously dangerous Foveaux Strait at the very bottom of the South Island is the most incongruous as an important residence for climatic, geographic and logistical reasons, yet this was one of the key settlements (along with Kaiapoi - which was the key pounamu hub) of Ngāi Tahu chiefs. They chose this location for a reason, there can be no doubt

that this was a geopolitically guided decision, but it was not because of its climate or locality. It seems likely that it was because of this incredibly bountiful and prized commodity that the chiefs chose to live in what was an otherwise remote locale. As Anderson (1980, 14) notes, one year's catch of roughly "250,000 muttonbirds would realise at least £5000 or more than the whole of Otago and Canterbury [were sold for in the same decade [1840s]". As the missionary Wohlers who arrived on Ruapuke in 1844 noted, the island was without cultivation and yet was able to support a population of at least a thousand people even at the beginning of the proto-historic period (Anderson 1980). Furthermore, as Anderson (1980, 15) notes, "[p]reserved birds in general were an important article carried by the porters in an extensive east coast land transport system described by Stack". This trade network was already well established in the early protohistoric record, with a path running from the bottom of the South Island, where the tītī were located, and from the West Coast, the source of pounamu, to Kaiapoi in the Canterbury region - not coincidentally the nexus of both these precious resources - before snaking north towards Cook Strait where there permanent traders (those who Cook himself noted were highly skilled at bartering on his visits) resided (Petrie 2006; Williams 2004). Anderson thus draws the logical conclusion from all of this information – the tribal structure despite being hunter-gatherers, the seat of tribal power being in an otherwise impractical location that is the gateway to the Tītī Islands, the incredible wealth of the tītī resource and the large trade network that ran up the East Coast of the South Island - that tītī enabled Ngāi Tahu rangatira to maintain an overarching executive power. As Anderson (1980, 15) outlines, the "operation of this system for the distribution of such a valuable commodity would, it is suggested, have provided the necessary background for the development, or the maintenance, of a tribal chiefdom", with the rangatira most likely acting as "the arbiter of birding rights and the foremost broker in a mutton bird exchange". This bears repeating, the high chief lived on Ruapuke as he was able to control both birding rights and tītī exchange – his control of such a valuable resource enabled him to maintain overarching authority. Anderson (1980) dispels arguments that Ngāi Tahu's tribal structure is either a vestige of its historical northern origins or because of European influence, in particular, potatoes. Anderson's 'tītī tribalism' theory is highly convincing, the many threads of circumstantial evidence hold weight, and is reinforced by fellow Ngāi Tahu history experts Stevens (2006, 2011) and Williams (2004). Stevens (2011, 24) even argues that "the notion of tītī tribalism is helpful and relevant beyond the imperial encounter, throughout the colonial encounter, and right up to the present-day [as in] each of these epochs, those southern Kāi Tahu actively involved in the harvest were self-assured in ways that their northern whanauka and many North Island Māori were not", and while we agree with him, as we will show when it comes to the high chief's role as ultimate authority regarding

rights and exchange, there has been a critical discontinuity that holds important insights into the current state of the tītī industry.

While the high chief held executive authority regarding birding rights and tītī exchange, on the Tītī Islands themselves whānau elders had authority, playing "a strong role in the decision-making and harvest practices on their particular island or manu [birding territory]" (Moller et al. 2009a, 251). Expanding on this, Moller et al. (2009a, 251), explain that "[g]overnance was another major responsibility for family elders, as they had... a strong role in the decision-making and harvest practices on their particular island or manu. Elders could remove younger family members from the island or prevent them from taking part in the harvest if they caused damage or misbehaved on the island. They could also set rules that the family had to abide by, such as rāhui, a temporary ban on harvesting, or bans on certain harvesting or processing practices". Also, "[h]istorically, the kaumatua [elders] of the island determined birding territories" (Kitson and Moller 2008, 165). Elders, therefore, had relative freedom on their island or manu in the traditional and protohistoric period but the high chief had the authority to determine birding rights and to regulate tītī exchange. There was, then, a division between what we might refer to as the 'operational' authority at the whānau level and 'executive' authority at the iwi level. It should be noted that while 'authority' is political it has obvious spill-over into the legal and economic institutions precisely because it is – to greater or lesser extents - authority over these 'lower' order institutions. The operational authority can be seen as the day-to-day capacity to make decisions within a specific sphere, while executive authority is the highest power with an overriding capacity to make key decisions, though this power is limited rather than absolute. This authority dynamic is crucial to understanding the contemporary situation, not just its functions but also the way in which it would have been understood and accepted by the tribe as the roles of, and interactions between, the operational and executive authority that were embedded within tikanga. In short, the roles of authority and their power dynamics were well-defined and would have been widely accepted by all birders (Gallagher 2003; Mead 2003).

Regarding the contemporary situation, generally speaking, whānau elders still have operational authority (Moller et al. 2009a). This has been somewhat moderated by the creation of supervisors for each island or manu, a position that was created when the first muttonbirding regulations were put in place (Land Act Regulations 1912). Supervisors are elected by those who harvest on the same island or manu, at annual meetings called the 'Permit Day hui'" (Moller et al., 2009a, 251).

The supervisor "was responsible for allotting manus (bird catching areas), supervising conduct on the area under their supervision and reporting any infringement of the regulations to the Commissioner" (New Zealand High Court, 2016a, 3). As Moller et al. (2009a, 251) explain, in "many cases those who are elected are respected elders or people who are recognised for their wisdom and fairness. The latter appear to have a similar role to that traditionally held by elders". They are responsible for the fair and equitable distribution of the privileges, opportunities and rights, and they are also able to allot manu, help people choose building sites and they are also responsible for ensuring that harvest practice is carried out correctly, including deciding when the different birding periods can start and end (Moller et al., 2009a). That said, elders still retain a high degree of operational authority though this has been somewhat 'diminished' (Moller et al., 2009a).

While there has been a relatively continuity at the operational level, there are new complex and confused power dynamics at the executive level, with a committee for each island group, Ngāi Tahu (in the form of the iwi governing council Te Runanga o Ngāi Tahu or TRONT) and the Crown all having differing powers. After numerous legislative changes that have seen authority shift several times, there are now two committees that 'administer' their respective island groups, which in practice means they have assumed the executive authority to adjudicate on rights, pass by-laws and enforce tikanga on the islands. The first of the two committees, the Rakiura Tītī Committee (RTC - sometimes the RTIC), was created by the 1978 Tītī Island Regulations to administer the Beneficial Islands (Gendall 2016). The RTC's major "role was to inquire into and make recommendations to the Commissioner on any matter relating to the land in question that he may refer to it, and upon such other matters as it thought fit" (Gendall 2016, 4). The RTC is elected during the annual meetings of Beneficial Rakiura Māori and their spouses. Those present at the meeting elect the 10 incoming members of the RTC, which must include a majority of Rakiura Māori plus one nominated by TRONT. A chairman is also elected by those at the meeting out of the incoming RTC members. The RTC decisions are made by majority vote. The roles of supervisor and commissioner continued, with the former still being appointed by the latter until 1987, when the Director General of Conservation assumed the Commissioner's responsibilities (Gendall 2016). The 2007 amendments to the 1978 Legislation transferred the Director General's capacity to appoint supervisors and dispute resolution responsibility to the RTC, it also granted the RTC the task of calling the annual meeting as well as the ability to call a meeting of all supervisors (Gendall 2016). The comparable Crown group entity is officially known as the Rakiura Tītī Islands Administering Body (RTIAB) and is constituted under the 1998 Ngāi Tahu Settlement Act (Graham 1998; Moller et al., 2009b). The RTIAB also has 10 members and must also have a

member nominated by Ngāi Tahu; however, while the RTIAB members are selected by their peers, the "Minister will then formally appoint those persons" and they hold the position for five years, as opposed to the RTC who are elected by their peers and serve for a year (Graham 1998). This is the major difference between the two committees, that the Minister holds the right of veto over membership for the RTIAB.

The 1998 Treaty Settlement between Ngāi Tahu and the Crown created significant changes with respect to authority, particularly regarding the Crown Islands, as "since the Ngai Tahu Treaty of Waitangi claims settlement... [the Islands] are administered and the Islands are managed by Rakiura Maori" (Wheen and Ruru 2011, 177). As Te Rūnanga o Ngāi Tahu (1996) explain, "[u]nder the terms of the Crown's offer Rakiura Māori were given the statutory responsibility for control and management of these [Crown] islands... including the power to make by-laws. However, they must act in accordance with the terms and conditions of the transfer of the islands, and the normal laws of the land". Thus, Rakiura Māori, and Ngāi Tahu, gained greater operational authority in their capacity to make by-laws as well as an increased executive authority through their statutory responsibility for control and management, and while this authority is still tempered by the need to operate within the 'laws of the land' there is also a reciprocal limitation on the Crown (Ngāi Tahu Claims Settlement Act 1998). As explained in the settlement, "the Administering Body, Te Runanga and the Minister will prepare and agree on the initial bylaws for the control and management of the Crown Titi Islands" (Graham 1998). Furthermore, complicating this situation, as stated in the settlement, upon commencement the 1978 "Regulations will cease to apply to the Crown Titi Islands" though any by-laws must "take into account the relevant provisions of the Reserves Act 1977 and the Regulations" (Graham 1998).

However, the executive authority of the committees and TRONT is not absolute, as the Crown, through the Māori Land Court, also adjudicates on rights for both island groups. As the 1983 Act that vested title in the Beneficial Owners outlined, the Māori Land Court (Isaac 2013, 1028) retains "exclusive jurisdiction to determine relative interests and succession to such interests of deceased owners and appoint trustees for persons under disability in respect of the beneficial ownership of the islands". Likewise, the Department of Conservation retains control of who is able to access the islands outside of the birding season. There is, then, no single executive authority for rights adjudication and none of the various executive authorities have any power or capacity with regard to regulating exchange. This contrasts with the traditional situation where the lines of authority

were far clearer, and the executive authority had the capacity to regulate exchange. It seems that the authority to regulate exchange was lost quickly after the sale of Rakiura in 1864. Unsurprising considering the loss of mana for the rangatira that would have occurred with the loss of land. As Anderson (1990) notes, the rangatira Topi Patuki, one of the key signatories of the 1864 Deed, was "[l]iving in 'proud poverty' near the end of his long life" in 1900. The other factor that would have seen this exchange regulation capacity lost is the dramatic expansion of the settler economy, as market exchange replaced reciprocity (see below). Whatever the causes, it seems that within a few short years after the sale of Rakiura, the rangatira was no longer able to regulate tītī exchange and, as we will show, this change has had some implications for the contemporary tītī industry.

Tītī legal institutions

Generally speaking, traditional rights were layered, dynamic and, consequently, complex (Williams 2004). As the eminent historian Alan Ward told the Waitangi Tribunal (1991, 183), the "question of just which sections of Ngāi Tahu owned or controlled what rights is a matter of some complexity – a complexity that had grown up over many generations of travel and dispersal over and through Te Wai Pounamu. Some rights, like mutton-birding in the Tītī Islands, were exercised far from the group's residential bases". Māori did not 'own' land but rather had an array of user rights that were largely defined by resources (Reid 2011). As Anderson told the Waitangi Tribunal (1991, 183), "land and its resources was perceived in three ways: as a tribal territory, that is, the area for which the tribe would fight; as land in common ownership excepting those tenured pieces, or rights of access to resources, which were inherited through hapu and could be located at any point in the tribal territory; and as a series of annual ranges (weakly combined into districts), which were the areas customarily ranged over by the members of the residential communities in the course of their yearly economic activities". As Anderson went on to explain to the Tribunal (1991, 183), this tripartite relationship with land created "an economic system in which common ownership was not congruent with management. The tribe owned the land in common but did not manage it economically. Hapū owned property or access rights but did not manage them at hapū level. Communities owned neither land nor resources but, were, nevertheless, the operationally-effective economic managers through their organisation of activity schedules and labour". Because of this complex and nested relationship, mahinga kai rights (take) were conferred to users through a range of different tikanga: "ancestry (take tupuna), conquest (take raupatu), gift (take tuku) and the important question of actual occupation (ahi kaa) which must accompany a take" (Waitangi Tribunal 1991, 182). That said, while the other take were important, take tupuna – as reinforced by continuing ahikā – must be understood as the key institution, as whakapapa is the central determinant of Māori relationships with whenua. Williams (2010, 163), discussing the terms used by Ngāi Tahu to delineate mahinga kai sites, explains that in "each case, the term refers to a discrete area that had been set aside for a particular group of people (*kaitiaki*), and in all cases rights had been gained through whakapapa".

As a prized resource, tītī were governed by strict user rights as delineated along whakapapa lines, though this was not an absolute genealogical right but rather had to be retained through ahikā and ultimately could be given or taken away at the high chief's discretion (Wheen and Ruru 2011; Williams 2004). While these rights were utilised collectively by the whānau, "[f]rom the position of the family, these manu belonged to the family elder with rights" (Tau 2016, 684). As the right was not absolute it is likely that the high chief would have used mana – as well as whakapapa and ahikā – as a metric to grant or deny rights. Muttonbirding rights were likely a way for the high chief to reward and punish iwi members, solidifying his own mana tangata in the process. Historically, the "islands were divided into different areas (manu) for each family to work" (Tau 2016, 684) "so that each whakapapa group had their share, and [the manus] were exploited by entire family groups" (Williams 2004: 149). Tau (quoted in Rout et al. 2018, 863) provides a statement given by an elder at a Native Land Court hearing in 1887 explaining that the island Papatea "was divided into sections and names after certain ancestors". The preciousness of the resource and the resultant surety of who held rights suggest the rights configurations were well-defined.

That said, they were not fixed. As Anderson (1980, 10) explains, hapū affiliation was not always clear and consistent but appeared to depend on the resource in question, such that in "1864 the Otakou people attempted to argue their case for access to the southern mutton bird islands on the basis of Ngati Mamoe ancestry but were eventually forced to adopt Ngāi Tahu bases [sic] for their claims... [in a way that] seem[s] to reflect a desire to legitimise ownership or access by appeal to ancestry of greater antiquity than that usually necessary in the circumstances of the immediate family". When discussing rights, Williams (2004, 149) notes that "not all members of each residential base journeyed to the same harvest location", showing how these complex affiliations manifested. Furthermore, one major change from the traditional to the protohistoric era that would likely have generated conflict was that more islands were opened up for harvesting by European technology (Wilson 1979). Anderson (1980, 15) describes a period of unrest during this

period in 1823, when the "Ruapuke people [were] at loggerheads with those from Kaikoura and Otakou in their midst. They regarded them as intruders upon their rights and... each of the groups spent most of its time watching the others for signs of hostility". One important consideration when considering the user rights in the post-contact period is that they had probably been through a relative state of flux in the preceding decades.

The intervening 150 years has seen much confusion and contention over who has rights (Kitson and Moller 2008; Stevens 2006). Unlike land sales across the rest of New Zealand, the Rakiura Deed saw Māori user rights entrenched in – rather than extinguished by – settler legal institutions. Kitson and Moller (2008, 162) explain that "[t]ogether with subsequent legislation, the Deed acknowledged the hereditary rights of Māori to harvest Tītī. 'Beneficial Islands' were set aside for the use of Rakiura Māori descended from chiefs who signed the Deed". A "companion document [to the Deed] recorded which people and families had rights to which islands" (Stevens 2012, 115). According to Crown regulations, Beneficial Owners have to prove they descend from one of the owners of the islands and to become a Beneficiary, the birder needs to inherit their right from their parent when they die, with all younger generations referred to as 'potential beneficiaries' and only allowed to bird with permission from their whanau member who has the right (Kitson and Moller 2008). However, as previously stated, that 1864 list was not complete, and this has created decades of problems. As Stevens (2012, 115) explains, "[l]ike many transactions of this sort, this list was seemingly incomplete and failed to record the names of all the people with interests in respective Tītī Islands. The list was thus added to and updated in both the first and second decades of the twentieth century after investigations by the Native Land Court. The list of islands was also seemingly deficient in the first place in that several Tītī Islands, nearly as many as were recorded, were omitted, to say nothing of who may have had rights to these. Ultimately, they became known as the Crown Tītī Islands, in distinction to the aforementioned islands, which became known as the Beneficial Tītī Islands". Thus, after much protest and agitation, the Crown Islands – which many had been using in the interregnum anyway - were opened for those who had "wrongly missed out on allocations on the Beneficial Islands" (Kitson and Moller 2008, 162). Both Beneficial Owners and those who had whakapapa rights – but no Beneficial Rights – were defined as 'Rakiura Māori', which "is a legally-defined term based on usufructuary rights to harvesting Titi, as determined by whakapapa (genealogical links) to the harvesters present when the 1912 regulations were promulgated" (Kitson and Moller 2008, 161). It took decades from the signing of the Deed for those who did not have Beneficial Rights to gain legal clarity regarding their rights and even

then, there continued to be challenges to the list of those who had a right, with many legal actions being launched right up to the present day.

While there remain some challenges, the rights issues have been largely overcome and the core whakapapa-based nature of rights remains for both groups. For the Beneficial group, the right belongs to the whānau elder and is passed on upon death, while the right to bird on the Crown Islands requires proof, they are Rakiura Māori. The flexibility of how they gain these rights has changed, however. For the Beneficial group succession has become more fixed in nature. Where once there was mobility through changes in mana and ahikā the rights are now determined solely by whakapapa. Conversely, for the Crown group rights have become more fluid, in that now those Rakiura Māori without a beneficial right must apply for a permit every year (Kitson 2006). This has resulted in a loss of ahikā and consequently the whānaungatanga [community], tikanga and mātauranga that have guided the exercise of these rights have declined. As a result of the loss of a clear executive authority and the ongoing issues regarding who has rights, the geophysical configuration of the rights has become less clear on many islands "that hitherto had distinct manu, no longer do so" and, consequently, have "witnessed a shift from pockets of self-interested kaitiakitaka to a tragedy of the commons type race to the bottom" (Stevens 2011, 28).

Regarding the geophysical configurations, there has been an increased flux in the boundaries of manu. Now, as Clucas et al. (2012, 156) explains a "birded colony may be worked as an entire area by all those on the island ('open manu 'system) or divided into specific areas designated to a particular family ('closed manu' system)". Furthermore, "[o]n some islands the type of territory system in place varies according to the development stage of the Tītī chicks. During nanao (extracting chicks from burrows), some islands work in 'strips', where all the birders work side-by-side, harvesting from one boundary to another on a pre-determined width of manu... territory systems are dynamic and systems on islands have changed over time. Some islands that had closed systems now have open ones, while Big Island has changed from a closed to open, and then back to a closed system over a lifetime" (Kitson and Moller 2008, 165). In the intervening decades some of the islands have lost their defined manu altogether while others have seen the manu system change depending on the phase of harvest. While there will be many factors involved in this development, it seems likely that the loss of ahikā has played a role in this degradation. With all the disruption experienced both on and off the island, it is unsurprising that the geophysical delineations of the birding territories have been impacted.

Tītī economic institutions

The key quality of economic institutions is 'exchange', specifically the mechanism through which goods and services are transferred. The pre- and post-contact institutions that shape and constrain exchange have changed dramatically, where the traditional economy was largely based on reciprocity, the post-contact system is dominated by market exchange, with the tītī industry increasingly enmeshed in the wider settler capitalist economy.

It would appear that in the traditional and protohistoric eras, the rangatira used redistribution within Ngāi Tahu and a mixture of barter and gifting regulatory exchange with other iwi (Anderson 1980; Stevens 2006; Williams 2004). Certainly, the high chief did not control the total supply of this precious resource - not only would whanau have kept their own supplies to get through the winter months but, as Stevens (2006) explains that in the traditional era tītī were distributed through both hakari (feasts) and kaihaukai (the mutually obliging if not co-dependent exchange of one or more foods between settlements). Food was a critical commodity, and there were several factors that impacted the means by which it was exchanged including regional variation, perishability and seasonality. It is unsurprising, then, that Ngāi Tahu, who lived in a more insecure food climate, developed a range of exchange mechanisms. While both hakari and kaihaukai can be categorised as reciprocity, the kaihaukai had a more pragmatic bartering component as it provided a means of sharing surplus specialist goods. Hakari were feasts held by one hapū or iwi for another as a means of cementing a wider social alliance (Williams 2004). Firth (1972, 328 - note 3) defines kaihaukai as "a return present of food made by one tribe to another", though referring to it as a 'return present' does not capture its true purpose. Williams (2004, 89 – emphasis in original) clarifies that unlike their northern counterparts Ngāi Tahu kaihaukai "is not necessarily a return feast" but rather that "the main focus of kaihaukai in the south was to distribute surpluses of food". It was an exchange "with obligation to reciprocate", but it was more than that, it "involved notions not only of reciprocity - it required mana whenua - it could also require a return contribution and it was a form of trading" (Williams 2004, xii, 123). Tikao (1990) explains that in contrast to the hakari, the foodstuffs were not feasted upon by the exchanging parties after kaihaukai but rather were taken home. The kaihaukai was a way of redistributing unique foodstuffs, as Dacker (1994, 9) explains, it involved "the exchange of speciality foods of different hapu from different rohe coming together following the return of the harvest", concluding that this "exchange was the basis of the traditional economy". While seen as more pragmatic, kaihaukai still

fulfilled the deeper function of mutual obligation, they were also used as a means of sealing social alliances (Williams 2004). Tītī, along with other foodstuffs, were exchanged for both utilitarian and socially-obligating purposes amongst different Ngāi Tahu groups.

Still, Anderson's (1980) convincingly argued position suggests that the high chief's executive authority enabled him to control much of the exchange in a way that was not just beneficial to him, but to the whole tribe. One key piece of evidence that supports Anderson's contention is the scope of the traditional and protohistoric tītī industry and while determining the exact size and range before contact is impossible, both because it was dynamic and has been overlaid by protohistoric and historic understandings that obscure as much as they enlighten, there are some clues to its extent. Based on the archaeological record, Anderson (1997, 48) himself concludes that "muttonbirding on the historical scale began late in the prehistoric era as other major sources of terrestrial protein disappeared or became scarce". Likewise, Kitson and Moller (2008, 162) write, "[a]rchaeological data show that Sooty Shearwaters were widely exploited as a food and trade source in prehistoric New Zealand but their present large-scale use may have been a protohistoric phenomenon". That said, there are oral histories that show there was some traditional trade across the South Island and even to the North, with one from roughly 1550 describing a social outcast acting as a 'highwayman' on a trade route where 'large quantities of mutton-birds, dried fish, prepared tii-palm, and other Native products were carried north, and supplies of clothes (Native mats) and other things brought back in return" (Williams 2004, 21). Likewise, another oral history, which could date back as far as 20 generations, recounts the annual heke by Ngā Rauru from Taranaki to "trade preserved forest birds and kūmera for muttonbirds" (Williams 2004, 196). Also, in 1793 someone from the far north was able to draw a map of the South Island that accurately labelled several resource areas despite never having been there, showing how far information had travelled (Waitangi Tribunal 1991). This all suggests that while the tītī industry was far smaller in the traditional era, it seems to have spread out beyond the Ngāi Tahu takiwa and as the tītī were exchanged further from Ruapuke Island the likelihood of these being utilitarian transactions increases.

There have been many changes from protohistoric period to the present day. Very quickly after contact there was a dramatic increase in nationwide barter as European settlements and technology enabled trade and the new influx of desirable goods encouraged trade. In 1873 the *Otago Daily Times* explained how critical muttonbird barter had become for Rakiura Māori. Likewise, Wilson

(1979, 77) discusses how in the early colonial period, muttonbirders did not pay cash for any of their supplies but rather everything was 'paid' for beforehand through barter, noting that "muttonbirders did not talk in money. They handled no cash, unless they were lucky enough, if the season was good, to be able to slip in an extra kit or two which were exchanged for cash". In the late 19th Century barter was still common, though the commodities exchanged for tītī were increasingly Pākehā commodities, such as flour and butter (Dacker 1994). However, by the turn of the century, market exchange had increasingly come to dominate the tītī industry, though both gifting and barter continued to be practiced (Dacker 1994). Polanyi argues that while these different mechanisms of exchange are generally all present in a society simultaneously, "only one can constitute the dominant integrative mechanism of an economy" (Nee 1996, 909). As Nee (1996, 910) explains, "transition from one institutional form to another entails remaking the fundamental rules that shape economies, from formal regulations and laws to informal conventions and norms"; this is Polanyi's 'Great Transformation', where socially-embedded reciprocity gave way to impersonal price-driven market exchange.

Gifting to whānau appears to have been relatively consistent throughout the 19th and 20th centuries. The endurance of gifting despite the shift to market exchange is not unusual, but rather, is common across societies (Offer 1997). It is redistribution that is less likely to survive in a market economy as the two forms of exchange are largely incompatible – the former premised on centralised control and the latter on decentralisation (Nee, 1996). This fits with the widely held neoclassical theory that barter is replaced by money as the latter solves the problem of the necessary 'coincidences of wants' of the former (Jevons 1865; Smith 1776). Humphrey and Hugh-Jones (1992) argue against this theory, and their own delineation of barter as non-spontaneous, requiring face-to-face interactions, and yet not demanding ongoing social relations provides extra insight into why it would have declined (Humphrey and Hugh-Jones 1992). In other words, barter probably declined because it was both less practical in modern New Zealand and this impracticality was not worth attempting to overcome because it did not fulfil any social outcomes and the same pragmatic exchange could be conducted spontaneously and over long distances using money. In 1927 the Evening Post (16) explained that while Rakiura Māori "used to barter with mutton-birds for articles from the North Island... At the present time the natives derive a substantial income from muttonbirds". That said, Wilson (quoted in Williams 2004, 197) writes that in the mid-20th century "the vital necessities of life, groceries and clothing, were obtained by a system of barter with selected storekeepers", likewise passage to and from the islands was generally based on barter exchange in this period as well. In 1938 The Press reported that the birds bartered for passage

represented the greater portion of the catches. It is telling that the barter that continued into the 20th Century was non-spontaneous and, probably most important, face to face. Barter for passage was replaced by market exchange for many by 1946 according to the *Alexandra Herald and Central Otago Gazette* as the birders' passages had to be paid for in cash before departure when the half-season trip to collect the bartered birds was officially abolished. It was, then, a change in the legal institutions that drove the change from barter to cash in this case. While anecdotally Williams (2004) found that barter for both supplies and passage were still common to a degree the reality is that in the contemporary era "mutton birding had gradually become a more costly exercise" (Waitangi Tribunal 1991, 870), meaning that to ensure they are able to pay for all the necessary transport and supplies birders need to get money from their commodity. That market exchange would come to dominate is unsurprising as birders have become fully enmeshed in the wider settler economy, needing money for life off the island and to purchase birding supplies and transportation. Where once the exchange was largely socially-defined and intrinsically connected to authority structures, it is now largely an unregulated utilitarian exchange of a commodity for cash.

The tītī institutional framework

As should be clear, these institutional components cannot be considered in isolation, but rather together as an overarching framework. It is apparent from the historical record and the interviews conducted that there are several interrelated constraints on the tītī industry, which generally flow from the loss of a singular executive authority and its centralising and collectivising role across knowledge, rights and exchange, which will be dealt with in the reverse order. There are also several unconnected aspects that will be discussed in the relevant places.

There has not been an executive authority akin to the high chief for the Tītī Islands for many decades. One birder noted:

There was never a government when I went down there...I've never heard it, never seen it. [#19 – Beneficial]

Likewise, while he did note that at one point the government had tried to exert some authority on the islands, another birder told us that:

[It is] only islands that are left in Māori hands that the government hasn't got too much say on [#15 – Crown]

A third when asked if the Crown had any interaction or influence with them, told us:

As far as the islands we go to they keep their own distance from us. [#2 - Beneficial]

Certainly, the Crown has not been completely silent, but compared to the influence and power the rangatira exerted the Crown has only focused on a limited sphere of influence. Most of the interaction between birders and the Crown has been through the Department of Conservation, which restricts the focus of institutional interaction to one of conservation. It is not only the Crown that has not exerted executive authority since the high chief. As one birder told us:

I don't really know that I have had very much involvement with Te Rūnanga or Papatipu Rūnanga around our harvest or around our season... Yeah, whānau and extended whānau that you meet along the way really. So there's nothing comprehensive happening; there's nothing central... [#7 — Beneficial]

As she notes it has all been whanau-led, with nothing central with regard to authority. In other words, the operational authority has been functioning as it has been for hundreds of years but there has been no overarching executive authority in place, which has led to a number of issues arising.

One of the most dramatic constraints is that without a high chief exercising his regulatory authority, birders – who now have to operate in the market – have lost the ability to control supply. Instead they undercut each other, creating a race to the bottom and, critically, reducing already small margins. While some birders still have regular buyers, others told us that the competition was problematic:

... I price my birds according to what it's cost me to actually harvest them. Some people sell their birds very cheaply and then I lose a whole bunch of sales to cheaper birders who [undercut me]... I've seen a lot of it, more and more as time goes on. It used to be a thing that you might undercut somebody's market and people had freezing works that they might sell out of and somebody might go through on pay day with cheap birds and sell a bunch which used to be the way things were done. [#11 – Beneficial]

At times prices of tītī can stay the same for quite a number of years which is governed a lot by the costs involved. I believe... they're under-priced, they should actually be increasing the costs every year to cover themselves... I think there is maybe some people get pressured on money and adjust their prices... you do hear of people say well so and so has sold some birds for whatever and you'll pick up that its quite below of what others are getting. But some people too are dictated by the market in regards to who they use, are forced to come down. [#12 — Crown]

Some saw that the younger generations were more competitive, noting that:

... I do feel modernisation is going away from the traditional ways of looking after it. Whether it's because younger people today are more competitive and they're more driven; I just think it's a shame when you see people having those self-gain ideas. They're not being fair to all. [#7 — Beneficial]

Certainly, generational change may have driven this but other factors need to be considered including the raising costs of birding that, as will be discussed below, have made it increasingly difficult to break even let alone make a profit from. The need for profit has degraded tikanga.

The loss of executive authority has reduced birders' opportunity to increase profit as they undercut each other rather than control supply collectively. Furthermore, often those profiting are non-birders who are able to seize the opportunity because they have the financial capital to amass enough product to control supply. We were told by birders about non-birder middlemen profiting:

There is big buyers out there that will buy them and then take the up north and that. Like they're buying 100 buckets... [#8 – Beneficial]

[One buyer] must get at least 30,000 or 40,000 and they're gone as soon as they hit the wharf in Bluff... he sends most of the birds that he buys to Auckland. So, there's big demand for them up there. [#4 – Beneficial]

I try not to deal with middle men because they tend to buy cheap and then go and sell expensive... I quite often think if we can get that mark-up ourselves in those unprofitable years it would be a lot easier to get through. [#11 — Beneficial]

Furthermore, as can be seen in that last statement, while there is demand for the birds, many birders struggle with the variability across seasons, as they explain:

The markets aren't that easy. I mean it depends on the season. [#8 – Beneficial]

...you can make some money but then again it will all come down to how good your muttonbird season was. [#16 – Beneficial]

You get probably one season that doesn't cover anything but you have other seasons that may cover your bills. [#6 – Beneficial]

Crucially, none of the executive authorities in place today have the power to regulate exchange. A return of some sort of the executive authority would likely increase profits by enabling birders to enhance opportunities through regulating supply. Not only could the executive authority ensure birders did not undercut each other but it could also prevent middlemen from 'clipping the ticket' whilst also balancing out seasonal supply differences. While phrased differently, the need for the regulatory power of the executive control that comes from the collective working together was apparent in this birder's statement:

I know a lot of people would not like to see it regulated in any way. But I reckon that there's room for everybody and those people who want to continue to operate that way if that's what works for them then that's fine. But I think there's probably a sector of the muttonbirding community down there who would like to produce quality birds and sell them for top dollar, rather than have somehody else scooping that top dollar for inferior quality birds. So I think there's room for people to band together. But that's up to a few individuals to lead the way as far as that goes. I'm not going to get out there and tell everyone that's what they should be doing because I don't think everyone is capable of doing it for a start. It certainly would be one way of putting back in to the community a little bit... If there was maybe twenty birders on board with a quality scheme that they're assured a certain quality and return then we could market those birds and a percentage of that money could go back either for restoration or other things. Also with group buying power of a co-op sort of situation you could probably get discount on buckets, wax, maybe. You could look at doing some sort of a deal or at the very least having a bit of a credit thing where you can book those things up before you go and pay when you come back without accumulating extra interest on it. All those things I think would be really good business things that would be worth exploring. If we used our traditional values of being a whānau group or a co-op or something around that nature I think we could do better... That's probably the saddest thing about the whole muttonbirding thing for me is that we aren't a little bit more of a collective as far as that goes. We inevitably work really really hard some seasons and we get no return out of it. [#11 — Beneficial]

There is a lot to unpack from that statement, including quality control capacity of an executive authority. In particular the participant is outlining the possibility of a hybrid executive authority that draws on 'traditional group values' and a 'co-op' governing structure. When asked how TRONT could help, a birder told us:

A website for selling them would be a big thing for them. Getting people out there that want to buy them to connect with the people that are selling them. [#8 – Beneficial]

Running a collective sales website would be an obvious way for the executive authority to regulate supply and it could also increase demand. Part of ensuring higher prices through the executive authority would be some form of provenance quality control. As one birder explained:

I've seen some muttonbirds... only fit for pate... the quality is not there, the focus is not on the quality it's on how many we can get. It doesn't apply to everybody but there are certain ones down there they have to relook at what their product and what they're doing and why they are there for and it's not kill everything in sight and shove them in a tin and sell them. [#16 — Beneficial]

Provenance quality control, then, also has potential to increase sustainable harvesting as it focuses on producing smaller amounts of high-end product, thus increasing both profit and enhancing kaitiakitanga. There is a market for high quality product, one birder explained that:

... if we know there's birds we have a look out the back and look at the brand, "Oh nah, nah, I'm alright thanks [I don't want to eat their birds]."... they've all got the brands on so everyone knows whose birds are whose. [#1 – Beneficial]

However, as a birder who had been selling on New Zealand's main online customer-to-customer sales platform told us:

It is reality and I've always endeavoured to maintain the quality of my birds so I can justify whatever price I'm asking for. I hope that that would be a point of difference but it hasn't really helped me over the years.

[#11 — Beneficial]

There is demand for quality product, but in the contemporary online era trust must be established through verified entities (Reid and Rout 2016). The executive authority could create a provenance quality control scheme that increased opportunity to sell the birds at a premium online.

Another way that an executive authority could increase opportunity is through lowering production costs so that prices could be maintained at a level that meant while birders recouped expenses, they were not pricing the birds out of the market. Birders have experienced significant rising operational expenses year on year, as they expressed:

I think economics kills a lot of people from going to the island because it is quite expensive to go there. [#8 – Beneficial]

... it's costing so much to go down there now... so many different factors now that didn't apply in the old days so that has added a lot of pressure on the way people do things now. [#16 — Beneficial]

... the expense factor is quite phenomenal as the year go by inflation it just keeps raising the bar and the price of muttonbirds don't really, sometimes really don't go hand in hand with it. Our costs over the years we have just sometime just made it, we have covered our costs. [#17 – Beneficial]

Acting as individual operators, each *whānau* group on its own lacks economies of scale to purchase the necessary supplies at a 'trade rate', paying full market value. The executive authority could provide that scale, reducing the cost of supplies. They could also help lower the cost of transportation, usually via boat and helicopter. This was commented on by several birders:

... it would be nice if there was a boat of some sort that could be owned by the tribe... [#10 – Beneficial]

A Ngai Tahu boat would be really good... [#6 – Beneficial]

...if they had a big boat they could do two or three islands per trip and it could save quite a bit of money...[#14 – Crown]

We have always talked about why doesn't Ngai Tahu have a boat and why not have a helicopter and ferry their people. [#17 – Beneficial]

Ensuring birding remains financially viable requires both market regulation and supplies and logistics consolidation and coordination as there is only so much room for price increases before the market becomes unsustainable. As the birders explained:

... over the last few years people who used to buy birds are no longer able to afford them. I'm getting a lot of feedback like that. [#11 – Beneficial]

I don't think people realise what it actually costs to do one bird. That one bird and if you priced it out could be very expensive and I look at it in the sense that you've got to keep at a realistic price for the families... I'd like to see the price a bit higher but then you've got to go within the people's budgets and what a realistic price for doing it... You've got to get a reasonable price for your birds but yea I don't know how far the price will go. [#14 — Crown]

The executive authority could also advocate to TRONT and the Crown on behalf of birders, particularly regarding issues of kaitiakitanga. An increase in mana could also help protect the resource. For example, many of the birders are worried about the impact of the various fisheries, including squid and krill, on tītī numbers:

We always worry about the cycle of life with the fisheries, besides when the squid boats came, and now they're taking krill for oil supplements. That is something that the birds feed on and the birds feed on squid... [#7 – Beneficial]

... there was... one of those big boats down there fishing for krill and they were taking all the krill and sure enough there was no muttonbirds...[#19 – Beneficial]

... maybe Ngāi Tahu is involved I don't know but we shouldn't be trawling for krill so Ngāi Tahu should do something about that ... stop the krill and that will bring the muttonbirds back. [#20 – Beneficial]

That could be something they [Ngāi Tahu] could help watch over out of season, what's going on in the islands. [#3 – Beneficial]

To be clear, we are not suggesting TRONT serve as the executive authority. The many changes post-contact mean this would not be a viable option. Several birders, particularly from the Beneficial group, made it clear they would not want Ngāi Tahu in this role:

...it's always upon Ngāi Tahu to remember you don't own it, the whānau own it, the whānau lead and guide even though you're facilitating and they have all the legal minds, but they have to be at our disposal of the whānau rather than then pushing or not understanding where the authority lies. The authority lies with the one who holds the right. [#3 – Beneficial]

... it really needs to be grassroots; it has to start right at the very base of things because people won't accept a top down approach on this... there can't be a top down approach here. People are too protective of it. [#5 – Beneficial]

... we were unhappy that our Tītī Crown Islands were put into Ngāi Tahu hands... why does Ngāi Tahu want our islands? Why do they want to help administer support... It's all been a grey area for us. [#7 – Beneficial]

... well hopefully [TRONT are] not involved because we don't need outsiders telling us the owners what to do on our property, we know what's best for ourselves and the island...[#19 – Beneficial]

Therefore, birders themselves need to create an entity that can provide the different executive functions, with the committees as the most obvious template, or source of personnel and legitimacy. As one of the birders above suggests, a supplier-cooperative might be appropriate as this would ensure operational autonomy whilst providing executive functionality.

Contemporary rights issues, partly a consequence of the loss of a single executive authority, have also caused issues. First, regarding the increased rigidity of the Beneficial rights, one outcome is that mana as a means of rewarding those with ability has been side-lined by whakapapa. As this birder noted, authority does not connect to ability:

... those decisions are made — within our family — regardless of how knowledgeable you are, is by the lead person in the family. [#10 — Beneficial]

Similarly, another birder talked about issues with the committees being biased and self-interested:

... I do believe that at times, sometimes our committees have been very biased; they haven't been fair. Whether that's for their own self-greed, for their own self-interest, I don't think they're withholding their part of being on that committee to respect our elders... I think people can have self-interest and I don't think at times people are fair. [#7-Beneficial]

The inflexibility of the contemporary rights system means that the rights holder has an inordinate power over the rest of the whanau. For example, one birder told us:

My father... If he wanted to, if things weren't going right at home, we had a row with them, he could say, "Well, you're not going to the island this year"... and we couldn't go because the way it's set up is that if you've got the right then all your children are subordinate to you as far as the Muttonbird Island is concerned. And in a lot of cases there were cases where fathers or mothers stopped their children from going. So, that's the way it works, the succession. [#2 Beneficial]

Certainly, the elders held significant influence in the traditional era but the ability to prevent someone from being able to go birding has been increased because of the contemporary rights system that gives them total power. Traditional institutional forms had more flexibility and it is likely that for those who had disagreements with their own whanau were able to bird on other islands, at the behest of the high chief, so long as their transgressions were not too severe. The consequences of this rigidification have manifested in the operations of the committees, which, as some birders considered, were no longer guided by *mana*:

... I do believe that at times, sometimes our committees have been very biased; they haven't been fair. Whether that's for their own self-greed, for their own self-interest, I don't think they're upholding their part of being on that committee to respect our elders...[the commissioner] was in a Crown role to be there to sort disputes on the Tītī Islands whether it be Crown or Beneficial. No offence for being a Pākehā but for him having no rights there he had no gain one way or the other when it came to disputes. He was unbiased, he was fair and making sure that things were administered right... Now I think people can have self-interest and I don't think at times people are fair [#7 Beneficial]

... in the old days... there was a group of elders who represented some of the... families who were deeply entrenched in birding. Some of those people had more mana than the others. Back in the day their word was respected as being the law. So once they made a decision it was pretty much adhered to by everybody... the modern committee system it can get a bit lop-sided when you've got too many family members from one family they can sort of manipulate the outcomes of things a little bit towards favouring themselves. [#11 – Beneficial]

From the perspectives of these birders, when birding rights are tied to the rigid blood right system, nepotistic rather than meritocratic behaviours have been encouraged resulting in kinship trumping ability. To be clear, we are not suggesting that the whakapapa-rights system should change, but rather that an executive authority could reward ability by providing a way to gain mana through various roles in the executive, from leadership to education, with possible benefits given to those who had provided these services.

The lack of a singular executive authority adjudicating on rights and the overlapping of settler laws has meant that some confusion regarding rights has emerged, as can be seen in the following statement:

There's also ... the thing that happens when manu is unoccupied then quite often a neighbour will go onto it and bird it for a period of time because there's nobody. After a wee while... the following generation has always birded it so they too believe it's theirs... Somebody says they've birded this area for a whole generation therefore it should be theirs because ... they've established that right. Whereas somebody who has been absent comes back and says 'no, before you birded it we birded it' therefore its ours. [#11 – Beneficial]

Also, the loss of clearly-defined territory, resulting in 'open' manu, has the potential to decrease bird numbers as it can result in a loss of ability to bird. As this birder outlined:

... there's some open manu [islands]... Then there's others that are where you have your whānau manu...

The family ones, in my opinion, it's the best model because as far as your responsibilities and particularly

what you do impacts you directly and you're responsible for whatever happens on the manu. [#10 – Beneficial]

Providing clarity regarding the geophysical configurations of rights would be an important role for the executive authority, which would help enhance the opportunity to bird by connecting sustainability responsibility to a specific area. The connection between rights and knowledge was also apparent across the interviews. As one birder explained:

... we've got a handwritten letter from [an ancestor] saying these are our manu, these are the places that we go. It's a beautiful letter. I don't know if he wrote it; if he did our handwriting skills disappeared right about then because it's a beautiful script. But written completely in te reo dated late 1860's. It outlines the manu that our whānau go to. So we take that line from him... we know where those boundaries are. We know because we've got that long continuous history and because as a boy I went down there with my pōua. [#1 Beneficial]

This same connection between rights and knowledge was also clear in another birder's statement:

...a lot of the manus down there are really boundaried through creeks, through certain rocks from the [16.31] coming down and certain landmarks and if you're brought up on the island you got to know these landmarks and creeks and all those sort of things and you respected what was handed down to you. Today I think a lot of that has been lost; a lot of newcomers that have come to the Tītī Islands don't have that knowledge; which is not their fault. Someone should be there to tell them. [#7 Beneficial]

Knowledge is critical with regard to ensuring both the delineation of rights through the geophysical layout of the manus, but as this birder indicates when she refers to the need to 'respect what was handed down to you' it is also critical in fulfilling the role of kaitiaki as well.

Another issue regarding rights is that in the contemporary era where there are more people who have the potential right, there is increasing pressure on manu. This be indirectly related to the lack of executive authority as if there was a single rights adjudicator then it is likely they would ensure

that there was a sustainable number of birders, while as it stands the law cannot discriminate against anyone with the potential right, even if it has not been exercised in generations.

I'd say... there's probably more birders than the population can sustain in some cases... Allowing everybody to have the right is one thing. Allowing them to be able to exercise that right is something we need to think carefully about in the future. Because there is another truth too and that is that most people that go birding as children want to go back as adults. There's an increasing number that have knowledge and the desire to go down just from the people who are currently birding, let alone those who have never done it before. [#11 Beneficial]

Finally, the loss of executive authority has seen the decline in knowledge transmission as birders no longer gather together on Ruapuke Island. Thus, indirectly, the loss of executive authority has also reduced the capacity for birders to communicate with each other, which has limited their ability to bird. A critical role an executive authority could play would be to facilitate operational improvements through encouraging communication amongst birders. The importance of communication as a means of enhancing ability was emphasised to us by several birders:

... there is just no communication. Like you only have communication with the whānau that you know and that's it. When the university was doing their research they produced Tītī Times which was a really pragmatic way of keeping birders in touch with each other. I just would love to see that reinstated; some sort of annual communication that came out say around about December/January, somewhere there where people are starting to get it in their minds again that they're going birding. [#5 — Beneficial]

[It would be good if TRONT said] we can assist you to start having an annual communication... I think it's creating opportunities for whānau whether it's through wānanga of some sort; saying, Hey look people sharing what they've gone.' They say, Look we've been vacuum packing for 15 years and we know that these particular machines don't work and this is the best way to do it.' But to have some kind of get-together outside of the season where people can share their ideas and what they're actually doing, because it's just adding that extra value and things like cost recovery... [#10 – Beneficial]

At times for that wider information, that would be good to encourage [communication] so that people can all understand together... Inform people of what is happening in the wider world and how we can help ourselves...[#13 – Crown]

Facilitating communication would help to increase knowledge as well as ensuring that the resource was protected. The executive authority could play a role in this, as one birder told us:

One of the things that was really good was all the tītī research that went on and the newsletter used to come out from the scientific people and I don't think that's carried on. And so that would be a good thing for Ngāi Tahu to pick up wouldn't it because we were discussing how do you know when everyone's only taking a sustainable amount of birds per season? So, there's always a good healthy amount of birds getting away to come back in the next season and breed rather than it being rather haphazard about it. [#3 Beneficial]

That said, some birders are concerned that the loss of knowledge means that contemporary authorities are not capable enough to assume power. One asked if:

[The committee] have enough knowledge and experience to be able to carry out that [rights adjudication] role as efficiently as what we've got now.[#3 Beneficial]

Closely related to the roles of communication and education, the executive authority could also help with sustainability initiatives, ensuring the resource is protected, and helping improve mātauranga and whānaungatanga by coordinating sustainability education. As the birders explained:

... perhaps it needs to come from the administering body... I think in the future it would be wise if we could have someone who is working out in the world [explaining] what is happening with pollution and the oceans and anything related to care of the seabirds as a whole, because that's all part of our lives as well so I think information is a great thing so the people are kept informed... there needs to be opportunity to come together as one not as separate islands. [#13 — Crown]

I would like to see that everyone on the island has to... make a tally of what everyone's caught, every year... tally it up and somebody so they know and then you can see over the years how it is declining... Then you compare those trends with what's going on with El Nino and all the rest of it and maybe that correlates. [#20 – Beneficial]

... we need to be coming together as a community to create these adaptive plans in preparation... to say what can we be doing for the habitat?... Because if it's a poor season we may put out more information to say, "Don't come. Have a year off because there's not many birds here." And how we communicate that information across the community I think that can be really beneficial. [#10 – Beneficial]

Just as with the communication function, the sustainability education role of the executive authority would also help to protect by enhancing whānaungtanga, tikanga and mātauranga as well as helping individuals reconnect with their cultural identity.

As one birder noted, an executive authority could also help facilitate the use of western knowledge in protecting the resource. As she explained:

Coupling with that is the birds then do their migration around the world; but we don't know what's happening to them in other places and where the change is and how that's affecting how many's coming back. So Ngāi Tahu might have the resources to keep [38.41] that sort of stuff and hopefully it's our own Māori people being employed to do the research, creating our own scientists, having the scholarships there. [#3 Beneficial]

There does seem to be an understanding amongst some birders that the best way to be kaitiaki is to utilise both Māori and western epistemologies, though as this birder indicates the executive authority could lead these initiatives and in so doing would be able to ensure that the western methods were in service to Māori values, thus firewalling them rather than letting them dominate.

At the operational level there appears to be a relatively coherent and continuing capacity to bird, when asked about if they were had control on their island, one birder explained:

I think it's even better. We've got the records. As opposed to government department having them. While it sounds semantical but – it just feels like we have got more charge of our, of our destiny. It just feels better, it just feels right, you know? [#18 – Crown]

Generally, the birders expressed the continuing authority of the right holder on the island, as one explained:

I've been brought up that when I knew dad was a shareholder as I grew up; knew dad was a shareholder and different ones. If I ever approached that with dad he used to say to me, "You're only a beneficiary, you're not there yet, you're only but a beneficiary." So it's not for you to deal with; your time will come." There's things that with that we knew not to speak out of place. If we went to different things with him we knew not to say anything because we were still 'just but a beneficiary'. It wasn't up to us to say anything. [#6 — Beneficial]

Likewise, another explained how:

I like how it puts the emphasis on your parents or those that is the head of the family; and so, those decisions are made — within our family — regardless of how knowledgeable you are, is by the lead person in the family. [#10 — Beneficial]

This continuing operational authority is often driven by ongoing tikanga. There are certainly disputes on the islands, particularly over boundaries, and sometimes these are sent up the chain to the committees and the Māori Land Court. However, from the interviewees' statements it seems that often these problems have escalated on the bigger islands, suggesting part of the issue is the scale. Almost every birder interviewed talked about an unbroken or long lasting tikanga regarding manu and boundaries on their island. As one birder told us, their whānau have been using a set of rules devised made by a previous generation to guide their birding:

.... one night where they were all there together, the five brothers and sisters, and they made some rules. They were really basic rules and we stick to those rules really and that's all there is; that's all there is. It says that that night they drunk four bottles of whiskey or something so that's the basis of our legal document; it's pretty crazy. [#5 – Beneficial]

Similarly, this birder explained that the manu his grandfather set out still stand on their island:

Where I go, the boundaries were set down by my tāua ... in the very early 1900s those boundaries were set. [#12 - Beneficial]

Another explained that they use a deck of cards to allot manu:

Then we have a meeting. If you want to crawl around and get them out of the ground once they call in the torching, you gotta draw the block. So, you gotta have a meeting for that. Then you'll just get a deck of cards out and draw, for which blocks; I think there's nine blocks on the island that we draw for. And there could be two groups, could be three groups, could be four groups. And those nine blocks are split up... So, if there's three groups that's three blocks each. And it's all stripped out. We know all the boundaries, where they are; do the island slowly at a time; one block at a time. And there's blocks that aren't done, at the south end of the island; and we all get together on a day and we do that; oh, it takes about two days to do that. That's what they call stripping. [#2 — Beneficial]

A fourth birder told us:

They are traditional boundaries that have been in place for, I've lived quite a long time so I think they have been there in my lifetime. Numbers in families change too, sometimes your family will grow and other families will have less children. We have stayed within the boundaries that have been laid down in the past. It's an agreement with people... We have been fortunate we haven't had a lot of conflicts but I think there's a need, I think we have done it once we all called a meeting and discussed the subject and came to a solution. that's probably the best way to do it, you need to talk it through because you can create another conflict out of the original one so I think for any group anywhere on the islands its something that's if its serious enough you should just get a group together and talk it through... To bird, the season on the island is for our

family that would be a person who is closely related and within our family it is just been close members of family. Not often extended whanau we've birded as a family [#13 — Crown]

This birder also expressed how the process was a whānau-oriented one. Another Crown Island birder expressed a similar coherence regarding manu delineation on their island and the whānau integrity of birding:

We are taking a place where it all has boundaries and we work within them each family works within their own boundary and that way it saves a lot of arguments and a lot of rows on the places... when we were shown where the old boundaries were we've just worked within those a lot of people say they shouldn't be there but we I particularly go its four or five families and we work within those boundaries and that seems to work our alright and there is no hassle or no arguments of people crossing into anybody else's boundaries...Within our own family we work as a family group. The boys have split up on their own and they do their bit but probably six or seven come with me and we work within that boundary and we just work our different tracks, seems to work out alright and they bring all their birds back to the wire and send them down and work as a group in the whare when we get back. [#14 — Crown]

Pounamu industry

Pounamu (greenstone) encompasses several types of hard, durable and highly valued nephrite jade, bowenite, or serpentinite stone that is found in Te Wai Pounamu (the South Island of New Zealand) "from Nelson in the north, down the west coast to Wakatipu and Milford Sound" (Waitangi Tribunal 1991, 188). Virtually indistinguishable from ordinary rock in its raw state, worked pounamu reveals a beguiling beauty, running the spectrum from milky opalescent white to a dark lustrous green verging on black. After exposure to extreme heat deep in the Earth's crust, rock undergoes metamorphosis turning into pounamu. Then these boulders are thrust up by the plate tectonics, which are the dynamo of the Southern Alps, becoming "displaced and transported by glaciers and rivers to and towards the coast, leaving *in situ* deposits in lateral moraines, and along river valleys and the beach" (Wheen 2009, 552).

Prized for both its looks and its durability, the importance of pounamu to traditional Māori society cannot be overstated, not just for its practical use as a material for tools and weapons without compare (it is nearly as strong as steel), aesthetically as jewellery, but also for its spiritual significance. It is revealing that the whole of the South Island was known as the place of greenstone, 'Te Wai Pounamu'. It was so important that Anderson et al. (2015) believe that it drove the waves of expansion into the South Island. As the most sacred taonga, pounamu is central to Ngāi Tahu being, with Wylie (quoted in Wheen 2009, 552) writing that "pounamu is Ngai Tahu and Ngai Tahu is the pounamu". Likewise, Gibbs (2001, 170) relates that "Ngai Tahu has shared whakapapa with pounamu, and that pounamu has a mauri, or spiritual force, often connected with the atua (deity and ancestor) Ngahue". However, pounamu was not just spiritually prized but was equally important as a commodity, forming the backbone – along with tītī – of the trade networks that spanned the South Island before contact. While only sourced from certain locations in the South Island, pounamu items were found across New Zealand – as Firth (1972, 402) notes, pounamu "in any form as a peculiarly mobile object, the demand for it being always very keen".

Unlike the muttonbird industry, when the Crown purchased most of the South Island, they failed to protect the right of Ngāi Tahu to retain possession of pounamu despite repeated attempts during the sales process to ensure that right (Gibbs 2001). During negotiations with Poutini Ngāi Tahu (Ngāi Tahu from the West Coast), the Crown representative Mackay even "informed them that the Greenstone was of no use to the Government, and if it was all they wanted, they might have the whole of the Arahura bed, that it was of no use to anyone and even if they sold it to the

Government, no objection would be raised as to their procuring Greenstone from it" (Keane 2006). Despite this, the river bed was not reserved. Pounamu was not explicitly mentioned in any of the sales deeds, and despite Poutini Ngāi Tahu's desperate attempts to maintain their rights to pounamu, after the various purchases the Crown assumed the rights to the resource in an almost ad hoc manner (Gibbs 2001). Over the next one hundred fifty years, Ngāi Tahu would seek to regain that right while commercial operators exploited the precious stone both legally with mining licences and illegally, with the poaching evolving to helicopter raids – both the legal and illegal stone was generally worked by Pākehā and sold to international tourists (Waitangi Tribunal 1991). During the negotiation process with the Crown, Ngāi Tahu made a particular point of asking for the return of pounamu because of "its role as kaitiaki (guardian) of the stone" (Gibbs 2001, 106).

Despite agreement on its return at the commencement of the negotiations in late 1991, bureaucratic delays involving the Ministry of Commerce (which was responsible for all mining operations) prevented its early restoration to Ngai Tahu. It was not included in the interim settlement offered to Ngāi Tahu in late 1994, which due to its inadequate contents was rejected and a formal breakdown in negotiations followed. (Fisher 2015) During the breakdown around Christmas 1994 to mid-1996, the Ministry of Commerce's pounamu licensing was the subject of one of many (both successful and unsuccessful) lawsuits filed by Ngāi Tahu negotiators to force the Crown back to the negotiating table. (Finlayson 2008) The tactic worked and in April 1996, following the passage of the Te Runanga o Ngāi Tahu Act, negotiations recommenced. Ngāi Tahu negotiators sought another more favourable interim settlement and despite some early apprehension on the part of the Crown in June 1996 \$10 million, the freehold title to Rarotoka (Centre) Island and the ownership of all naturally occurring pounamu in the Ngāi Tahu rohe were returned to Ngāi Tahu (Fisher 2015).

As part of the wider settlement, the right to pounamu was returned in 1997 and in 2000 the tribe set up the Ngāi Tahu Pounamu Management Group (NTPMG), which was made up of representatives from 'kaitiaki rūnanga' (those rūnanga, or councils, who had a traditional right to pounamu), to take control of the management and protection of the resources (Wheen 2009). After the release of a management plan in 2002 Ngāi Tahu set up a provenancing mechanism to certify pounamu as authentic. However, as will be explored, the journey from the joy of investiture in 1997 to the present day has not been a simple path but rather has involved pitfalls, problems, opportunities, and innovation.

Pounamu cultural institutions

As Gibbs (2001, 266) pithily puts it, "Pounamu is not easy to find", both because it rarely stands out from normal stone and because it is usually in difficult to access locations. In fact, pounamu was so difficult to find that there are reports of carvers working on substandard stone for months and even years in the pre-colonial era because this was the only pounamu, they had access to at the time (Chapman 1891). Gibbs (2001, 179) explains how "Ngai Tahu navigated the land by 'memory maps'... [which enabled them to] accurately recall the detailed sequence of places, including place names, resting places, and general countryside, along complex river systems and coastal tracks. Places were named after eponymous Ngāi Tahu, Ngati Mamoe, and Waitaha ancestors, and associated accounts told of 'heroic deeds, of epic journeys of exploration of ancestors, and the myth memory of how the land was formed'. Thus, each walking of the greenstone trails confirmed Ngāi Tahu's relationship with the natural world and its ancestors, reinforcing tribal identity". An example of how the memory mechanism works is the name 'Hokitika', which means 'return direct' as the river path up Browning's Pass was critical to the passage of pounamu from West to East Coast (Chapman 1891). The varying stories of pounamu's origins also provide insight into its location, they all focus on water which is of course the key means through which the stone is moved (Gibbs 2001).

Carving pounamu in the traditional era was laborious, the "process of shaping a piece of pounamu could take months, years, even generations, depending on the implement or ornament involved" (Gibbs 2001, 182). Pounamu carving stands as one of the highest skillsets in traditional Māori society, the knowledge required to be able to turn such an incredibly hard stone into jewellery and weaponry was vast. There were several tools required and many techniques demanded to craft the raw stone into finished products. While specific reference to how this knowledge was passed on is not available it is fairly certain that it was the same as outlined in the tītī section. Crucially, pounamu, particularly the most important pieces such as mere were only worked by old chiefs who were no longer able to fight. The mana of the carver was critical to the final value of the piece (Gibbs 2001). Thus, it was not just *how* the stone was worked but *who* it was worked by that was important. The traditional designs are themselves taonga, embodying mātauranga Māori. As Garrity (1996, 1197) explains, "taonga such as carvings or artistic objects often contain symbols that relate to events, places or people and, consequently, play an important role in enabling Maori history to be remembered and passed on". The designs symbolise and embody Māori cosmology and the connections between tangata whenua and wider reality (Ryan and Crotts 1997). In certain

cases, carvers even have an obligation to pass on these designs as they are their kaitiaki (Garrity 1996).

Crucially, regarding contemporary knowledge, it seems that information concerning the traditional harvesting sites of pounamu, and the routes to these sites, were rapidly lost to Ngāi Tahu following colonisation (Gibbs 2001). Stack (quoted in Taylor 1952, 188) said in 1865, "I am sorry to say the only Maori who has gone to the West Coast by the old route is now too infirm to leave his whare. There are no Maoris now living, except this old man, who know anything about the route beyond what they have heard in the past from others". Gibbs (2001, 202-203) writing about Wakatipu, explains the "location of this source was lost to common knowledge, and even dismissed altogether, until it was 're-discovered' to be in the Mt Aspiring National Park by a deer hunter, Tom Trevors, in 1970". Skinner (1936) goes even further, stating that "[i]t is remarkable that virtually all the information secured from the Maoris, before the visits to Westland of Brunner and Heaphy, indicated that greenstone was found in the bed of a lake, and most of the informants, including one at Banks Peninsula, placed the lake in Otago. Lake Wakatipu is specified by Shortland, Chapman, and Beattie, while Polack's account, if of any value at all, seems to indicate Lake McKerrow, north-west of Wakatipu, and communicating with the sea by a short channel. The rivers Arahura and Teremakau in northern Westland are never mentioned by these early informants as a source of supply, though they figure prominently in Maori myths relating to the origin of greenstone and probably provided the greater part of the greenstone used by Maoris in northern districts.... The fact that Otago had ever produced greenstone was forgotten".

Even now that these sites have been identified finding pounamu is still extremely difficult, "Experience and knowledge of the New Zealand bush, of the stone, and great patience, are all required" to find pounamu (Gibbs 2001, 266). That said, "Ngāi Tahu has also entered into research partnerships, primarily with GNS Science (Institute of Geological and Nuclear Sciences) but also with the University of Otago, in order to quantify the pounamu resource and assess its sustainability... the primary objective of this research is to quantify the resource and determine an appropriate level of sustainable use" (Wheen 2009, 556). While finding pounamu is still difficult it is nowhere near as hard as it was in the traditional era, as Western empirical methods and new technology have enabled greater ability to locate the stone.

With regard to carving methods, there are mixed reports. By 1891 Chapman wrote "[t]here can be no doubt that the highest expression of Maori art is a thing of the past. The highly-skilled woodcarvers who worked with tools of stone, or bone, or sea-shell are all gone, and have given place to rougher workmen who use steel tools". Likewise, Gibbs (2001, 186-187) describes the sudden decline as so precipitous that "one of the only references to Maori working pounamu after 1860 is in Dunedin, where political prisoners from Taranaki worked pounamu whilst imprisoned in the 1860s". However, Stevens (2012, 125) writes that "[m]etal introduced by early Europeans did not extinguish Māori enthusiasm for pounamu. Moreover, colonists developed a taste for the stone too, which they called greenstone. From the 1860s onwards, greenstone was used to produce a variety of jewellery and also replica Māori artefacts". Whether a sudden decline or a more gradual one, it seems fairly certain that eventually many of the techniques used to carve pounamu before contact were lost. Furthermore, as "a result of the almost exclusively Pākehā-led renaissance in New Zealand pounamu carving since the 1970s, some Ngāi Tahu have learnt to carve pounamu using modern techniques and equipment. Accordingly, there are a few Ngāi Tahu carvers working in the pounamu industry today" (Gibbs 2001, 187). Of course, the traditional methods would unlikely be practical given inefficiencies. However, what is key here is not so much the fidelity of methods but the fact that the transmission was essentially halted at some point.

However, what is more pertinent here is the knowledge relating to the designs, specifically who this knowledge belongs to. As Garrity (1996, 1210) concluded in his article on intellectual property and Māori, "Protection has been virtually non-existent because traditional Maori knowledge and intellectual property does not fit within established Western models". Likewise, van Meijl (2009, 342-343) explains that "intellectual property rights, normally recognized for patents, copyrights, and trademarks only, cannot automatically be used for the protection of indigenous knowledge for a variety of reasons" including that it is older than the legislation allows (50-70 years) and cannot be ascribed to a specific individual. Where once the designs were considered precious taonga to be protected, within the settler institutional framework they are afforded little protection.

Pounamu political institutions

Just as with tītī, locating the key level of authority in the traditional era is important, also critical here is looking at how the authority exercised and enforced the rights over pounamu. One key caveat that needs to be made is that as such an important resource, the locus of control over pounamu shifted a number of times in the traditional era, such that Gibbs (2001, 211) writes that

it "is difficult... to fix on a particular unit of Ngāi Tahu society as the unit that traditionally had mana over pounamu". Put simply, pounamu's high value meant that it was the source of conflict as authority over this right was extremely lucrative. Certainly, tītī was also prized and no doubt fought over but pounamu was the single most important commodity/taonga in traditional Māori society. It was the engine of the traditional Māori economy and as such it fuelled conflict as well as profit. Pounamu was so highly desired in traditional society that it was one of the main drivers of expansion and invasion, creating the flux in authority that makes untangling authority difficult (Anderson et al. 2015). Mapping the waves of conquest shows how fluid authority was in the traditional era. For example, while Taylor (1952, 188) confidently explains that "Five of the leading hapus of the Ngāi Tahu of Canterbury, united with the members of their tribe domiciled on the West Coast and decimated the Ngati Wairangi at the Paparoa Range" it does not appear that simple. Certainly, it was the "pounamu sources that motivated Kaiapoi-based Ngāi Tahu hapu, Ngati Waewae, to enter into sustained conflict" (Gibbs 2001, 218) in the late eighteenth century with Waitaha hapū Ngati Wairangi, who consequently lost "control of the west coast including the valuable pounamu of Arahura" (Waitangi Tribunal 1991, 182). However, "it is not clear whether Tuhuru won the pounamu sources for Poutini Ngāi Tahu, as a hapu maintaining ahi kaa, or on behalf of the wider Ngai Tahu Whanui" or even whether Tuhuru "was of predominantly Waitaha, and not Ngai Tahu, ancestry" (Gibbs 2001, 218). Likewise, while Gibbs (2001, 218) outlines that "Ngati Mamoe retained mana over the Otago and Murihiku sources of pounamu for some time after Ngai Tahu settled further north... [and that] Years of conflict between Ngati Mamoe and Ngai Tahu were formally settled at Poupoutunoa (near Clinton) around 1780", she goes on to outline how complex and contentious the whakapapa between Ngāi Tahu and Ngati Mamoe are. To clarify, Waitaha are understood to be the first of these groups to occupy the South Island, followed by Ngati Mamoe, then Ngāi Tahu. At each phase there has been a mixture of conflict and intermarriage, creating complex and hard to untangle lines of whakapapa. The label 'Poutini Ngāi Tahu' is often used and this refers to the "West Coast section of Ngāi Tahu [who] became known as Poutini Ngāi Tahu, and it incorporate[s] both Ngāi Tahu and the remnants of Ngāti Wairangi" (Keane 2006). Thus, while it seems that by the end of the eighteenth century certain Ngāi Tahu hapū had largely consolidated authority over pounamu from the Mamoe and Waitaha hapū, the complex intermarriage and multi-hapū affiliations mean even this delineation is not clear (Anderson 1980). The complexities, of course, come into a particularly sharp focus when the subject in question is as valued and valuable as pounamu. The executive authority over pounamu was fluid though it seems likely that over time it coalesced at higher levels, with early executive authority resting at the hapu, and sometimes even whānau, level. By the late traditional period, and definitely by the protohistoric period executive authority was at the hapū and iwi level. Operational authority would have sat at the whānau and hapū level though the groupings would have changed as the rights were won and lost.

The archaeological and historical records suggest that overarching control of the stone, or at least the locus of executive authority, was centred at several kainga in the late traditional period. As Anderson et al. (2015, 78) explain, by the eighteenth century "the pounamu industry seems to have been integral to systematic trade across Raukawamoana (Cook Strait). It was closely controlled from settlements on the east coast of the South Island, such as at Whareakeake (Murdering Beach) in Otago and Kaiapoi Pā in north Canterbury". While smaller settlements no doubt worked and traded pounamu the record seems to be fairly consistent regarding the dominance of these two kainga in the late traditional period. With regard to Whareakeake, Chapman (1891) writes that the "great variety of stone hammers, anvils, and cutting-tools found there shows that it was a regular manufacturing centre" while Petrie (2006) explains that Kaiapoi was well known for its high-quality jewellery and weaponry, becoming wealthy as a result. These two appear to have played a similar role to Ruapuke. Writing in 1891, Chapman explains that most of the pounamu was carried across the Southern Alps in unworked form. There are several explanations for this, it could be because the East Coast chiefs were more powerful and wanted control of the resource, including the carving, or that the best carvers were on the East Coast. These trails were treacherous and carrying unworked stone rather than finished items would only have made the passage more difficult, indicating that the reason for this was probably political rather than practical. It appears that in the protohistoric era at least, Kaiapoi was the key authority. As Gibbs (2001, 219) notes, "an important consequence of the Ngati Waewae control of the Poutini pounamu sources and trails was that Kaiapoi became the principal pounamu trading (and working) centre... Ngai Tahu thus controlled the trade of pounamu to the North Island". Likewise, Coutts (1971, 42) writes "during the prehistoric period, the exploitation of the Westland greenstone resources was said to have been carefully regulated by the Ngāi Tahu tribe which developed a trade with settlements at Kaikoura, Kaiapoi, Banks Peninsula and the Otago Peninsula". This was also the conclusion reached by the Waitangi Tribunal (1991, 188) as well, "Kaiapoi pa became a renowned trading centre for the stone, where it was fashioned into articles ranging from intricate jewellery to robust mere pounamu". Thus, it seems that the chiefs of these kainga exercised a degree of executive authority over pounamu, though it does not appear to be the same form as tītī. For starters, rather than being connected to rights adjudication for the wider iwi, it seems that this was more centred around rights possession – these were the settlements of the hapū who had wrested control of pounamu.

It does also appear to have a degree of geopolitical determinism, as these two kainga were on the coast that was more suited to trade routes on both land and sea. Trading from the West Coast north overland or by sea was notoriously difficult and while the passes between west and east were by no means easy, they were not as treacherous, plus they led to more populated areas where more stone could be worked (value added) before being sent to the North. As Lenihan (2009, 4) writes, the Kaiapoi site "opened up inland pathways... over the Southern Alp passes to the rich deposits of pounamu on the west coast". At the least, then, it seems that several Ngāi Tahu hapū had control over the trade of pounamu as they possessed the rights to key sources. That said, unlike tītī, pounamu can be found in several locations and throughout the year.

After the land sales of the mid-nineteenth century the Crown assumed control of pounamu, issuing mining licenses but otherwise taking a hands-off approach to the resource. The Crown "failed to adequately police the resource, a situation which... led to high levels of poaching and a thriving black market" (Gibbs 2001, 189). This was not all small-scale poaching either, but often involved large boulders being cut up in situ and helicoptered out. The remote locations pounamu is generally found meant that policing this was difficult for the Crown, who generally did not exercise much control over their right to pounamu. As Gibbs (2001, 201) explains, the Crown had a "lax attitude toward policing this mineral in past years". As will be seen, these issues – particularly the issues of rights exercise and enforcement – would also come to cause problems for Ngāi Tahu.

With regard to the contemporary situation, as noted, the pounamu right was vested with TRONT in 1997 under the Ngāi Tahu (Pounamu Vesting) Act 1997, where the iwi were given the right to all pounamu naturally occurring within their rohe, with the pounamu in the Arahura River immediately transferred to the Mawhera Incorporation, which will be explained later (Wheen 2009, 555). Gibbs (2001, 213) highlights that there were two forms of opposition to TRONT gaining the rights, the first was that it did not "reflect traditional Ngāi Tahu social and political institutions, and in particular, does not recognise the place of hapu within Ngāi Tahu society and is overly corporate in style" and the second that it did not accurately reflect the diversity of the iwi.

While TRONT have the ownership rights, it is the NTPMG who have the management rights to the pounamu resource. This right to manage was devolved through the TRONT pounamu management plan, which was finished and ratified in 2002 (Jamieson 2005). In other words, the practical executive authority has been devolved down to the groupings where it would have rested

in the traditional economy; however, as will become clear in the analysis later this devolvement is not always understood or acknowledged by all in the pounamu industry. Barr and Reid (2014, 223) explain that this "left the ownership of pounamu with TRONT but gave the Kaitiaki Rūnanga responsibility for developing their own resource management plans for the customary and commercial utilization of pounamu". The Pounamu Management Plan (TRONT 2002, 2) outlines the roles of TRONT and the kaitiaki rūnanga. With regard to the former it states that TRONT's roles are: "Ownership of pounamu on behalf of Ngāi Tahu Whānui; Administer ongoing protection of tribal interests and legal ownership; [and] Monitor and review pounamu management plan". The latter's roles are: "Kaitiaki of the pounamu resource in their takiwā for management and control; Determine the extent of local pounamu; Protection; Determine collection policy and rāhui pounamu and restrictions for the collection of pounamu; Determine the sustainable extraction levels of any given deposit, within their takiwā and undertake sustainable extraction; Be the point of contact for, and undertake, supply to the commercial industry; Undertake monitoring and surveying of deposits and pounamu areas; Create Pounamu Resource Management Plans for individual takiwā" (TRONT 2002, 2).

Consequently, as well as holding the rights, TRONT still retains some authority in terms of monitoring and reviewing management plans. As both Gibbs (2001) and Barr and Reid (2014) conclude, this arrangement accurately reflects traditional institutional structures, with a balance between hapū and iwi authority. Certainly, an iwi-centric rights holder with a degree of authority is not totally congruent with traditional institutions but as Barr and Reid (2014, 226) note, "Ngāi Tahu traditionally resorted to centralized political institutions and acted collectively to protect resources when under external threat. Given the current context, then, some sort of balance between centralization (to protect resources) and decentralization (to encourage economic development at hapū and whānau levels) is required".

Following the development, finalisation and approval of the iwi pounamu management plan in 2004 it was then concomitant upon the Papatipu Rūnanga with kaitiaki rights to develop their own local pounamu management plans outlining how they were going to manage the devolved resource and taonga. These plans needed to be accepted by the rūnanga membership and they had to align with the iwi pounamu management plan. The first Papatipu Rūnanga pounamu management plan was completed by Makaawhio in 2010, and a second by Ngati Waewae in 2011. This kickstarted the commercial development of pounamu and the supply of raw pounamu to the market.

Consequently, between the return of pounamu to TRONT in 1997 and the completion of the first Papatipu Runanga plans a period of 13 years had elapsed.

There were many criticisms directed at TRONT regarding the delay between the return of the pounamu resource through settlement, and the development of plans for management, protection, and commercial supply. Gibbs claims that there was "an effective vacuum in management policy" (Gibbs 2000, 257) and Plater (2007) decried the fact that a decade after investment not a single piece of stone had been supplied to the market. However, this criticism seems unduly harsh. The process in developing the iwi pounamu plan was demanding and complex, in terms of getting agreement across several Papatipu Rūnanga, and associated communities, regarding how the resource was to be managed in perpetuity. Each kaitiaki rūnanga manage pounamu in different localities, with diverse geographies and local government regulations. Furthermore, the following institutional structures and processes needed to be developed from scratch including: the hiring, contracting, and development of expertise; assessment of sustainable levels of resource extraction; optimal models for commercialisation, conservation and protection; agreements with government agencies including the department of conservation, border security, and regional governments. This complexity explains the delays in getting plans for the sustainable management of pounamu and the development of commercial operations.

This complexity was acknowledged early in the process by Edward Ellison (quoted in King 2002), then deputy chairman of TRONT, who explained that "It's been a huge task. When the pounamu was vested with us I don't think we realised the enormity of it". However, others with less sympathy with the time taken to develop pounamu plans, such as Davidson, placed the blamed (the 'slowness') upon the high turnover of executives within Te Rūnanga o Ngai Tahu: "Here we are seven or eight years on and there's been a continual turnover of executives at Ngāi Tahu during that period. There's basically nobody there who knows the history of it, or if somebody has told them the history, they're not conducting themselves as they should" (Jamieson 2005b). However, Tahu Potiki, TRONT CEO, reiterated Edward Ellison's point, outlining that the issue was primarily the complexity of the task at hand the skills available to complete the task: "I think it justifies our caution. This is an enormous task that requires tenacity and skill and it's something we have to grow over time" (Jamieson 2005b).

Despite reasonable arguments for the delay in getting plans in place for the commercial development and harvesting of stone, anger and frustration was nonetheless generated within the pounamu industry – including many Ngāi Tahu carvers. Jamieson writing in December 2005, explained that there were "increasingly frustrated tribal members on the West Coast who believe the Ngāi Tahu head office in Christchurch either doesn't know what it is doing or has ulterior motives for stalling the industry... Those who claim some of the strongest rights to the semi-precious stone complain bitterly about seemingly endless delays and hopeless bureaucracy which prevent people who were supposed to benefit from the 1997 settlement from getting their hands on it". While TRONT was trying to communicate the complexities of the situation they were dealing with, many tribal members with a strong interest in pounamu considered the delays driven by TRONT's desire to centralize, own and control the resource. One individual "who represented the Kaitiaki runanga of South Westland during the preparation of the 2002 Pounamu Resource Management Plan, believes it comes down to money. They think it's worth millions and billions of dollars. It is, but not to the tribe... We have nothing out of this so far" (Jamieson 2005b).

This centre-periphery tension concerning the management of pounamu reflected fears that existed prior to the settlement in 1997: "Ngāi Tahu hapu (sub-tribes) say the Bill has not addressed concerns that they may lose their say in managing the resource" (Wood 1997). Basically, TRONT found itself representing groups who had been fighting for the return of pounamu for a century and a half and who had in many cases vigorously opposed the rights being vested in TRONT (Gibbs 2001). The delay in getting access rights to pounamu out into the communities fuelled suspicion that TRONT was assuming centralised control and taking away the property rights of whanau and hapū to harvest the stone. From the outset this was an adversarial relationship with TRONT having to work with a variety of interests to bring about a satisfactory outcome for all parties despite hostility and antagonism. As Barr and Reid (2014, 223) note, the "new centralized ownership of pounamu within TRONT resulted in political tensions over whether, and if so, how, to devolve the management of pounamu to the nine Papatipu Rūnanga who legally represent the original hapū who possessed traditional rights to the resource".

However, while the exigencies of the situation cannot be denied, the optics were just as problematic. A *Press* editorial in 2005 stated that:

"Ngai Tahu's reputation for business acumen and tribal unity is threatened by the delay in developing its monopoly control of pounamu into a commercial enterprise.... The frustration shown by the kaitiaki -- these members of the tribe who have a traditional interest in the resource and rights to its management and extraction -- needs to be defused speedily. If it is not, what is now a simmering row risks blowing out into something worse. Already the police investigation into the theft of greenstone has entangled tribe members, and others are bitter. Their lack of money has prevented legal action so far, but, as others join their cause, a court challenge becomes more likely... If the Ngai Tahu leadership were to make a clear statement about where the dispute stands and what its position is, the air would be cleared. At present, the atmosphere is clouded by coded references and implausible insistence that corruption in the industry is delaying a settlement. The resulting confusion and frustration are raising temperatures... Ngai Tahu has it within its power to ease all these tensions".

From the outset TRONT was viewed negatively by many and the long gap between the vesting act and final commercialisation reinforced this perception. There was "growing unrest within the iwi over how the corporation was managing its assets, and a call for increasing accountability of representatives to tribal members" (Jamieson 2007). Put simply, it appears that during the decade, as TRONT was building the institutions and capability to manage the pounamu resources, it lost the trust of many Ngāi Tahu with interests in pounamu. As a carver, who had represented the north Westland kaitiaki rūnanga said, "It's sad, but I can remember about two years ago when I said that we had these problems and we should fix it up ourselves in the Māori way. They didn't want to talk to me. I knew then that our culture had gone in Christchurch". A tribal kaumatua who was instrumental in the Waitangi Tribunal claim would say in 2007 with regard to the pounamu situation that there was a "crisis at the runanga table" (Jamieson 2007). This crisis seemed to embody and reflect the wider issues manifest in attempting to facilitate justice for such a wide ranging and long running grievance.

Another justification given for the delay was the black market. As Potiki told Jamieson (2007), "no sooner was the ink dry than there was 'a knock on the door' that changed everything at Ngai Tahu, ... The message was 'that there's a black-market industry and it's rife and we've got no control over it'. This turned the focus of papatipu rūnanga and TRONT onto the protection of the resource from attack - 'It was our responsibility as the trustees of this resource. There was no other

agenda". In other words, just as exercising the right has proved problematic for Ngāi Tahu following the vesting act, so too has the enforcement of the right. As Barr and Reid (2014, 223) explain the "black market developed under Crown management... created a 'free-for-all' culture, and Ngāi Tahu has experienced major problems enforcing its new property rights since the transition to the new pounamu ownership and management system in 1997". Ngāi Tahu's problems enforcing their right has not only seen the growth in poaching but has impacted their ability to exchange the resource. As the Clarkson (2008) wrote, the "pounamu black market... has been a 10-year set-back for Ngāi Tahu and the South Westland runanga, Makaawhio. A commercial body was set up to market the stone and it has not sold a kilogram so far, in those 10 years. It was not willing to get into action while the black market was pulling prices down. That caused hurt because it deprived the South Westland tribe members of the chances of employment and economic benefits".

It should be noted that while many outside TRONT have taken a negative view regarding the exercise and enforcement of the right in the first decade following the vesting act, TRONT were suddenly left to deal with many of the administrative issues associated with exercising and enforcing pounamu rights and that it was not only TRONT who made the decision to halt commercial sales. As Stevens (2012, 127) recounts:

"TRONT was told that pounamu was being mined, sold, carved and on-sold at an alarming rate. It therefore postponed the implementation of its management plan and engaged private investigators to assess the veracity of black-market rumours. It was our responsibility as the trustees of this resource', explained then Chief Executive of TRONT, Tahu Potiki. The outcome of the initial investigations was such that in 2002 the New Zealand Police launched an investigation into claims of illegal pounamu extraction from the West Coast. As part of this, police advised, and TRONT agreed, to suspend plans to begin commercial mining... when the Crown divested itself of the ownership and management of pounamu, it simultaneously divested itself of numerous administrative problems associated with it".

Here we see how the major issue that TRONT faced was balancing the commercial interests of carvers – many who were Pākehā – with their kaitiaki responsibilities to ensure the resource would still be there for generations to come. Compared to the nearly a century and a half where they did

not have control over pounamu, the decade it took them to sort out the exercise and enforcement of the right is negligible.

There are two more issues regarding authority. The first is the Mawhera Incorporation and the second is the kaitiaki rūnanga. Mawhera was set up in 1976 to represent Poutini Ngāi Tahu when the government returned the ownership of the Arahura River bed that should have been reserved in the 1860 Arahura purchase, "arguably the most significant pounamu-bearing river in Te Wai Pounamu" (Gibbs 2001, 237). Gibbs (2001, 229) notes that "One of the reasons for the return of Arahura pounamu to the Incorporation was that the Incorporation had provided finance for the Ngai Tahu claim on the understanding that should pounamu be returned to Ngai Tahu, the Arahura pounamu would be vested in the Mawhera Incorporation". The vesting of pounamu with Mawhera turned out to be problematic for several reasons. Regarding representation, while traditional owners were given shares in the Incorporation – though not all took them – since then the shares in the corporation have become consolidated with a relatively small number of holders meaning that the benefits of ownership are not shared broadly. One current shareholder laments that "many of the descendants of the original owners are missing out on the current prosperity, as their shares were sold for next to nothing" (Van Beynen 2008). Most of these shares would have been traded before the pounamu rights were returned, with this resource helping push the price of a share up from seven cents in the 70s to over \$5.00 in 2007 though Mahwera have made most of their money through dairy rather than pounamu (Van Beynen 2007).

Another issue of representation is that the "children of original and current shareholders may not be shareholders. This is problematic because only shareholders can legally walk up the Arahura and collect pounamu" (Gibbs 2001, 248). Even for those who still retain shares, as Gibbs (2001, 247) notes, "share structure of the Incorporation effectively excludes most shareholders from participating in the decision making of the Incorporation" as the majority shareholders will generally call for a 'share vote' on major decisions, effectively nullifying the influence of most shareholders. The issue of representation was also raised by kaumatua from Ngati Waewae commenting to van Beynen (2007) that the Chair runs the Incorporation "like a personal fiefdom", complaining that he "doesn't come to meetings and it can be bloody hard to get him to tell us what's going on". The situation has led to questions regarding Mawhera's legitimacy as the authority over pounamu.

Another area of contention regarding authority concerns Papatipu Rūnanga representation. (Gibbs 2001). Gibbs (2001, 243) outlines that one group considered itself an independent hapū that should have got rūnanga status under the Te Rūnanga o Ngāi Tahu Act 1996. Without gaining this status they considered themselves disenfranchised from the pounamu resource. She then explains that "[s]ubmissions before the Maori Affairs Committee from 1996 to 1998, and interviews with various Poutini Ngai Tahu in 1998, indicated that there may be (or have been) three runanga-type groups on Te Tai Poutini: Kati Waewae, Makaawhio (Te Koeti) and Tuhuru". Only the first were provided papatipu rūnanga status under the Te Runanga o Ngāi Tahu Act 1996. Gibbs considers that the Poutini Ngāi Tahu were effectively disenfranchised (Gibbs 2001, 243). However, the Tuhuru claims for a mandate were repeatedly rejected by both the Māori Land Court and the Minister of Treaty Negotiations. (Fisher 2015). This situation is also true for many other groups during the development of the Ngāi Tahu claim, with significant historical research, debate, and deliberation being applied to the formation and recognition of what groups could form as representative bodies.

Pounamu legal institutions

This section will examine the 'rights' to pounamu in the pre- and post-contact eras, focusing on their type and their delineation. One key aspect regarding type is that before contact the rights to pounamu were, obviously, what is currently referred to as 'customary' though might better be referred to as 'aboriginal'. Or more accurately, the rights were based on tikanga Māori and rooted in the Māori worldview. Gibbs (2001, 191) explains that before contact "legitimate access to pounamu resources depended primarily on whakapapa and ahi kaa relationships". In other words, it was based on kinship connection and the continued exercise of the right. Another aspect of rights type, the holder, is less clear, as Gibbs (2001, 211) goes on to say, the "historical accounts are equivocal as to exactly which unit of Ngāi Tahu society exercised what rights over pounamu at each particular source at the time of the land purchases". While the Waitangi Tribunal (1991, 1156) stated that "[w]e are of the opinion that Ngai Tahu held the 'customary' title to Tai Poutini and had held it for a considerable time before 1827" this should be interpreted as referring to the constituent hapū rather than the iwi as a whole. It seems like that there would have been a mixture of different rights patterns depending on when and where is being considered though Firth's (1972, 356) statement that the general principle with regard to ownership of resources by "single persons was accompanied, or qualified by an over-right of the mass of the community to use such goods to service the wider need". As there were a number of different sources for pounamu, each

may have had different rights structures, and these may have changed over time (Gibbs 2001). As Gibbs (2001, 221) explains, "submissions to the Maori Affairs Committee on the Ngai Tahu (Pounamu Vesting) Bill differed on this point, with conflicting arguments that (West Coast) pounamu was not a tribal (iwi) resource, and that it 'was a collectively owned iwi/hapu asset to which all had access". That said, it seems that most rights to pounamu in the late traditional period were at the hapu level before contact, though as has been repeatedly acknowledged Ngāi Tahu often lived in multi-hapū kainga.

Following on from the critique of an iwi-centric view of Māori property rights, is an equally pertinent criticism of a focus on hapū. As Gibbs (2001, 236) notes "whilst the iwi or hapu owned land and resources, day-to-day use and management of these was largely undertaken by small communities and whanau". This would make it appear in the traditional era that while the hapū held the right, it would have been smaller mostly whānau-based groups that exercised the right though this does need to be tempered with the complexities of getting some types of pounamu ready for transport. As Stack (1935) recounted to Haast, breaking off a manageable piece of kahotea (a less prized variety of pounamu found in large blocks in Taramakau, Westland) could require up to thirty men to work the hammer. It seems then that there would have also been hapusized expeditions to gather stone. Furthermore, as Barr and Reid (2014, 226) note, "Ngāi Tahu traditionally resorted to centralized political institutions and acted collectively to protect resources when under external threat". The nature of resource rights in the traditional era were dynamic and nested, and while no one had an individual absolute right, rights were held collectively, with the chief.

With regard to the delineation of these rights, making sense of the traditional borders is difficult because, as has been outlined above, so much of the knowledge of these different resource areas has been lost. Nevertheless, some more general understandings can be extrapolated. First, as with tītī, pounamu was such a highly prized resource that it seems likely that the boundaries to rights were well known. Maika Mason of Ngati Waewae described his hapu's boundary to the Waitangi Tribunal (1991, 1156) and explained that "this boundary remained unchallenged for some 190 years until this present dispute". It also seems more probable that the pounamu that was located close to settlements, particularly the Arahura and Taramakau in Westland, would have had more rigorously delineated boundaries than in those areas such as the Dart River, which required far more effort to access.

During the negotiations for land sales in the mid-19th century Poutini specifically demanded that the right to pounamu was not included in the transfer (Ward 2015). The very value of pounamu "is reflected in the difficulties encountered by the Crown's agents in making land purchases on Te Tai o Poutini" (Wheen 2009, 552). In the Arahura Deed that conveyed the land sale, it was "specifically stipulated that a very large reserve should be made at the River Arahura or Brunner, and that the reserves should be taken in a strip up each side of the river with a view of giving them a right to its bed, from which is obtained the highly prized greenstone" (Mitchell and Mitchell 2007, 338). Despite the specific stipulation "Ngāi Tahu access to and control of pounamu was eroded following the land purchases. The Crown acquired ownership of the relevant land and thereby assumed ownership of pounamu" (Wheen 2009, 552). The Waitangi Tribunal found that the "specific undertakings to protect Ngai Tahu's rights to the pounamu… of the West Coast had not been kept" (Ward 2015, 58). The Crown essentially assumed the right to pounamu after the 1860 Arahura Deed.

In the contemporary era there have been several changes to rights. The vesting act saw the right to pounamu enshrined in settler law and held by Ngāi Tahu as an iwi. The vesting, as Stevens (2012, 127) has noted, had a "property-rights focus". While the right to raw pounamu was returned to Ngāi Tahu there are some complexities to this that make it different to traditional. First is that most of the pounamu lies in the state's vast conservation estate within the Ngāi Tahu takiwa and "Ngāi Tahu must negotiate access to conservation land for pounamu extraction on a case-by case basis and develop ongoing relationships with the Department of Conservation and its officers" (Gibbs 2001, 200). Ngāi Tahu have to deal with an entity that has the "preservationist purposes of conservation areas and national parks" as its core driver as well as the wider "public opinion unsupportive of mining in national parks" that underscores the Department of Conservation's stance (Gibbs 2003, 145). Thus, while they have the right in theory, in practice this right is limited by the need to negotiate access with the Crown via the Department of Conservation. As Gibbs (2001, 206) concludes, this embodies:

"[T]he tensions between the grant of kawanatanga, or sovereignty, to the Crown, and the retention of rangatiratanga, or chieftainship, to Maori over their taonga, and thus a result of the limited kind of justice available in the Treaty settlement process. The ongoing Treaty relationship is crucial. Ngai Tahu and the Department of Conservation must work closely,

in a spirit of mutual co-operation and trust, to find the balance between Ngai Tahu's desire to extract pounamu, and its protection, while also conserving New Zealand's unique ecosystems and landscapes".

In other words, the return of the right to pounamu is far from absolute, yet as a legal term 'vesting' "means that a person has an absolute right to some present or future interest in something of value". Rather than being an absolute right it is one that is contingent on the settler state institutions.

Another interesting aspect is the holder of this right, as the 1997 Act explains that "all pounamu occurring in its natural condition in... the Takiwa of Ngai Tahu Whanui; and... those parts of the territorial sea of New Zealand... that are adjacent to the Takiwa... becomes the property of Te Runanga o Ngai Tahu". This, it would seem, totally extinguishes any other right as it is the property of Te Rūnanga o Ngāi Tahu. However, this has been hotly contested by various iwi members who "say the vesting act did not, and cannot, extinguish those [customary] rights and any member of the tribe who decided to start helping themselves to pounamu would be within their rights" (Jamieson 2005). Countering this, O'Regan (quoted in NZPA 2007) has argued during a trial focused on pounamu poaching that:

"While the tribal collective was owner of the tribe's customary rights, its role was one of guardianship of the right itself. The tribe had a responsibility to protect the resource being managed. In practice, that responsibility generally devolved on the tribe of the area. In South Westland, Te Rūnanga o Makaawhio managed and controlled the natural resources. A person would have to get permission to exercise a customary right from the collective, or from the rangatira (tribal chief) on the assumption that he held delegated authority from the collective... that the customary rights were held collectively, and what an individual owned was an access right... I would emphasise that a customary right is a right to access to a resource... That's what you own, not the resource itself."

However, other tribal members questioned the legitimacy of TRONT as a collective rights holder: "In the first instance ... Ngai Tahu are the thieves. [Pounamu] was never the Government's to give to them" (Booker 2006). Referring to the same trial as O'Regan, this individual exclaimed that the

judge "has basically come out and said there's no such thing as customary rights. We own the rights -- we were born with the rights" (Van Beynen 2007). In support of O'Regan, the judge in the trial said this individual "was wrong to say [he] found no customary rights to pounamu existed. Essentially, he ruled such rights had been established, but they were collective rights belonging to the relevant hapu or tribe as custom determined. Individuals did have rights to the pounamu, but only as part of their hapu or tribe that had traditionally gathered the resource" (Van Beynen 2007).

Supporting the contention of continuing customary rights was the argument used by the defence, that "pounamu had never been acquired by the Crown and so could not be vested in TRONT" (Court of Appeal 2009, 4). Some Ngai Tahu, including the above individual, were "calling for Ngai Tahu to hand over the ownership rights to the people they were destined for in the first place — the kaitiaki", something that Sir Douglas Graham supported, explaining that "[i]t was intended to return it (pounamu) to the hapu in whose area the greenstone was found — so not Stewart Island and not Kaikoura Māori" (Jamieson 2005). Dissatisfaction with this situation led to a group "establishing a new company to allow South Island Maori to exercise customary rights to natural resources in opposition to iwi policy. Known as the First Nations Resource Company NZ Limited, it was conceived from growing dissatisfaction over the centralized ownership and control of traditional, customary Māori rights by Ngai Tahu, directors say. They considered that rights are owned at a local level by families and hapu, or sub-tribes, not by the South Island-wide tribe (Jamieson 2007). The main issues seems to be first the legitimacy of the Crown in adjudicating rights over pounamu when such rights were considered not to have been ceded, and second the formalisation of whānau-hapū representation and the centralisation of assets at an iwi scale.

With respect to whakapapa and ahikā, while the former is still the most significant determinant of rights, regarding the 'tribal collective' anyway, ahikā rights have been effectively extinguished by Crown legislation. It has been argued that "during the period from 1861 to 1997, there were at least customary rights to take and exploit pounamu which Ngāi Tahu Whanui individually enjoyed, notwithstanding the Crown ownership of the resource. Therefore, when the Crown transferred its rights to TRONT, this did not alter the customary rights of Ngāi Tahu individuals, which had continued during that period of about 125 years" (Court of Appeal 2009, 14-15). However, the Court of Appeal (2009, 15) stated that "whatever issues could arise from the conveyance of 1860, subsequently-enacted legislation removed any doubt that the Crown had complete ownership of

and control over the pounamu... customary rights, even if they had survived the Deed, were extinguished by legislation".

Consequently, the ruling established that existing ahikā rights were effectively extinguished and that it was up to TRONT, and its constituent Papatipu Rūnanga to decide how customary rights might be established or allocated in future. From the position of Tipene O'Regan this was appropriate given that the traditional role of the representatives of the collective was to adjudicate and decide on the allocation of rights. However, for those who considered that they had maintained their customary rights between 1861 and 1997, many of the representatives making decisions were not members of the ahikā collective, and therefore not in a legitimate position to allocate rights. In short, Ngāi Tahu outsiders were considered to have taken control of the resource away from ahikā.

Nonetheless, it also needs to be noted that due to colonisation processes many Ngãi Tahu were not able to maintain their customary rights to pounamu. For one the Crown had assumed ownership of the mineral, which could only be harvested or mined by permit. Consequently, many Ngãi Tahu lost their ahikā status through no fault of their own. The TRONT Pounamu Management Plan 2004 and the subsequent Makaawhio (2010) and Ngati Waewae (2011) kaitiaki rūnanga pounamu management plans established the rights of tribal members to commercially harvest pounamu in particular areas – albeit harvesting was limited to pounamu 'that could be carried' and did not permit mechanical extraction. In essence customary rights became allocated on whakapapa alone and did not include the ahikā status of an individual. Arguably this may be considered appropriate given that many Ngãi Tahu lost their ahikā status through no fault of their own, however, it also meant that the exclusive rights that ahikā may have maintained from 1862 were extinguished. Furthermore, the limiting extraction to non-mechanical also impacted ahikā. In essence there was no real way of allocating customary rights that would not lead to an injustice of some sort.

There is another issue with regard to rights, one related to the issue concerning the representation capacity of Poutini Rūnanga. At the time of incorporation the two papatipu rūnanga – Te Rūnaka o Kati Waewae and Te Rūnanga o Makaawhio – had to share the same takiwa as they could not agree over the borders, meaning that "any consultation over resources has had to involve both rūnanga, despite the fact that the Kati Waewae Runaka is centred on the Arahura River and

Hokitika in the north, and Te Runanga o Makaawhio on Makaawhio River, near Bruce Bay, in the south" (Ross 2000a). This however was solved in 2000 when Te Rūnanga o Makaawhio "secured authority" after being at 'loggerheads' for several years (Ross 2000). Makaawhio still have "shared authority with Kati Waewae for land north of the [Poerua River] as far as the Hokitika River", meaning that the rights delineation is still somewhat ambiguous (Ross 2000). The "fight over regional ascendancy has also been a fight over resources and the potential they might offer the local runanga. Makaawhio is understood to have plans to develop tourism opportunities in South Westland, and commercial opportunities for pounamu (greenstone)" (Ross 2000).

Pounamu economic institutions

This section will examine supply and demand of pounamu. One aspect is certain, demand outpaced supply significantly, it was arguably the most prized commodity across Māoridom. Demand was so high for pounamu that, as mentioned (Anderson et al. 2015) it drove waves of expansion and invasion. Firth (1972, 400) refers to it as the "most striking object of inter-tribal exchange" that while sourced from one small district in the West Coast was held by people across both islands. Similarly, Cumberland (1949, 413) states that the "importance of the pounamu trade from the Poutini Coast is reflected in the number of its transalpine routeways, unequalled by the present-day exploitation of coal on that coast; the Māori regularly made use of nine passes, whereas European traffic uses but two". Pounamu supply was always limited in the traditional era, which was due largely to the extreme difficulty in finding it, transporting it and carving it. Each of these steps was problematic and taken together they can be seen as providing a powerful filtering effect on the amount of pounamu available. As already noted, pounamu is difficult to find because in its raw form it looks much like any other stone. It is also located in some of the most remote parts of the South Island, as Firth (1972, 437) writes, pounamu expeditions "were of almost epic nature. The ruggedness of the country was appalling". To make the transportation of the stone even more time consuming, as noted above depending on the stone type up to thirty men would need to split the boulder. Once the stone had been brought to a kainga it could take many years, or even several generations, to be worked into the final piece. In the traditional era it is not hard to see why supply was highly constricted.

In the late traditional era, the trade in pounamu was fairly advanced. The level of trade would have increased drastically after around the year 1700 when Raureka discovered the pass from the East to West Coasts. "Before Raureka's lifetime", Skinner (1912, 15) explains "greenstone ornaments

and weapons had been rare. Parties in search of the stone had been faced either by a canoe voyage along a stretch of rugged and storm-beaten coast, or by a long and difficult journey on foot around the coast from Arapaoa to the Arahura. The boldest might well be daunted by either course. But now a pass had been discovered across the mountain barrier, and the way was easy. At once, we are told, a war-party gathered, crossed the pass, fought with Ngati-Wairangi, and came home laden with the stone". The driving force of this increased trade was the East Coast kainga, who used this avenue to dominate the Western peoples. As Cumberland (1949, 410) notes "Pounamu came [to Kaiapoi] by way of certain passes in the Southern Alps in exchange for textiles, mats, and scents, and from Kaiapohia the greenstone was redistributed both north and south. By virtue of its exchange function Kaiapohia was a center of overland routes". TRONT outlines on their website how the "traditional travel route of Nōti Raureka (Browning Pass) played a significant role in Ngãi Tahu gaining manawhenua of Te Tai Poutini (West Coast) and control of the valuable pounamu trade. The discovery of the pass is traditionally attributed to the arrival on the east coast of a Kāti Wairaki woman named Raureka, for whom the pass is named". Kaiapoi sent out three successive war parties to the West Coast via Nōti Raureka (Anderson 2003).

By this late traditional period, pounamu had become the 'gold standard' of the national trade network, its exchange was about as utilitarian as the traditional Māori economy got. On his second voyage, Cook (Beaglehole 2017, 56) noted that "Notwithstanding the divided and hostile state in which the New Zealanders live, travelling strangers who come with no ill-design are well received and entertained during their stay, which, however, it is expected will be no longer than is requisite to transact the business they come upon. Thus it is that a trade for poenammoo, or green talc, is carried on throughout the whole Northern Island. For they tell us, that there is none of this stone to be found, but at a place that bears its name". The rarity, importance and system of trade surrounding pounamu was immediately obvious to Cook. As Petrie (2006, 16) explains, "trade in pounamu was vital to the economy of South Island Maori. It was exchanged for obsidian and argillite as well as flint, chert and other minerals, but the trading of stone for foodstuffs was also significant". Pearce (1971, 54) explains that pounamu was exchanged for "certain foods such as kumara which could be dried and stored, huia feathers for the adornment of chiefs, obsidian from Mayor Island and Taupo, and finely woven flax cloaks such as the Taranaki tribes produced". Firth (1972, 400-401) outlines that "it was gained as a rule by exchanging other products, as kumara, taro, and fern-root, or other food delicacies which the people of that region could not obtain, while fine mats and garments were often given for the larger pieces of good quality.... Another form of exchange depended not so much on differential natural resources as on the variations of

technical skill displayed by certain tribes". There are many lists of what pounamu was traded for, the reality is that it was most likely traded for anything that had value, particularly either specialised items/skills or regional specialities. Certainly, pounamu was traded across New Zealand and it seems likely that this involved a mixture of social and pragmatic motivations. Anderson et al. (2015, 78) write that "pounamu was manufactured into goods of high value that were then distributed north through networks that reflected the retention of links through ancestry either side of Raukawamoana [Cook Strait]". However, while the trade would have been facilitated along genealogical lines this does not necessarily mean it was always primarily premised on social obligations. As Firth (1972, 436-437) wrote "great economic interest which attached to the nephrite in the mind of the native led to many journeys being undertake to Te Wai Pounamu, 'the water of the greenstone,' from other districts to secure the stone. This was the nearest approach which the Maori made to any regular form of trade". It appears that this was not the delayed return of a gift, but rather a form of barter. Revealingly, Salmond (1991, 91) explains that on Cook's arrival "Te Wahanga, whose family had supplied the Resolution with fish during their previous visit, had evidently calculated that the Europeans would give much more for greenstone than for fish, and that they would probably return to the Sound. He was an expert and enterprising trader who had found ways of acquiring quantities of greenstone for barter, although it had taken him six days from the ship's arrival to get back to the Sound". Te Wahanga was one of the specialised traders that facilitated exchange across Cook Strait and while this is supposition, it seems likely that his ability to obtain the pounamu for Cook was premised on pragmatic exchange than social obligation. Still, as Coutts (1971, 42) notes, "There is some evidence that the constant demand for greenstone affected the linked economic and social organisation of Maori groups, the magnitude of the effects being dependent on geographical location and status of the Maori population in question".

Following the Crown's acquisition of pounamu, the supply virtually ran out, likewise the demand from Māori for the stone had also declined dramatically as European technology made it irrelevant for practical purposes. However, after many decades of both limited supply and demand came the "development of the greenstone industry in New Zealand [which] had been essentially a Pākehā phenomenon, and was... worth tens of millions of dollars and employed several hundred people" (Macfie 1998). This industry was built on the increasing demand for pounamu jewellery from international tourists who began visiting the country in significant numbers in the 1960s and by and large it appears their ability to get enough stone to fulfil this demand was relatively assured before 1997. As Mason told the Waitangi Tribual, (1991, 728) "[t]oday we see cheap gimcrack

pounamu ornaments being sold to tourists, much of the carving being done by Pākehā working in factories and with no knowledge at all of the spiritual values which our people enshrine in their carving. Our people are not entirely blamefree in this, some of them are also involved in that trade, but that is almost an inevitable result of the debasement of our heritage. They see Pākehā making money out of this business and almost inevitably some will try to do the same".

The return of pounamu to Ngāi Tahu caused panic about supply amongst the pounamu industry and "[h]undreds of tonnes of pounamu have been stockpiled at the jade factories or secretly buried around the West Coast, much of it extracted in a race to beat the 1997 law change" (Madgwick 2000). As mentioned, it also saw a large increase in price and a resultant growth in the black market. As Stevens (2012, 127) writes, "[i]n 2000, when the last mining licence expired, the price of raw pounamu began to climb, fuelling a black-market trade in the stone". Gibbs (2001, 272) believes the concerns regarding supply were well founded as "Ngai Tahu is in a monopolistic situation with complete control over supply of the stone to the market". As already noted, the time it took to supply stone to the market "caused prices to rise... The inability to source the stone had caused prices to double, and he believed it could be encouraging illegal mining" (Jamieson 2005b).

When Ngãi Tahu did begin to supply stone to the market "the market for legitimate pounamu was 'tight" with one Pākehā carver saying that "[i]t's getting so scarce now I've had a bunch of young Maori guys, young carvers, who can't get stone. (Ngai Tahu) need to start supplying the market" (NZPA 2010). The lack of legitimate stone encouraged jade from other countries to be imported. This was an issue noted by Barr and Reid (2014, 223) "the importation of jade from overseas – primarily from Canada, Siberia and China – in raw form and as finished items… has pushed down the value of raw pounamu and has also forced New Zealand carvers to compete against jade-producing countries in Asia with low labour costs. These products are typically misrepresented as genuine New Zealand pounamu". Likewise, a Ngãi Tahu Pounamu (NTP) Pounamu manager recognised that "it's mainly because pounamu has not been so available over the past 10 years that jade from other countries has been brought in, and often passed off as NZ jade" (Plater 2007). His successor also noted that the foreign substitutes hurt New Zealand carvers, saying "[i]t does impact on individual carvers and the industry, because they can't compete. Economically and commercially they can't compete with a Chinese factory carving 1000 Mãori motifs an hour and sending them over here" (McClure 2014). As McClure (2014) noted, "[i]n the long run, confusion

around cheap imitations could hurt the whole industry, with a University of Otago study showing tourists were reluctant to buy pounamu if they could not determine its quality or provenance".

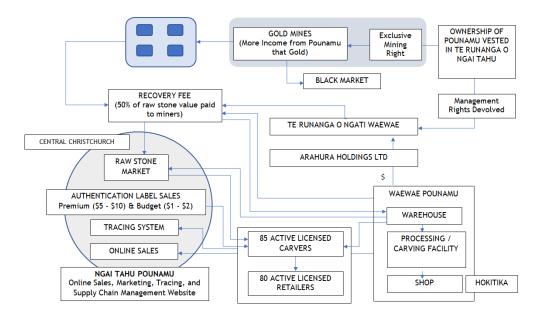
This dilution of pounamu's integrity through the black market and importation of foreign jade led to one of Ngāi Tahu's main initiatives around pounamu, their authentication scheme (Barr and Reid 2014). As Barr and Reid (2014, 224-5) explain:

"This new traceability system allows a premium to be captured for Ngāi Tahu Pounamu. This premium flows right through the value chain with an average price increase of 30-50 per cent for both the raw pounamu extracted by Kaitiaki Rūnanga and for the finished carved pieces sold to consumers compared to similar imported jade products. Licensed carvers are required to pay a licensing cost recovery levy of 7.5 per cent on the retail price of every piece they carve – and with a 30 per cent premium, this levy is more than compensated for – creating significant benefit to the licensed carver and their whānau".

The Development of the Ngāi Tahu Pounamu Scheme

This scheme attempts to fulfil core tikanga Māori values by ensuring end consumers can connect with the producers (Reid and Rout 2016a) whilst also delivering a premium on pounamu products. The structure of Ngāi Tahu Pounamu scheme is outlined in the figure below.

Ngai Tahu Pounamu



The figure outlines that the ownership of pounamu is vested within Te Rūnanga o Ngai Tahu, however the right to commercially operate and manage the resource is devolved to kaitiaki rūnanga. The figure demonstrates that the only kaitiaki rūnanga that is commercially operating and managing the resource is Ngāti Waewae through Arahura Holdings LTD - the trading name of the business is Waewae Pounamu. Pounamu used in the NTP scheme is accessed through the mining industry, where is a bi-product of mining operations. The miners are paid a recovery fee for the stone, which is approximately half the market value. The stone is purchased by Te Rūnanga o Ngāti Waewae (TRONW) who then sells the stone to Arahura Holdings LTD that places it for sale online NTP market place. Fifty percent of the proceeds received by TRONW return to TRONT while the other 50% is retained by TRONW. Licensed carvers are then able to purchase raw stone online. Once they have purchased the stone, they must either purchase labels to attach to their carved pieces to demonstrate the products authenticity, or if they are aiming for the premium end of the market utilise the online tracing system that requires them to photograph and weigh each piece for sale. Licensed carvers can sell their products through their own outlets. Waewae Pounamu like other licensed carvers also purchases raw stone and sells their pieces via their shop in Hokitika. Also, Waewae Pounamu sells carvings on online via the NTP online retail store. Ownership of the NTP store transferred from TRONT to Waewae Pounamu in 2017. Some selected carvers that have met sufficient standards also able to sell their finished pieces via the NTP store.

In addition to the commercial model Ngati Waewae also separates its commercial operations from its resource management. Resource management – including the purchase of raw stone from miners is managed by their pounamu management komiti, while commercial operations are managed by Arahura Holdings LTD. This is demonstrated in the figure below.

Arahura Holdings LTD Pounamu Management Komiti Waewae Pounamu & Ngāi Tahu Pounamu Commercial Development

The overall model provides a means for carvers who want to source the stone through legitimate means to then sell it through a variety of channels. For those who working within the system it provides a means of sourcing pounamu and selling carvings. However, there are a number of challenges presented by the NTP model that can be traced back to long-term grievances concerning the vesting of pounamu within TRONT, and limitations to TRONT's executive authority. These issues are explored in the section below.

Pounamu institutional framework

There are economic implications for the development and operation of the pounamu industry that stem from the vesting of pounamu rights within TRONT; and Crown policy and regulatory constraints to TRONT exercising its rights. Twenty years after settlement the vesting of pounamu ownership with TRONT is still questioned by many traditional Ngāi Tahu carvers, harvesters, and leaders within the pounamu industry. This disaffected cohort of Ngāi Tahu (discussed previously), which in interviews referred to themselves as manawhenua, or ahikā, express a sense of alienation from their customary rights and disenfranchisement from the management and control of the pounamu resource. As a consequence, there is a division between Ngāi Tahu involved in the industry through TRONT and NTP operated commercial initiatives, and those who feel alienated. This lack of cohesion constrains the development of a tribal economy that can generate broad economic benefit to many Ngāi Tahu interests.

In our interviews the disaffected cohort considered rūnanga to be illegitimate and inauthentic institutions. Furthermore, they argue that the existing Ngāi Tahu institutions reflect the Crown structures and approaches created through the treaty settlement process. This sentiment is reflected in the following statement:

Legally I know the iwi has got the monopoly on the rock, but even that's problematic because like some of the whānau over the Coast they'll go, 'Hey, who are these bloody Ngāi Tahus to take over our rock, we've been ahikā for generations." And, you couldn't side with them because they've got the weight of history behind them. Ngāi Tahu have only got the weight of the legal system behind them. [#10 – Carver]

This perception of ahikā being alienated from aboriginal and customary rights is again reflected in the following statement:

... we have these pre-existing Aboriginal authority and rights and stuff and power... when the Europeans arrived and the establishment of the institutions of law and authority that came with that post-Treaty, it set up its own sphere of authority under colonial institutions; and for want of better word we'll call it British law. The two are quite different. There's areas where they can obviously mix and co-exist and exist if you like; where they meet. However, Ngāi Tahu in its long grievance in the 1990s settled with the Crown and the Crown in that settlement created a new law under British law, which was called the Pounamu Vesting Act. It transferred the title and right to pounamu to a new construct called Te Rūnanga Ngāi Tahu. So, that creates a totally new authority. It didn't exist prior to that point in time and it was established under an in agreement with between the parties of Te Rūnanga o Ngāi Tahu, or Ngāi Tahu Trust Board back then, and the Crown; to ensure the Crown could recognise that we owned the resource. However, nothing in any of that, and as far as I can see in my work, extinguished the pre-existing rights... There is nothing in Pounamu Vesting Act, or the Te Rūnanga o Ngãi Tahu Act, or the Crown Minerals Act which extinguishes the pre-existing title – which I will use the term Aboriginal title – and so we can only say, to be honest, that the Crown established a new authority... so we have two spheres; there's the pre-existing rights and associations which allow for harvesting, and then there's the new ones established by British law and facilitated through these post-settlement entities. [#17 – Carver]

The alienated position is reflected again in the following statement by another member of the disaffected cohort – this time referring to the pounamu management plans that delineate and establish pounamu rights within the iwi. This member states:

This plan, and every other plan, that I can think of that have come out of settlement, does not follow what I consider tikanga. I think that the plans are exactly that: they're coming out of Resource Management. They're coming out of Pākehā systems, and Pākehā legislation, as opposed to our tikanga. And we can gloss over it by putting a few words of te reo in there, to say that it's Māori, to give it that Māori look. Or, we can write a karakia and put a karakia in the plan: it doesn't make it any more tikanga, just because we put a few words of te reo Māori in there. It still sits within Pākehā legislation as opposed to tikanga Ngāi Tahu.... still sits within Pākehā legislation as opposed to tikanga Ngāi Tahu.... obviously it must fit a Pākehā framework because we have to fit with the Crown legislation... mana whenua need to be kaitiaki, not the freakin' rūnaka. Because again it's a legal identity. The rūnaka are

really legal entities that have been set up to sit within another legal entity. They're only being set up because these are the authorities that the Crown recognises. So, my kaitiakitanga isn't as a rūnaka member, my kaitiakitanga comes from being mana whenua. It comes from whakapapa. [#8 – Kaitiaki]

In terms of an alternative structure for operating the following member of the disaffected group suggests a shift toward institutions and legislative frameworks based upon Māori lore whilst recommending that care needs to be taken to adapt and adjust these structures for a contemporary setting.

I'm not saying that we should go back to being people in grass skirts, you know, singing songs and doing whatever; I'm not implying that at all. I'm just saying that I'm failing sometimes to see where tradition and tikanga meet legislation, where lore, L-O-R-E and L-A-W meet. And often, there's more L-A-W than there is L-O-R-E. And I'd like to see more L-O-R-E, you know? [#8 – Kaitiaki]

Although the pounamu property right was vested in TRONT, current and previous employees of TRONT noted that this right was, and is, constrained by Crown regulations regarding conservation estate access. This is outlined in the following statement:

I think the Department of Conservation was always trying to water down Ngāi Tahu's rights to enter the DoC estate and harvest what they owned within it, in a commercial sense; and, they'd do that by making it difficult to get permits to access for mechanical harvest. That was definitely one of the barriers around making stone accessible; was working with the Department of Conservation on those issues... DoC needs to have a much simpler process for access into the DoC estate. [#9 – TRONT]

In effect TRONT operational authority to gather and retrieve pounamu is restricted by the Crown. As one interviewee stated:

Even today we have to have mining licences. To actually gather the stone from any area outside of the Arahura we had to have a mining licence. Therefore, that limited me to actually going into the Cascade or going down in those areas gathering because they were really remote areas anyway and you had to have a mining licence. [#3 – Carver]

In addition, it was noted that TRONT was also dependent on police for the enforcement of their property rights. The need to work with DOC to access pounamu, and the lack of policing to enforce TRONT's property right, is outlined in the following statement:

... because that required working with the Department of Conservation and other agencies to work out access, control and ownership of the resource. And so, to me, Ngāi Tahu were handed a mess by the Crown, 'cause none of these things had been determined beforehand. The Crown licensing had occurred, but it was never policed properly or anything like that. So, they handed Ngāi Tahu this basket of mess that needed to be fixed and then Ngāi Tahu took ten years to work through all of those complexities to come up with planning. [#9 – TRONT]

In addition to lack of policing, it is also noted that TRONT had difficulty combatting counterfeiting, with foreign jade being sold as pounamu - driving down the price of authentic stone. As we were told by the pounamu manager:

... there was external market forces that were driving down the price of pounamu; mainly cheap imported carvings from China and from British Columbia. So, there was cheap jade coming in and being imported to New Zealand, but also being carved abroad and being brought in as fake Māori pieces and work of arts. It was an industry in a race to the bottom. There was a few people doing high valued carvings, but generally I would say it was an industry and a race to the bottom. [#9 – TRONT]

Another carver told us that up:

... in Rotorua I've seen a rock up there, man, it was massive and that had come from British Columbia. So, I don't know how they got that in the country. [#2 – Carver]

Apart from the development of tracing and authentication systems (as developed by TRONT) regulations requiring that foreign jade be labelled would ensure differentiation and counter forgery. Another carver told us that retail stores:

... were buying [jade] in randomly, they couldn't guarantee that it was pounamu. And there was no expertise to be able to check that it wasn't Canadian jade or Siberian. [#2 – Carver]

Another enforcement issue concerned operator's illegally shipping genuine pounamu over to China where lower labour costs ensured the production of product that could out-compete New Zealand carved stone:

A lot of people who will take pounamu they will have carvers to a certain point, they will ship it off to China to get it finished and polished and sold in New Zealand as authentic pounamu. That was my other issue with Ngãi Tahu, because they were supporting certain carvers that were doing that, whether or not they knew, I would always say under my breath, you need to check what is happening with this stone. You are supporting Chinese product. [#5 — Carver]

A further enforcement issue concerns kaitiaki rūnanga tribal boundaries or takiwā. Traditionally tribal boundaries were somewhat fluid based upon rights to whakapapa and ahikā rights to particular resources. However, European property titles brought fixed boundaries leading to disputes concerning access to pounamu between kaitikai rūnanga. This is outlined in the following statement:

The local Ngāti Waewae iwi with Makaawhio South Westland had a bit of a disagreement with the land in the middle being the Rimu tailings. One iwi is, 'That stone that comes from there should be ours'. Other iwis are, 'It's not really your land either, so it should be ours'... It was [dealt with in] a formal setting. [#7 – Kaitiaki]

This issue, as explained earlier, was eventually settled in court. While TRONT were involved in mediating talks, in the end it ultimate authority regarding pounamu access within a particular jurisdiction was made by the Crown.

Another problem within enforcement concerns containing the black market. As a former NTP manager explained:

In terms of that ability to combat the black market and enforce the authentic and legitimate ownership of the resource. I think there's a major issue around enforcement of the property right; which is why we have a thriving black market. I don't think the black market is as big as it was, but I certainly think that it still operates... Ngāi Tahu was still dependent upon the police for enforcement. I know there's a lot of debate whether Ngāi Tahu should be funding one or two people just to work in enforcement internally as sort of officers to protect the resource. A question from my end; would they recover enough resource to pay for themselves, and I think they probably would. I mean, in the time we had the private investigator we recovered \$7 million worth of stone; so, the private investigator more than covered their own costs. And, certainly we raided; we found that nearly every shop in New Zealand had at some level a stolen stone in their retail outlets. To me that should have been a major focus, continuing to combat that black market. I think we got pretty close to eliminating it. We had the whole industry in terror of someone raiding.' [#9 – TRONT]

Consequently, although TRONT has the property rights to pounamu their ability to enforce is dependent upon police action. Although the relationship with police appeared constructive the interviewee went on to mention that the relationship has declined.

... found black market and traced black market stuff that was followed up by the police in a synergistic and positive relationship; a relationship which does not exist to the same extent. [#9 – TRONT]

However, it appears that TRONT primarily placed its focus on combatting the black market by developing tracing and authentication systems that would enable consumers to differentiate between pounamu originating from the black market. One carver, however, considers that the project is failing in this regard:

I like the fact that it [the scheme] was trying to get rid of the black market, however the black market just got blacker when they took it over. I still hope it works but I don't think it is going to work. [#5 – Carver]

This statement is nevertheless contrasted with that of a former manager of pounamu:

We developed the authentication scheme to combat the black market — just like what has been done successfully in many other industries such as blood diamonds. It allowed us to begin to release stone back onto the market knowing that it was being traced and certified. However, we did not pursue authentication scheme alone, but also sought to dovetail this with enforcement with the police. The measures were extremely effective. I believe much of the stolen stone was taken off the shelves, and the most telling thing was that nearly all of the major pounamu retail stores were seeking to become authenticated. They knew that with a good authentication scheme stolen, or imported jade, would lose its value. [#9 — TRONT manager].

However, the very process of creating a system for combatting counterfeiting by licensing production and tracing pounamu production through the supply chain aggravated the disaffected cohort. This group resented having an external authority 'validate' their Ngāi Tahu authenticity, and questioned TRONT's right to license Ngāi Tahu who had always gathered and carved stone.

A related issue is that each Papatipu Rūnanga also establishes its own resource management plans concerning the resource. This means that pounamu management is different across regions. For example, pounamu cannot be gathered from the Whakatipu Basin but can be gathered by hand in the Ngāti Waewae takiwā. This can lead to confusion, particularly within co-managed areas between rūnanga. As another interviewee states:

Well, for myself they put down some tikangas and stuff which I've ignored, because they put a rāhui on a spot and you wonder why that rāhui is there. Then you hear there's a rāhui on that spot and for a bit I acknowledged and followed that rāhui. Then I was finding other rūnangas were ignoring that rāhui. So, for me it turns out that only two or three rūnangas supported the rāhui and other rūnangas didn't and it got messy; so, I just do what I need to or all I want to. [#10 — Carver]

However, perhaps more problematically, many interviewees in the disaffected cohort considered it legitimate to gather stone illegally – given that they did not recognize rūnanga mana over the

resource. As one told us, when asked what he would have done if his permit to harvest had been denied:

I would have done it anyway! I would have just done it anyway. I respect. It was just the respect. This is the kaupapa or the tikanga, this was the tikanga that's been laid down...' [#3 – Carver]

This perspective is reiterated again by another research participant who states that not only does he not recognize the authority of the rūnanga, but also does not recognize the authority of the DOC in regards to pounamu enforcement:

Even though the place is administered by DoC they've never told me not to go there. The only people that have actually told me not to go there are the rūnanga. And of course, I ignore that... if I was to go up the river and come back with 12 tonnes of the stuff I'd fully expect to be told off, because that's just greedy. But, even if I did get told off, if I was to do that and I got told off, what can they do? They can't do nothing. You know they might ban me from going up the river, but no one's got the mana to ban me going up the river; not even DoC... The ahikā is the important one. That's why I ignore when the rūnangas say that I'm not allowed to go up the river. Are they ahikā? I've never seen them up that river, so I'll ignore it. [#10 — Carver]

Other members of the disaffected cohort frequently mentioned the inability of papatipu rūnanga to enforce their pounamu management plans – with a tendency to focus on controlling what Ngāi Tahu gatherers and carvers do rather than the general public. Furthermore, it is frequently mentioned how shared enforcement between rūnanga and DOC creates problems. This is outlined in the following statement:

The] restrictions the rūnanga are imposing, their own rūnanga members reporting quantītīes taken out, or whatever. It's fine to measure the resource and what's being used, but it's only for rūnanga members, everyone else is just... I mean anyone can go there, they're paying for that, and who you know. And then they run along to the Department of Conservation to police that. I mean, if you've got a thousand visitors picking up a piece of pounamu it doesn't take long to deplete the resource; but they're just relying on the honesty of the rūnanga members. And it's all about power and control of the resource that belongs to everybody. Yeah, it's quite a conflicted way of working around things... some of the areas that we go to is in the Department of Conservation estate, there is the sort of general restrictions but then it's half managed

through Ngāi Tahu or the local rūnanga pounamu committees, but nothing [13.14] relatively loose. You can take out what you carry, doesn't say how often. You could be working for 365 days a year taking pounamu out. [#2—Carver]'

When asked about how enforcement of ahikā rights occurred prior to colonisation members of the disaffected cohort outlined the approach was entailed the use of violent force. A participant told us that:

"... when they would go across to the coast, some... would wait in the bush for people to bring the pounamu back over the Browning's Pass and then they would attack them, take their pounamu and then head back. That was a part of the fighting that went on, on pounamu as well. They would fight whoever had pounamu, you know they would hide out in the bush and attack whoever was coming back if they knew they had pounamu on them either kill them and take their pounamu, and then they wouldn't have to carry on over the hill... You take a look at when Te Peehi was killed up in Tuahiwi, you know, that was over a block of pounamu. [#6 — Carver]

Another participant also outlined the impact of failing to recognise the pounamu property rights if ahikā:

'Oh, death. Donk. I'm not meaning the supernatural way, I'm talking about they clubbed you on the head.' [#5 – Carver]

Similarly, when asked about rights enforcement another told us:

I think it would have been a lot more fiercer in the past... my grandfather and before him would have been a few more people thrown in the river I guess.' [#7 – Kaitiaki]

This feedback suggests that pounamu rights were strictly enforced before contact. However, there is difficulty with enforcement today given the resistance of the disaffected cohort to recognise papatipu rūnanga mana in relation to the resource and ultimately TRONT's ownership.

Furthermore, mixed enforcement delineations between DOC, kaitiaki rūnanga, and the police mean that there aren't clear lines of responsibility for enforcement.

An alternative approach to enforcement mentioned by a TRONT NTP manager outlined that he thought the primary way to enforce the right today was through traceability. As he explained:

International experience has shown that protecting high-value raw minerals is best achieved through traceability — that is maintaining control of the supply chain from source. It then becomes much easier to differentiate black-market from legitimate. Most carvers in New Zealand can tell pounamu from BC or Chinese jade, furthermore scanning technologies now exist that can determine origin. It then becomes a straight-forward matter of purchasing suspected black market stone from retail outlets (that is stone that is not authenticated) and scanning to determine provenance. This can be followed by prosecutions.' [TRONT Manager #9]

As mentioned in the previous section, another dominant theme reiterated in the interviews with members of the disaffected cohort concerned the erosion of faith and trust that occurred when TRONT failed to get stone to Ngāi Tahu carvers rapidly after settlement. This theme is illustrated in the following statements:

I would have to say no. I would say that the Pounamu Vesting Act, or the pounamu being vested back to Ngāi Tahu probably made the industry struggle. Only in the sense that the pounamu resource was closed off. [#5 – Carver]

When I went back over to the coast I'd seen a big difference in the local people over there. Their stone was their stone. And I'd seen a lot of them were quite anti-Ngāi Tahu at the time. It didn't affect me as much because I was on this side of the hill. And when I would go over there I knew that my cousins were hurting over there, because of what had happened with the stone. That was because they've had a free reign for all of those rivers for so many years, hundreds of years; they've had the free reign of all of the coast. And to be told that they couldn't take from different areas didn't go down too good with them... And that was really hard for them on the coast; those people over there, it was really hurtful for them, where they had to question

people to go up the rivers. Ican see when Ngāi Tahu took over those rights they were there for the people.

[#6 — Carver]

"... there's the Pounamu Vesting Act to begin with; and then there is our own Ngāi Tahu Pounamu Resource Management Plan. The copy that I have is a very, very old copy and I understand that this one is under review at the moment, and it has been under 'review' for a god knows how many years. I think almost from the moment this particular plan that's sitting here was put out, it became "under review"... we've done this again, and again, and again, and again, and again... without it sort of moving forward. We seem to just be rehashing and redoing it all of the time... here we are in 2017, so we're what 15 years down the track from that. And I think both of those hui were very, very successful. But we're 15 years down the track and we're still doing development, aren't we, for these initiatives. We're still developing strategies, we're still... I think we just keep rehashing things all the time, rather than doing... we've done this again, and again, and again, and again, and again... without it sort of moving forward. We seem to just be rehashing and redoing it all of the time.' [#8 — Kaitiaki]

The perceived lack of concern for Ngāi Tahu carvers and gatherers led to the impression that TRONT was focused on commercial returns at the expense of its own people and culture. For example, one carver told us:

"I think that Ngāi Tahu has to think less corporate. There needs to be the balance between accountability, which is resource management etc.. accountability to .. industry as a term is not right.. but making stone affordable for carvers who's focus is not commercial so they can carve something that is different and better... But to look at the culturalising commerce... I think that the way we are heading all of our trusts and all of our Māori entītīes are becoming very commercially driven." [#5 — Carver]

Another carver reiterated:

There does need to be something official; a group of officials, I suppose, that are working for us not for themselves.' [#4 – Carver]

Others even portrayed TRONT's role in a more assertive manner. For example, one carver said:

I think they thought they could just come into the industry and just take it over. But they don't realise that they are dealing with people who are so individual, they are already robust people, because they are just used to getting by on the smell of an oily rag. There is no way they are going to get squashed by them, because they are used to surviving and do anything that they have to survive.' $\lceil \#5 - Carver \rceil$

These statements are however in contrast with the following statements from a former TRONT manager who outlined the intension of Ngāi Tahu Pounamu was to place ownership at the local scale:

I am aware that some flax-roots Ngāi Tahu think of Ngāi Tahu Pounamu as a corporate takeover. However, the truth is if pounamu was to be managed in a corporate way it would sit in, and be operated by, a centralized company like Ngāi Tahu Holdings. Ngāi Tahu Pounamu is the complete opposite, its business model is about protecting the mana of pounamu and decentralizing the business to kaitiaki rūnanga, whanau, and individual carvers. The whole point is to decentralize ownership and control to better reflect traditional models. [#9 – Manager]

This statement is reiterated by a more recent pounamu manager:

The reason for the business's existence is to create opportunities for papatipu rūnanga and carvers. It is not necessarily for it to be profitable in its own right, but to integrate the supply chain to create financial opportunity and security for Ngāi Tahu people.....There are challenges in that there are strong personal connections [concerning pounamu] for Ngāi Tahu carvers...that can create significant tensions ... carvers can be abusive.' [#14 TRONT]

These statements demonstrate divisions in perception between those within TRONT and the disaffected cohort. Within this group there is a general tendency to perceive TRONT as a foreign corporate intent on economically and politically marginalising many Ngāi Tahu carvers and harvester. Conversely within TRONT there is an almost opposite perception that their job is to put ownership and control with kaitiaki rūnanga, carvers and gatherers, and support them in whatever way they can to be successful. This scenario suggests significant communication issues

between centre and periphery, and in particular a lack of trust in TRONT by the disaffected cohort fuelled by a settlement process that removed customary rights.

However, a further explanation given by a pounamu manager for the significant differences in perceptions is that Ngāi Tahu Pounamu had been understaffed for the entirety of its operational history, with only one full-time-equivalent staff member. This has meant that communication between NTP and the carvers has not always been as clear and consistent as it should have been.

However, members of the disaffected cohort also demonstrated strong individualism which suggests that collective action to overcome divisions may be difficult. This phenomenon is mentioned by the research participant below, who sees the industry as atomised and individualised, with everyone competing rather than collaborating. He outlines the important need for everyone to work together:

We should all be helping each other grow up together, because then we're all healthy you see; and, now I see displacement and division — it's not a together thing. There's a different clock for one, and a different clock for others. [#18 — Carver]

However, such division will be difficult to overcome given that the centralization of ownership and control of pounamu within the TRONT and papatipu rūnanga structure has alienated those who consider that they possess the customary rights to pounamu.

Awareness of this division is described below by a carver who participates in the NTP scheme, who told us:

I'm aware of the fact that there are, and again, this is all the learning experience for me, because I understand that there are certain, what we would call, and as you were explaining, customary rights about who owns what, and that kind of thing, and as I've said, I've tried to stay away from that really, because I am personally not connected with any group of people or culture. I'm sort of a pariah or something, I don't know... I'm distanced; I'm just on my own doing my thing. [#16 — Carver]

Despite grievances regarding customary rights the disaffected group still tend to look to TRONT to protect pounamu and provide assurance regarding their designs. Furthermore, they are critical of TRONT for not providing this protection:

Ngāi Tahu is supporting the government, like it's supposed be the pounamu protection, and Ngāi Tahu is supporting the government in this continual importation of Canadian jades, and carved in Asia. And even places like The Warehouse have got thousands of dollars' worth of jade carvings, all using traditional Māori design. And Ngāi Tahu support the government by not saying anything about it; that's pretty much it.' [#2 — Carver]

Nevertheless, there were suspicions that the NTP scheme was making money off Ngāi Tahu licensed carvers by providing poor quality stone while taking the best stone to support the Waewae Pounamu business. As one participant told us:

The playing field is not even... that goes back to the resource as well, where they were cutting it. Keeping the cream for them and trying to sell the butt end to the whanau carvers to cover the costs at their end. [#5 – Carver]

Overall, underlying distrust in the tribal structures, and underlying grievances regarding customary rights and the legitimacy of tribal institutions, inhibited members of the disenfranchised cohort from participating the NTP scheme. The difficulty in gaining participation is outlined in the following statement by a NTP manager:

... we found that most whānau didn't trust Papatipu Rūnanga or TRONT enough to become registered [in the scheme]. I spoke to a lot of them, engaged with a lot of people, actually ran hui to explain how the system worked and with the number of pounamu carvers on the coast; so you had hui. Interestingly, they didn't actually say anything around it; they were very quiet about whether they were involved or not. But, what was clear in private conversations outside hui, was that they didn't trust the tribe to engage; which was a bit of a shame, because it didn't get momentum and instead quite a few non-Ngāi Tahu became carvers and Pākehā as well became carvers, and became part of the scheme. [#9 – TRONT]

In addition, to suspicions that the goal of the NTP scheme was to financially exploit Ngāi Tahu gatherers and carvers, members of the disaffected group also outlined the bureaucratic issues of having to deal with the processes and standards associated with belonging to the scheme, and the cost of commissions:

I was interested in the pounamu management scheme, with the authentication scheme when it first came along; to be able to tell my customers that the stone is kosher. They can check that for themselves but the scheme itself, it seemed that there was the tax that they were trying to impose on the finished work which obviously put me off, as well as other things... it just seemed like another hand; holding the hand out to get a piece of it. I've never really seen the benefit, for me personally... you hear stories of stones they've purchased and how much they've paid, and then you hear about how much they're asking for them, and honestly it just seems like somebody else trying to make a buck... There was the scenario, 'if I buy a certain amount of stone, use half of it and then decide I need the money and I need to sell this bit of stone, who do I sell it to? I can't sell it to somebody who's not in the authentication scheme'. As far as I was aware, Ngāi Tahu wouldn't be interested in buying it back off me? You're sort of stuck with it, in a way that you're not, when you're just dealing privately. You know, it was just more rules, more regulations not doing anything to make the carvers life easier and it just seemed like another hand; holding the hand out to get a piece of it. I've never really seen the benefit, for me personally. Again, I understand the need to try and regulate it, and kaitiaki means to protect and look after, and I'm all for that but unless there's purpose; if it's just more of hassle for me, I'm not going to bother getting involved, and just that lack of clarity. Nobody seems to know what's going on and who's allowed to do what. [#1 – Carver]

I didn't join in that but when you bring in the price of the stone you're paying 50% commission on the sales; that system is such a pain in the ass to actually register, and you had to wait a month to get paid.

And the promotion that was promised didn't really happen, so it wasn't worth being part of the scheme.

[#2 – Carver]

If you look at paying commission, tax, paying for the stone and then the hours of work you put into it, it doesn't equate. [[#4 – Carver]

If we get back to the Ngāi Tahu scheme where they were trying to make material available for the commercial industry.. it just got too strangled. The rules and regulations are too difficult and jade carvers are poor people by the best of times. I thought it might work to a point where it made the resource more manageable for smaller carvers. Where they could purchase more bocks of stone and you know, manage to carve without outlaying large sums of money that they can't afford, so I thought it might work. It didn't take long for carvers to realise they were over paying for material. At the back end of it were we are selling the material, the clients only have limited budgets. When the resource or the raw material is costing you way too much additional is the time on paperwork and the coding costs it pushes the costs too much. [#5 — Carver]

I've seen some of the stone that come back that Ngāi Tahu had here, and they were trying to sell this stone. Now, I know I'm pretty good on stone. I know what stone's worth, what's inside them and stuff like that. Well they had a stone there that was selling for 50 to 60 dollars a pound... Now, no way you wouldn't sell that for 20 dollars a pound, you know?... One was a cousin of mine and I said, "You're pricing that stuff too dear; it's not worth that." Even made up into a pendant it's not worth that, you'd lose money on it. So, people are not gonna buy the stone. I said, "You put it at the right price people will come and buy a piece. The carvers will come and use it; but if you don't, they won't use it". [#6 — Carver]

As already noted, licensed carvers in the NTP scheme need to pay levies for the cost of authentication, however this cost is compensated for by the premiums gained through authentication (Barr and Reid 2014). However, problematically some individuals viewed the commission as a 'tax' on a resource that they considered already their property from a customary perspective:

... it doesn't make sense; it's not fair almost. If you look at paying commission, tax, paying for the stone and then the hours of work you put into it, it doesn't equate. [#4 – Carver]

Those involved in the scheme outline a different perspective, describing how they understand the scheme as a 'work in progress' that they try to engage with flexibly:

It wasn't sold to me as this is done and dusted; this is how it rolls. It's a working model so I have tried to have flexibility. [#15 – Carver]

Another issue a carver raised about the scheme was that it creates a binary of 'authentic' and 'unauthentic' but is only focused on the stone rather than the carver. As he explained:

... we know that the authentication system is about the stone, but the market doesn't. And, our old own relations, who aren't aware of it too – the intricate point of difference – they will associate the carver as not being authentic. [#17 – Carver]

This insight is important given that the scheme can end-up portraying anyone not working in the scheme as inauthentic when they may have a whakapapa right, be sourcing the stone themselves and carving it themselves.

NTP have attempted to ameliorate issues with the scheme arising from the costs in time and money. In response they created a budget accreditation system where a Ngāi Tahu Pounamu label is purchased and attached to the stone – without the photographing and weighing that is involved in what then became the premium tag. As a carver working in the scheme told us:

[The scheme] was still developing with the labels and the percentages, and how all of that has changed over time as well... for the better... way better... overall, it's a better percentage because the 15 percent that we were paying was like that. That was heavy and at that stage the stone was pretty average. [#15 – Carver]

While the changes have gone some way in encouraging the disaffected cohort to enter or return to the scheme it has only solved some the operational and practical issues rather than those that emerge from mistrust. Even then, as the current NTP manager recognised:

... there is 'only a handful' of carvers that see real value in the system — that understand the market value that comes with assuring product quality and authenticity that comes with tracing. [#14 - TRONT]

Even for those carvers in the scheme there are a number of operational and practical issues that are still causing problems, as one told us:

... it cost a lot to buy the stone and the tools and everything, and the money that's left over is not really a lot. I guess I'd hoped for better access to the stone, better quality stone, and more understandable prices, or being able to buy a stone, but you can pay it off. [#16 – Carver]

Finally, many in the disaffected group see the scheme as in competition with them. As a carver told us:

The corporate entity has set up the Ngāi Tahu Pounamu trading website and they're actually supplying other non-Ngāi Tahu or iwi carvers in competition... I mean, that's what you do to get rid of competitors, is you strangle them off. You know, there was the question of added value was going to make pounamu different than jades and so on, but Ngāi Tahu is sending pounamu to carvers who are flogging trinkets off; probably cheaper than what I could manufacture and that. There's no control over the quality, there's no control over the quantity, pricing. If you compared that with Fonterra, there's always set the price, set the standard, you know if someone wants to make a toki and sell it for \$30, then it's competition; it should be sold for \$76. And people are prepared to, I could buy one of those down the road for 30 bucks, and it's the same stone. I actually thought that Ngāi Tahu had worked... If they had wanted to set up a commercial entity, have their own online store where there would be a set amount of designs, and Ngāi Tahu carvers could supply those designs. And the quality would be assured and managed, and the price would be managed. But it didn't quite seem to happen. [#2 — Carver]

In contrast to this perspective, a TRONT manager, outlines that the purpose of the scheme is to give Ngāi Tahu carvers competitive advantage over competitors:

Ngāi Tahu Pounamu is not just about protecting pounamu through authentication, it is also about generating the highest prices for Ngāi Tahu carvers through differentiating authentic product from inauthentic product. It is about providing Ngāi Tahu carvers with a competitive advantage. The only way

to do this is to act collectively to protect this taonga. However, when I was in TRONT it was really difficult to get the carvers involved – they were distrustful.' [#9 – TRONT manager]

A more recent TRONT manager outlined the challenges in maintaining quality control among Ngāi Tahu carvers, and the need to send material back:

There can be really difficult situations where there are quality, tracing, or illegal on-selling of stone, issues that need addressing with carvers. I have to deal with some quite upsetting behaviours.' [#14 – TRONT manager]

Once again, these statements from staff within TRONT managers directly oppose the statements made by the disaffected group. This sentiment was echoed by another carver:

Te Rūnanga o Ngāi Tahu is a competitor of whānau Māori; it competes against, it uses resources that were originally from grievances held by whānau Māori and it uses resources to establish itself in prominence without whānau Māori; and it uses it resources to compete commercially and also exclude whānau Māori from markets and from opportunity, and, it will do that in partnership with the Crown. So, these are the new grievances being established. [#17 — Carver]

This scenario is reiterated by the following participants:

As carvers we were paying for Waewae to cut the eyes out of the stone, were they were getting material for free. Everybody else is got to compete with Waewae, who are paying for their stone at the same time they are paying for their material, so it doesn't work.... The playing field is not even. that goes back to the resource as well, where they were cutting it. Keeping the cream for them and trying to sell the butt end to the whanau carvers to cover the costs at their end. [#5 – Carver]

I'm against it. They should be supporting us and making resources available to grow... If you look at it from a material point of view, not a taonga; in any industry that you need a material to create something, do they have those kinds of restrictions put on them? [#4 – Carver]

And then when she was asked how she would feel if improvements were made:

It would sort of feel like we're on the same team, not fighting for our own voice; we are the same. I don't get it? We're all sort of playing on different teams when we're the same. [#4 – Carver]

Overall, it is clear that there is significant mistrust of the TRONT 'establishment' and its motives, with it being viewed as a competitor. This is in direct contrast to those from TRONT who see their role as providing a platform for carvers to operate from that places them in the most competitive position within the industry.

Another issue was that carvers felt that quality and artisanship were being restricted. One carver, expressing both the sense of competition with rūnanga and the drop in quality caused by competition, told us:

...you de-mana the material because of the souvenirs you are carving out of something that has so much mana. They keep the best stuff and sell the crap stuff to us fellas that would do it justice. I wish our market will allow us to spend the time on what we do and give us the opportunity to take thing to the next level and do some really amazing work because our audience will allow us to do it. But I find that it only allows us so much and then we have to ... the head side of us says that we need to real back. [#5 — Carver]

Because of pounamu's spiritual significance, substandard carvings have a negative impact on tribal mana. In the same vein another carver told us:

Instead of competing on quality, people are competing on price which is devaluing the material and dumbing the game down. To be competitive, you've got to be dumber than next block. You know, you've got care less. That's how it feels at times. [#1 – Carver]

The competition is leading carvers to focus on the commercial interests rather than kaitiakitanga responsibilities and it is causing negativity within the wider pounamu industry. The growing competition was something that TRONT is aware of, as the former NTP manager told us:

My warning around it though, is that if there's no co-ordination across whānau and across rūnanga and that sort of thing, around the harvesting, then you don't have a structured way of maximising a benefit from it. If you don't have some sort of overarching authority, like whatever existed historically, i.e. chiefs or so on, to provide some sort of regulatory structure in the way the economy operates, then you're not going to maximise the value of it. There needs to be some sort of co-ordination, otherwise the value will be a race to the bottom. In terms of the value of pounamu everyone will trade underneath each other. There's broader higher-level co-ordination... I think it's [the scheme] fallen into competition rather than synergy. Certainly I think it started off as being synergistic, i.e. you provide stone to whānau, you provide a protecting framework for them to incubate their businesses, you provide a source of marketing and tracing and an online system for marketing and sales and distributing. The whole structure was designed to support whānau scale incubation in business development, and then they pay back into the system in a synergistic way. But, I think what happened is, I don't think that support at the whānau scale continued, and I think it built the industry at the rūnanga scale losing sight of the reciprocity and the synergies it was supposed to form from my end at the whānau scale. [#9 – TRONT manager]

This statement suggests that Ngāi Tahu Pounamu might consider re-focussing its efforts onto the whānau scale and the Ngāi Tahu individual carver – particularly those that are disaffected.

Competition on price has a negative impact on kaitiakitanga and legitimacy which was something that several carvers noted:

"... I think that [with] the commercial returns it would be easier to sell low end items with the high volume of material, but the ones that took longer you have to sell for a higher premium. That puts it back into the taonga realm rather than the souvenir realm. What the balance is I don't know, I don't know where it sits.' [#5 – Carver]

Generally speaking, the division between the disaffected cohort and the papatipu rūnanga led enterprises will be likely difficult to resolve. This is because participation in the scheme would essentially validate TRONT and papatipu rūnanga as the owners and authority over pounamu resources in direct competition with those that consider themselves as the customary right holders. It is consequently unlikely the disaffected group would engage.

Solutions for pounamu industry offered by stakeholders

There are a number of potential solutions that may help build trust and overcome divisions between the Waewae Pounamu commercial interests and the disaffected cohort. While it seems unlikely that TRONT will be able to fully exercise or enforce their right to pounamu, there is still some room for them to act within. One carver suggests that one way for TRONT to rebuild trust is by re-establishing traditional institutions. As he told us:

We're not talking law, we're not talking management plans, we're not talking enforcement, and we're not talking power... We're talking about human relationships and actually the relinquishment of power. And the re-establishing of traditional institutions that have capacity to make laws, enforce them and manage them. [#17 – Carver]

As well as working directly on this, the papatipu rūnanga with commercial interests need to: a) build and develop relationships and trust; b) and utilise the authority it has to enhance knowledge and facilitate exchange. Firstly, while it would not make sense as a long-term business model, one way for TRONT to encourage disenfranchised carvers to join up to the scheme so that they can see the apparent benefits is by supplying the stone and purchasing finished works off the carvers, minus the cost of the stone and levy, before on-selling the finished product. This would not be an open programme where any carver could sell an endless amount of carvings to TRONT but rather would involve a select set of artisans with a proven track record and strong customer base. Even for some carvers in the scheme this might help them access the higher quality stone that they are unable to afford upfront. As one carver in the scheme told us when asked about quality of stone and his ability to acquire the best pieces:

If there's ten stones that are pretty good up there, then one person just comes and buys the whole lot... You're like what? So, the power of the bigger places with money cancels us out even though we are putting; well for me I put my lie on line for it. If you've got the dough you can do it but if you haven't; you've just got to watch it go. Without kind of sounding selfish; basically, my family have given time to this system with its ups and downs. It would be nice to have some more support with the product in that way; if you're one of the first on; not just having to get the dribs and drabs. [#15 — Carver]

While this would still certainly have some risk attached it would also have the knock-on effect of encouraging a better quality of carving as TRONT could select those who are displaying a high level of artistry. This would help maintain the kaitiaki responsibilities of ensuring that the stone is being worked to the highest standards. This connection to natural capital can be seen in the following carver's statement:

...for the sake of the whole industry and the pounamu, and the state of the game in general, we've got to somehow encourage people to be doing their best work. [#1 - Carver]

However, the main purpose of this initiative would be to begin to build the necessary trust that is lacking in the relationship between TRONT and the carvers, as one told us when asked what TRONT could do for him:

Just, and it's a little bit egotistical, but just to be recognised; just to be approached by Ngāi Tahu to say, "We recognise that you're working in this industry, it's of great significance and relevance to us," just basically a pat on the back to say, "We like what you're doing... I think the people who are doing good work with the materials should, yeah, just a pat on the back. It is an important thing, it's always been important. It's held up as really important and significant but where is Ngāi Tahu? [#1 – Carver]

While not totally in-line with traditional structures providing leading carvers with stone and offering a guaranteed purchase of the final product is not totally counter to them either. For example, while the dominant kainga monopolised carving and controlled trade some stone was worked in the more far-flung settlements and this programme mirrors this to a degree, with TRONT serving as the hub for trade beyond the iwi. Furthermore, there is a resonance with the

delayed repayment of much traditional exchange, this programme would tie the carvers to TRONT in a network of social obligations, or at least help overcome the distrust. One area in which this aligns well with traditional institutions is that it reasserts the importance of who carved a piece, connecting the mana of the carver with the mana of the piece. By doing this TRONT would also grow its own mana, increasing legitimacy.

Another recommendation is that TRONT could set up an exchange network that sits outside the mainstream industry and economy, one that enables carvers to exchange raw and worked stone with other whanui for other goods such as tītī. As the pounamu manager told us, one of the reasons many kaitiaki carvers did not enter the authentication scheme was that:

'... there was issues with them not wanting to lose their autonomy and the greyness of the current market; 'cause once you start using the authentication scheme you start getting money trails and you start having to use bank accounts all the money gets counted. It comes in and out of your bank account to their bank account and all that sort of thing. Tax systems start to come in. The whole complexity starts to grow and rather than being an informal economy, it starts to become a formal economy. I think that's why quite a few distrusted; they didn't want to become involved in it from that end.' [#9 – TRONT mananger]

While we are not suggesting facilitating a grey or black market, TRONT could help set up an exchange within the authentication scheme that was like the kai-hau-kai in the traditional era, where people were able to barter various items. This would ensure that the kaitiaki role was fulfilled by requiring all stone to be authentic whilst enabling carvers to operate outside the settler economy if they want. As one carver explained to us:

Trading is our thing. They've put a tax thing on everything. You know, you can't trade; it's the same as our food. We can't trade it anymore, you know. We traded tuna for mutton birds down in the Bluff, down in Stewart Island, for hundreds of years. And the English come and then there was no trading, that you gotta pay tax on it, you know? And it was the same with the pounamu. They stopped that trading's part of... that's how we were brought up, to trade; we're still trading today, I'm still trading tuna with titi down at Stewart Island. It's still doing that same thing the old people had done. But, with the pounamu, the trading, if you sell something now you're breaking the law because you've gotta pay tax on stuff; and it's

not right, it's our law, that's our law - not a Pākehā law, not a government's law. We were allowed to trade, that's how we got where we are today, is our trading. [#6 – Carver]

Another carver told us he also trades for other items:

I trade stone with my other cousins for tītī... I've traded for kite before. I've traded for other stones from overseas, because I love rocks. I've traded it for Christmas presents, birthday presents. You know, things I want to buy the grandkids, or whatever if someone might come in, or I'll meet somebody at a market, because sometimes I trade or sell at a market, and somebody's always got something, and markets a real good place to trade at. Yeah, there's a fair bit of that that goes on, actually, a fair bit of it. [#18 — Carver]

This traditional exchange could help encourage kaitiaki carvers into the authentication scheme as it would help build mana and trust and consequently would help frame TRONT as a legitimate authority. There are obviously still the same tax related issues, but for those carvers who are invited into the pre-purchase programme this exchange network would help further the sense that TRONT was moving beyond simply having a corporate focus, that they are intent on, as a carver told us 'culturalising commerce'. Another option could be that TRONT seeks some form of dispensation from the government regarding trade in cultural goods and services, enabling them to sit outside the market economy, though this requires a major change to the settler state institutional framework. For many of the carvers, interacting with the settler exchange economy is a necessity but one that they would rather avoid. As one told us:

Probably 85 percent is the financial side of it and maybe split up the other two. The only reason you do have that financial side of it is because you've got [realities]... which I don't really want to live under. I'd rather be in the helping out world. But with trade through the financial you're still having it. It's just a longer relationship; a more distant relationship but still kind of offering. [#15 — Carver]

Likewise, another carver in the scheme explained that:

I will sacrifice some of my income for this... [#16 – Carver]

An exchange that enabled carvers to work beyond the settler economy, one that helped them to connect with a wider network of different goods and services, would provide them with a way of subsisting and existing with less reliance on the market economy. It would help build whānaungatanga and increase mana, not just for TRONT but also amongst the wider whanui and it would help to reinstall utu as an institutional framework.

A third suggestion would be for NTP to change from having a basic and premium brand to one that fits better with the current context and traditional institutions. Specifically, have three tiers: 1. Authentic pounamu sourced by Ngāi Tahu and carved by a Ngāi Tahu carver; 2. Authentic pounamu sourced by miners and carved by anyone; 3. Foreign jade carved by a Ngāi Tahu carver. While ranked in relative order of pricing, the point here is not just about profit but also focuses on building mana and protecting the resource. For example, one carver told us:

... we used to sell our stone, and it was an income for myself and my whānau, through hui a iwi, hui a tau; and then suddenly one year we were cut off. The people weren't allowed to take their stone there and sell it, unless they were registered with the Ngāi Tahu authentication programme, and to me that was a real blow. That was a financial blow... we were cut off from feeding ourselves, we were cut off from our well-being. A legal entity cut us off; cut off our food... they say Ngāi Tahu Pounamu is authentic; what is authentic? I think it starts back with whakapapa and our traditions, and the people going out and gathering it. Now, a lot of the stone that's supplied, the majority of it, my understanding is it's supplied by gold miners, and in the early days they started up because they were running out of stone to work; and, I got approached to supply them some stone. So, yeah, I sold them some stones at an affordable price, and we were both happy, and I thought, 'Well, that'll keep them going'. Since then; yeah so, we've been cut off now. So, what is authentic? To me it's not authentic, they're buying from miners. It maybe our stone, it maybe be Ngāi Tahu stone, but what's authentic about it? They haven't got it from the people who have a right to gather it. [#18 — Carver]

The animosity directed at TRONT and NTP about what 'authentic' means and the fact that pounamu is sourced from miners engenders mistrust and by creating the first tier of the scheme suggested above this could be counteracted, whilst also increasing the profit margin of those kaitiaki who want to source the stone. As this carver goes on to say:

Buy Pounamu off us; I think we should have the first right to be able to sell, not the gold miners. I can see how buying off the gold miners can help alleviate the black-market trade, because the gold miners now can receive something, and they aren't going to sell it to an outside entity, which is good too, but I think that we should be allowed to buy too. I think there could be more discussion around how it could work for all of us. I think that the people at the coal face, the gatherers and the ones who are outside the corporate entity, really need to be listened to about how it works for them; and, some of the ideas that I've heard are pretty good... What could happen is the authentication system could change. We have it, but we don't have it as a numbering system on the stone, we [could] actually have it back to the person who found it, because they are the ones with the whakapapa... to me bro, the authentication system actually coming back to the finder, and not just numbering a stone, because the stone could come from anywhere, but it's those who have the whakapapa. Some people actually want to meet the person who's found the stone; they want to know their name, who has carved this, who found the stone. Once they hear that whakapapa's connected to it, the spiritual side of pounamu and the people; I mean, we could be doing a whole lot more to promote ourselves through pounamu. Man, it's a vehicle for Ngāi Tahu to raise its head. A whole lot more could be done; Ngāi Tahu mana could be raised. [#18 — Carver]

This carver is essentially proposing creating this top tier where the stone is sourced by those with the whakapapa and carved by those with mana, along with the second tier, which is essentially the scheme as it stands except split into basic and luxury. As he puts it, pounamu is 'a vehicle for Ngāi Tahu to raise its head'. This top tier could be heavily promoted, used as way of not only promoting the tribe and the stone but the carver as well. As noted, the mana of the carver was a critical component of the traditional cultural institution. That said, as he notes, the sourcing of stone from the miners serves a useful function of alleviating the black market, which is why the second tier needs to remain. That said, as another carver told us:

... a quantity of stone coming off those places is high, there's no incentive for the system to buy from the customary harvesters. [#17 – Carver]

Rather than having customary harvesters competing with the second tier, the prices offered would need to be higher as the miners have virtually no overheads as the pounamu is a by-product of their operation. However, as a carver was careful to point out, one of the issues is that they feel the authentication scheme collapses the numerous differences across 'Ngāi Tahu' into a singular 'brand'. As he explained:

The problem with getting caught up in authentication too much, is authority over who's is the story line. And, in the modern context that becomes a huge battle because there are individuals who hold political positioning because of their storyline... it's state policy to standardise and therefore deny diversity. And, so through a mono-cultural lens Te Rūnanga o Ngāi Tahu is demanding standardisation and whenever I hear the term 'consistency' and 'standard' I ask what standard and how is it measured, and who does the measuring? And, consistent for who, and who does that benefit? So, is it to deny us and our views as whānau, because we all have different views, we all hold different information... the mana of the whānau and the carver is being impinged upon inadvertently by the authentication system, because those who aren't in it are often considered not authentic. [#17 — Carver]

Taking this into account, the top tier 'brand' could offer the carver the chance to place themselves at the heart of the story, with NTP playing a background role in providing the technical verification of authenticity.

The third tier is obviously far outside the way the scheme stands currently. This tier is intended to protect pounamu whilst providing kaitiaki carvers with a cheaper stone that they can still imbue with their own mana. One carver, when talking about foreign jade, said:

... we carve our own stone here and when it comes to sustainability it's not gonna last forever. It has for the last thousand years, okay. Another thousand years it may be all gone. So, I'm a believer is that just carve the British Columbian jade. Let's import it. Just buy it down the road or wherever, carve that, label it Made in New Zealand or carved by this person and that person but state that it is British Columbian jade. [#3 – Carver]

This could be another way that TRONT increases take up to the authentication scheme, by adding a third tier of cheaper foreign jade and a related tag that indicates it has been carved by a kaitiaki carver – again reinforcing the importance of *who* carved the piece. This would help carvers to access a more economical stone that they would still be able to put a premium on because it comes

under TRONT's overarching scheme. In turn this would mean that TRONT could focus on turning genuine pounamu into a premium-only product, thus building mana and increasing profits while protecting the resource. As one carver outlined:

'At the end of the day we are all trying to find a balance between existing, which is surviving and doing the best work we can do that is affordable for our people... it's the right balance between commercial trinket and the taonga status...So to me it about taking any piece of pounamu and making a taonga. Because at the end of the day that is where the art form is going to survive, if you just think commercial and quick buck it's not going to happen.' [#5 — Carver]

Another carver, who had previously talked about the Aboriginal and Crown spheres, told us

There is a space for both spheres to support each other. That's really where the healing can happen... it's a long road because it involves healing. [#17 – Carver]

This neatly sums up how the new, tiered scheme can help with whānaungatanga, mana and legitimacy. By supporting those kaitiaki who are still harvesting through the exercise of their Aboriginal title, TRONT can rebuild the trust, whānaungatanga and mana across the industry. The third tier ensures that resource is also protected during this process.

A fourth solution TRONT could implement, one that combines mātauranga and exchange and fits with traditional institutional forms: the creation of 'kainga/wananga' which train carvers and manage trade. It is useful to provide an extensive quote from one carver:

'[TRONT need to] Develop spaces of creative learning from a Ngāi Tahu perspective... I always say that one of the best models that is sustainable that is out there is Te Puia... Once they set the bench marks really high the work gets really amazing. That when you get work that takes on that taonga status because there has been no worry about time and money because everybody is safe and sound. If Ngāi Tahu were to look at something like that in Christchurch or somewhere, with the right model and the right product it serves as two functions, Institutional of some sort with a Ngāi Tahu kaupapa and it becomes a visitor product. I think that if Ngāi Tahu looked at something like that there would be real benefit and there

might be commercial returns. They have to look at things like a pounamu school... I'm talking about taking your own hand picking them just like Te Puia and then just having the right person to drive them through. But if they get the balance right, they get the whānauenvironment right within a commercial context. Then they will create a product that people will want to come and see. It would become a product in its own right, for us here I have thought about combining other art forms but a lot of that is about location how do we get across the line to create enough income streams for everyone to be supported, because the more people you need the more cashflow your gonna have, it's all about survival and finding the right balance but if you can get your product to a point where it is not just a retail space or a studio that commissions and sells retail, it's got to come to a point where it becomes a visitor product where people are happy to come and with Māori its around kai and education, learning sharing the culture and whatever, whatever you got to do. [#5 — Carver]

As well as providing training and exchange, TRONT and NTP need to work on communicating with the carvers and kaitiaki, ensuring they understand the way the authentication scheme works, TRONT/NTP's role, as well as facilitating dialogue amongst the various carvers. There is a need for transparency as there are a number of problematic misconceptions. This has been an issue from the outset. As one carver in the scheme told us:

... my first impressions of when the scheme came along and it was explained to me by a few people... I mean, I was just confused, I'll be honest, this was all stuff I was trying to process at the time, and I still was learning all the outside stuff which surrounds it; so, yeah, it initially seemed to be quite exclusive, I suppose. That was my expression of it, and I just thought, 'okay, I'll enjoy this year carving, and then I might carve wood or something'. [#16 – Carver]

The lack of communication and sense of exclusion does not appear to have been ameliorated, with the same carver telling us, when asked if belonging to the scheme had been beneficial overall, that:

I would sort of have to say no, for various reasons. It's been extremely challenging, because I've felt like I'm an outsider. I feel sort of ignored, I suppose, like by the people who are running the scheme, a little hit. They've been nice enough to me, but I felt like there is a very strict hierarchy going on, and it's like, you do what we say or just don't bother; and, I feel like I've had to persevere, like I've really had to hang on and get through the tough times... something about it has been, again as I said, exclusive. There's been some

exclusivity, or just unwillingness to listen... [the major problem with the scheme is] it's lack of communication; I'll ask questions and things, and they just won't get answered. [#16 – Carver]

Likewise, another carver in the scheme told us:

I haven't really met them [NTP and other carvers] much... So, if there was something that can improve a bit more; once a year or whatever just everyone gets together; chew the fat; just try and help each other out... Just get together; help develop the system moving forward. I think everyone's got something whether you're of the tribe or not... it would be great to sort of tee up the relational side and communication and that side with us on the ground doing it and sort of marrying it together a bit more... a get together or having something at least for us in the system or whatever getting together for a week and just sharing a bit of knowledge. I look at someone else's and go, "How do you get that nice surface or that nice matt finish?" I'm sure I've got a different technique to a lot of other people too. We're not trying to steal off each other. It's just if you want to move forward; kind of combining all our skills that we have that we haven't been able to share... Having those new carvers meeting up with guys that have been doing it for a while just to help share some skills and because they've got their own ideas. [#15 — Carver]

This sentiment was expressed by another carver in the scheme, who also wanted NTP to facilitate communication amongst carvers:

I'd really like to see carvers, myself, other carvers being more included in the scheme, and it being more welcoming, and maybe to create a bit of a forum and a discussion about how we can help each other, just to discuss on an equal basis, where we're all at; who's sort of wanting to achieve what... I think if a forum is open where these things can be discussed on an even keel, and let's put these changes in place, because I think at the moment, yeah, it's just too exclusive... a safe way to discuss, and again I'll just speak for myself, like what my goals as a carver are, like what I aim to achieve, and I really want to see mana returned to the stone, and I know it has its own mana, but there's just all this other stuff that's hovering around it, that I really just don't think needs to be there. [#16 — Carver]

Increasing communication would help carvers to compare techniques, enabling the atomised nature of the pounamu industry to be addressed and trust and relationships built. Rebuilding this

requires papatipu rūnanga to take the lead. It also seems that they need to focus on legitimacy and enforcement of property rights as this is an important means to gain trust needed to expand the industry.

The need for better communication with carvers is recognised, as current NTP manager explained:

There is a need for a communications person to undertake this work given the limited personnel time available and the focus on just maintaining operations. [#14 - TRONT]

As outlined above, the scheme is profitable for carvers and TRONT's role is not to profit at the expense of the carvers, which needs to be effectively communicated. NTP needs to ensure that more than 'a handful' of carvers understand the benefits that come from belonging to the scheme. The benefits are not just increasing profits, though this is a major one, as one of the carvers in the scheme told us:

... the advantage of the traceable side of things is that people can contact you individually if they want to.

Or they'll ask for you by name from that so that's the advantage of that side of things. [#15 – Carver]

In other words, he experienced increased connections through belonging to the scheme. Furthermore, in his above statement you can see the increase of profits and the growing of mana working synergistically, with people contacting the carver because they know who he is. Another outcome of increasing trust and personal connections across the industry is expressed by the following carver, who is working in the scheme:

...if I'm carving a piece of stone, I feel like I'm not disrespecting my ancestors, my family, and the people I'm selling to, by being a part of the scheme, because I can prove not just with my own words, but with something that's outside of me, that will say, this is okay for you to have, and this is all done with respect. So, that to me, felt like the right thing to do, and I thought, 'okay, I will sacrifice some of my income for this,' because at the time, we were paying I think 7.5 percent or 12 percent, something like that, on the sale of every item, and assigning; you had to go through the process of assigning the codes and putting it in the computer. [#16-Carver]

While this might sound like the benefit being encouraged is increasing papatipu rūnanga returns, which participating in the scheme does do, there is something more important at the heart of this. Ultimately, the NTP scheme is a vehicle for channel the financial returns into increasing the trust, connections, and environmental outcomes of the tribe. As this carver went on to explain:

I want the scheme to succeed because... we have a lot of imported stuff that is not carved here and not carved by Māori people and it's taking, what I think, is money out of our pockets, and as you said, it's our resource, and it should sort of belong to all us, and it should be something that if a person, like a young person decides, like me; I'm creative, and that can be a blessing and a curse in this world, because it's a tough way to make a living, but if that person decides I want to make a living, I'd like that to be supported really. [#16 — Carver]

Another component of communication would be directed at the public, both ensuring that they understood the importance of the scheme and they knew who the carvers were. This would not only help bolster the financial returns as it would increase the perceived value of the pieces but also fits into the importance of the mana of the carver. As one carver in the scheme told us:

... at the start you used to be able to put up stuff next to your name [but now you cannot]... Even if I can't see the person; if they are at least able to follow it up and if they want to contact me they can. Hugely, especially with imported stuff around the place. It does my head in. I have to constantly explain to people about that. That's all the other work that we do. We're not just sitting there carving. I'm having to use my trap all the time to educate... I guess it's a bit of marketing really. Why would you have that other product. I mean you could have this and the reasoning behind it. It could be touched up of course; it's not there yet. But we've got time on our hands. [#15 — Carver]

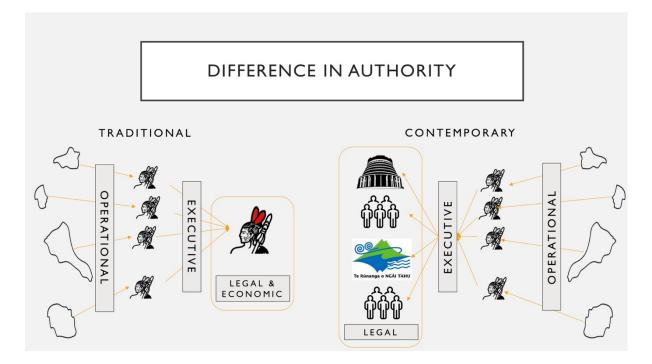
This carver wants to be more publicly identified and he wants the scheme to be more widely publicised.

Summary

Before providing final thoughts and a synthesis of the two case studies, each needs to be summarised, with a focus on the core issue rather than all the problems outlined in each case study.

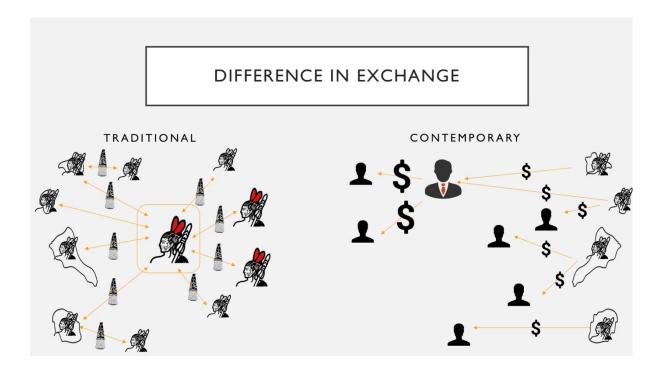
Tīti

The key finding in the tītī industry is that while traditionally the high chief had an 'executive authority' that enabled him to adjudicate on rights and regulate exchange, executive authority is now split between the Crown, TRONT and the two committees, as illustrated in the diagram below:



Critically, while these entities all have varying degrees of authority over rights, they do not regulate exchange. The birders compete in the open market and, consequently, there is no longer a centralised control over supply. Many birders commented on the problems competing with, and undercutting, each other and reducing already small margins. This is made even more problematic by the ever-rising costs of birding, particularly regarding transport and supplies, and with the seasonal variability that raises the financial risks of birding and threatens ahikā. Several middlemen with sufficient finance amass enough product to control supply, shipping large amounts of birds north and gaining the mark-up. The internet has opened up opportunities, but individuals struggle

to command premiums prices for top quality birds online as the necessary trust is hard to build and communicate. This is illustrated in the following diagram:



While the loss of exchange regulation is seen as the single most significant issue there are also a number of interrelated issues that emerge from the loss of executive authority.

- Firstly, a number of birders also indicated kaitiakitanga, particularly large-scale projects
 that bring all the birders and islands together, required executive oversight and
 coordination as currently the birders are too atomised. Also, the small margins have
 impacted kaitiakitanga, with birders noting some were less discerning about the size and
 quality of bird they will harvest.
- Second, the loss of a single executive authority with wide ranging powers has also seen a loss in communication, collaboration and knowledge transmission with birders expressing how this has impacted their whānaungatanga, tikanga and mātauranga.
- Third, it has reduced the influence of birders regarding the larger entities they need to deal
 with, and this is particularly problematic regarding kaitiakitanga as there are increasing
 environmental threats and the birders do not have a united from with which to confront
 these threats.

A fourth issue raised by birders was that both rights and committee positions are solely
determined by whakapapa and mana no longer plays a significant role. This means that
often individuals without the enough skill and knowledge to bird or lead are in roles for
which they are not suited.

While the return of a 'high chief' executive authority is not plausible there are alternative solutions. Several birders noted that some form of supplier cooperative would help regulate exchange by taking control of the supply side, reducing the length of supply chain, setting sustainable prices and managing sales and marketing. A cooperative could also provide a locus of quality control and trust for online vending, even out seasonal variations, ensure kaitiakitanga, facilitate communication, collaboration and knowledge transmission and provide lobbying potential. It would also provide an economies of scale that would reduce the costs of transport and supplies. Mana could be emphasised at the executive level, with any new cooperative functioning as a means of promoting meritocratic advancement.

A cooperative would not be a return of traditional executive authority, but it would be as close as the birders can get to it within the settler institutional framework. The exact composition and constitution of the cooperative would need to be designed with both traditional institutions and the contemporary context in mind, ensuring that the right balance between the two was achieved. Fortunately, there is a fair amount of latitude regarding traditional institutions as they have an inherent flexibility and nuance. Many birders expressed their distinct wish that TRONT did not try to assume this role, and the best outcome would be an entity that was composed of and run by the birders themselves. This could be either a supra-committee or a stand-alone entity, but either way it would need to be a hybrid of Māori and settler institutional structures.

While the structure and exercise of executive authority is problematic in the tītī industry, by contrast the structure and exercise of operational authority has been and remains fairly clear and coherent particularly for Beneficial rights holders. There are several likely reasons for this coherence. Much of it is probably due to the continuing ahikā that was enabled by the embedding of their right to bird in settler law. The undisturbed exercise of the right has enabled the continuity of birding culture and traditions that further facilitate the stability of operational authority. Even the remote and distinct nature of the right, difficult to access and often delineated by the ocean

itself, has helped reinforce operational authority. There are issues with operational authority, particularly the loss of mana as a regulator but this is a product of the right being embedded in settler law and wider forces of colonisation. However, in some respects this has helped maintain the stability of operational authority as well, with no question of who holds the right and how they gain it. The only area where the structure and exercise of operational authority is somewhat problematic is in the economic sphere. Their operational authority really only encompasses their time on the island, with some committee activity also falling into this level of authority. Once they are back on the mainland, they lose their operational authority and they must participate in the free market economy. Certainly, birders still utilise the barter networks, but they also need money and this requires them to enter the market and while they have some personal choice about where they sell their product, how much they charge and other factors the nature of the free market is that often these choices are limited and others with greater resources gain power. For example, most birders would prefer to get the mark up that the middlemen gain but do not have the capacity to achieve it.

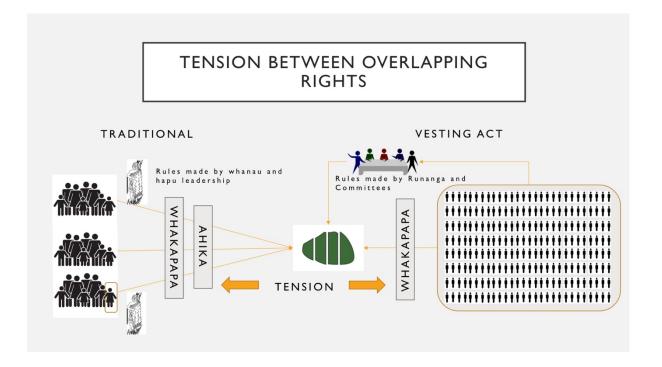
Pounamu

A key finding in the pounamu industry is that there is a significant division between those who believe that the contemporary executive authorities lack mana and legitimacy and those that see the vesting of the right as a return of mana. Critically, through a comprehensive process of engagement TRONT did devolve its authority to the kaitiaki rūnanga, more closely matching traditional power structures, yet for those who question the mana and legitimacy this is either not enough or has not been fully appreciated. Those who see a lack of mana and legitimacy also believe that the contemporary executive authorities are more interested in commercial outcomes than culture or kaitiakitanga while those on the other side see a complex balancing act that has to be commercially viable to deliver the other outcomes. This situation has further eroded trust, which was damaged by colonisation. Put simply, there is division with the pounamu tribal economy, with problems concerning trust and legitimacy.

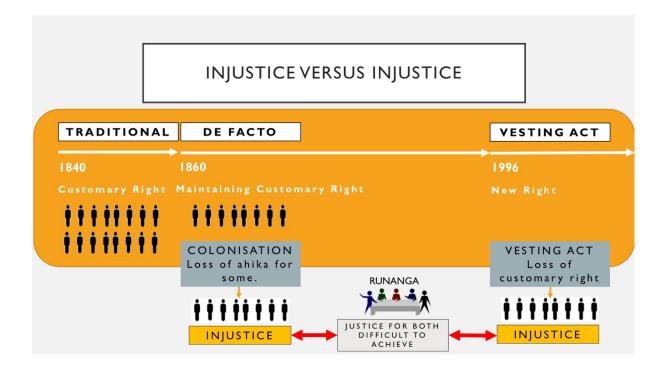
The perception by the disaffected cohort that the executive authority lacks legitimacy has been reinforced by the belief they have been unable to effectively exercise or enforce the right because of access issues to conservation land and reliance on the police, respectively. While the authority over rights was fluid traditionally, rights holders were able to exercise and enforce their rights with impunity. The inability of contemporary executive authorities to exercise and enforce their rights

has caused a loss of trust and legitimacy for some in the sector. For others, the vesting of the right in TRONT and the devolvement to kaitiaki rūnanga is seen as a restoration of mana, though the erosion of trust is apparent across the sector. The problems relating to enforcement manifested in both a black market of pounamu and an influx of foreign jade that many sector stakeholders took issue with.

Several carvers and kaitiaki believe the returned right is embedded in settler law and held by entities that are manifestations of settler law. Associated with this, several carvers and kaitiaki question whether they ever lost their right and consequently whether it was ever the Crown's to return to Ngāi Tahu, believing they had been treated unjustly. For others, the return of the right and the creation of entities that could exercise and enforce this right, even if only to a limited degree, was justice served. This tension can be seen in the below diagram:



There is an overriding issue of two competing injustices as a consequence of colonisation, as mapped in the following diagram:



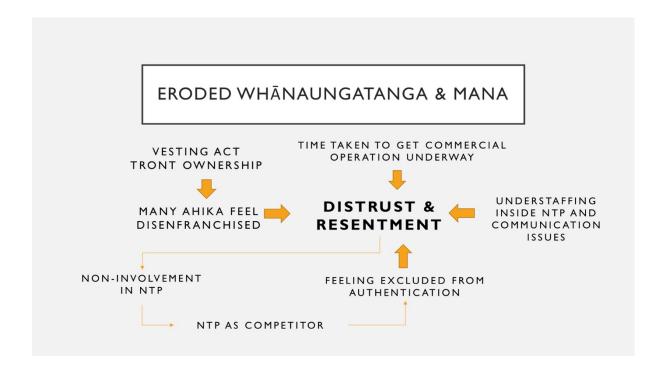
Another issue a number of sector stakeholders considered that the sector favoured commerce over culture, with perceptions that relatively low-quality carvings were being produced to feed the market. Former TRONT employees had a different perspective, considered that the NTP scheme was set up as a way of protecting pounamu, of encouraging commerce, culture and kaitiaki synergistically.

Because of issues with trust and legitimacy, as well as perceptions by some disaffected carvers that the scheme was expensive and unequitable, several carvers have chosen to operate outside the authentication scheme. A number referred to it as a 'tax'. Other participants however, considered the scheme was a means to increase the profit margins of carvers. Ultimately, however, many carvers view TRONT and the kaitiaki rūnanga as competition even though the scheme was set up with the purpose of giving competitive advantage to Ngāi Tahu carvers. The label 'authentic' was also seen as troubling by disaffected carvers and kaitiaki as it inferred the stone they harvested was not authentic while the stone harvested as a by-product of mining was authentic. However, the scheme was set up with the specific intention of protecting the authenticity of pounamu because of the black market and the foreign jade.

It is also believed that another reason many carvers work outside the scheme is that because there was nearly a century and a half without a strong and clear executive authority presiding over the

pounamu right a robust individualism has emerged in the sector. This analysis shows that while cultural match is important, it is not the only consideration and that the injustices and divisions of colonisation mean that trust must be rebuilt.

The issues that have led to the antagonism between carvers and TRONT, the kaitiaki rūnanga and the scheme can be seen in the diagram below:



Regarding solutions, TRONT and the kaitiaki rūnanga need to build trust so they can deliver commercial, cultural and kaitiaki outcomes to all sector stakeholders.

The disaffected cohort suggested several ways of doing this, including:

• Supply stone to carvers with mana with a guaranteed purchase of carvings as a way of proving the commercial viability of the authentication scheme. This would also help encourage a higher level of artisanship. This scheme would help create social obligations akin to those that bound the traditional Māori economy.

- Another means of whakawhānaungatanga and increasing mana suggested by carvers would
 be the creation of a traditional exchange network that enabled carvers to trade with one
 another and with other sectors of the Ngāi Tahu economy.
- Carvers also suggested that the authentication scheme needs to be adapted to fit current context and traditional institutions, with three tiers: 1. Authentic pounamu sourced by Ngāi Tahu and carved by a Ngāi Tahu carver; 2. Authentic pounamu sourced by miners and carved by anyone; 3. Foreign jade carved by a Ngāi Tahu carver.
- Another solution proposed by carvers that could help with building trust is the creation of a wananga that provided a space for both mātauranga and exchange.
- A number of stakeholders noted the ongoing issues with lack of communication or unclear communication meaning a critical element in building trust is for TRONT and the kaitiaki rūnanga to improve their communication with disaffected carvers, enhancing understanding through greater transparency. This solution is critical if TRONT and the kaitiaki rūnanga are to dispel the misperceptions that currently restrict the industry.
- Several carvers also suggested that TRONT and the kaitiaki rūnanga could facilitate communication between carvers, so they could help share knowledge and skills, a move that would assist in building trust.

The actual structure and exercise of executive authority is fairly coherent in the pounamu industry even if there are problems of perception and distrust regarding the executive authorities amongst many in the industry. At the operational level, the structure and exercise of authority is more problematic. Firstly, the locus of operational authority is diverse and lacks cohesion. TRONT, NTP and the kaitiaki rūnanga all have a degree of operational authority as they are involved in the managing, sourcing, carving, selling etc. of pounamu. The independent carvers have their own authority though there are some areas where this is impinged on by these other authorities, say in the ability to refer to their pounamu as 'authentic'. Secondly, exercising the right to harvest or otherwise access stone is not a clear process. A carver can either choose to harvest the stone themselves, though depending on where it is they may not be able to – if a rahui is in place – or they will need permission – from the land owner if on private land – and they are also restricted in the ways in which they can harvest – only able to take what they can carry. Otherwise, they can buy stone from a variety of sources: through the scheme, on TradeMe or via other networks. If they buy from outside the scheme, they may not be able to verify if the stone is pounamu or jade.

While carvers also must compete in the free market, they do have a slightly clearer means by which they can exert some authority, or influence at least, over the market. Choosing to operate within the scheme provides them with a means of verifying the authenticity of the stone and, therefore, charge a premium.

Conclusion

Critically, it seems that while there are several various issues with both industries which run the gamut from cultural to political to legal to economic, it seems that most of the more vexing problems emerge from the political sphere, which is to be expected as it is the institutional level that has control over the others. Crucially, it is also the sphere that has the most leeway in the settler state as both the legal and economic are relatively determined, while Māori organisations are still able to structure and exercise authority with a degree of freedom. For this reason, the focus here will be on political authority, though there is the expectation that solutions to issues of authority will have cascading benefits for other institutional spheres. As outlined above, the creation of an executive authority for tītī would have cascading impacts on: cultural aspects, regarding organising forums for knowledge sharing and coordinating information gathering; legal aspects, such as

Through the analysis of the two industries, both interesting contrasts *and* similarities regarding authority became apparent. Both industries have issues regarding their executive authority. For the tītī industry it is the lack of single coherent executive that is able to regulate exchange and represent collective birder' interests. For the pounamu industry it is the perceived lack of trust of the executive authority that has been partly responsible for a lack of cohesion and trust across the industry. However, these issues are also different in their nature; while tītī executive authority could be described as challenging in its structure, pounamu executive authority is considered coherent in structure, even if there are problems of perception and distrust. At the operational level there is an even greater contrast. The authority of the birding right holder has a relatively coherent structure and can be exercised in a coherent manner. By contrast operational authority is more challenging in the pounamu industry, with a confusing structure and issues regarding its exercise. These differences are critical, helping to provide insight into the different issues and guidance for the potential solutions in each industry. The table mapping these out can be seen below:

Authority	Industry	Political	Legal	Economic
Executive	Tītī	Challenging	Challenging	Challenging
	Pounamu	Coherent	Coherent	Coherent
Operational	Tītī	Coherent	Coherent	Challenging
	Pounamu	Challenging	Challenging	Coherent

While there are several generalisations made here and there is a wide degree of variation within and across the industries mapping the challenging or coherent structure and exercise of executive and operational authority across both industries and the political, legal and economic institutional spheres is useful. Though 'authority' is political it refers to the capacity to influence the legal and economic spheres as well so if there is issues with authority at a certain level it is likely to spill down the institutional framework, though this is not a hard and fast rule as these institutional spheres are not hermetic – for example in these cases the political, legal and economic spheres are all nested within settler state institutions.

The tītī industry has a greater coherence at the operational level and authority is more challenging at the executive level, while the pounamu industry is the opposite, with greater coherence at the executive and more challenging authority at the operational level. This variance helps to explain the difference solutions offered for each industry. The tītī industry needs the relative coherent operational authorities to band together to provide coherence at the executive level, particularly with regard economic challenges. Conversely, the pounamu industry requires the relatively coherent executive authority to try to bring the same coherence to the operational level through efforts to build whānaungatanga and mana. Thus, the types of solutions to several different hapū and iwi development will depend on which level there is the most coherence and which level has the most challenges.

Executive challenges will require the development of an *appropriate form of governance* that is able to either overcome or bypass these challenges in a culturally matched yet contextually calibrated manner. This section will focus on the structural nature of governance at the executive level.

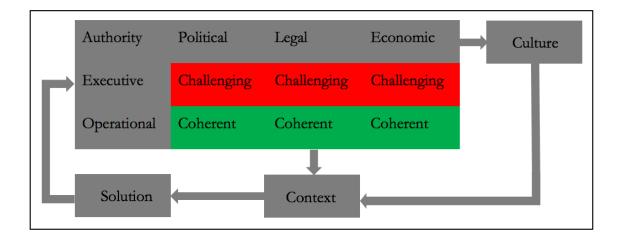
Traditionally, Māori governance was structured around a rangatira with both hereditary and personal mana who ruled a hapū; however, the structure of executive authority was relatively fluid and flexible – particularly around the constitution of groups and the rigidity of hierarchy. This means that there are a number of different options, from the union of different hapū into an iwi when there was a threat to the division of a single hapū into two to take advantage of different opportunities when resources were scarce, from the top-down, more hierarchical 'war-footing' structure for dire situations that require quick and decisive leadership and decision making through to the flatter, collective-oriented decision making of peace time (Ballara 1998; Webster 1997). The way Māori executive structure of authority adapted to changing circumstances provides both the scope for a wide number of culturally matched solutions and it helps reinforce the need to contextualise them to the specific situation.

The modern era has also seen Māori adopt several different governance structures, including the corporate-beneficiary, trust and incorporation models. However, these models have a western orientation need to be adapted to better fit traditional Māori institutions (Dell 2018; Reid and Rout 2016b). Harmsworth (2010, 101) outlines how these "mainstream governance models are commonly modified by Māori businesses and intertwined with cultural elements and responsibilities" but notes that this "adds to the complexity of many Māori businesses and specific cultural drivers can contribute to their organisational success or failure". The most significant change to the standard model of governance made by Māori organisations is the expansion of accountability from purely economic to a wider social/environmental (Harmsworth 2010). Structurally, according to Harmsworth (2010, 101) the most common Māori governance model for businesses and enterprises "is typically driven from the shareholders and beneficiaries downwards". However, while this is an adaption to the standard model it is only slight; it still forces most Māori into passive shareholder rather than active participant role in their own development (Reid and Rout 2016b). Scrimgeour and Iremonger (2004, 11,17) explain how "the continued regulation of Maori governance has lead [sic] to an array of organisations, with differing power, and administration cultures. The quantity of organisations and the differing lines of hierarchy has lead [sic] to miscommunication, uncertainty of leadership, squabbles in decision making and planning, and general break down of traditional social norms and social and cultural capital" before concluding Māori organisations need "stronger management and governance". A wider issue is that in the past thirty years New Zealand has adopted a neoliberal ideology that essentially devalues public governance structures in favour of private responsibility and market solutions (McCormack 2011). While this might suggest less regulation for Māori, it has not

eventuated. Rather, Māori organisations are caught between the continued regulation of their governance structures and the privatisation of key rights, such as fishing, that underpin their mana and economics. One structural issue that needs particular attention is the status of hapū as they have been largely subsumed by iwi. The "result of these new structures is political tension and instability between the iwi centers and their hapū periphery, as hapū seek to regain their customary political autonomy and the decentralization of assets to support economic activity at local scales" (Reid and Rout 2016b, 96). In their discussion Overall, Tapsell and Woods (2010), in reference to the traditional rangatira-potiki dynamic (examined in full below), discuss a governance structure that has a cultural match but also fits into the current context. Referring to an extant organisation, they (Overall, Tapsell and Woods 2010, 157) note its "dual governing bodies fulfils separate but complementary roles... Nga Ture fulfils the more traditional fiscal and legal advisory (accountability) role, and could be espoused as the "Law" role; whereas, Nga Rangatira fulfils the culturally relevant guiding and stabilising role, assisting Nga Potiki not to lose sight of the entities' indigenous identity. It can also be viewed as a legitimizing role and can be espoused as 'Lore". The Nga Ture and Nga Rangatira roles are "complementary monitoring and mentoring", providing the necessary freedom and control for the Nga Potiki (Overall, Tapsel and Woods 2010, 157). This structure "encompasses its governing requirements into culturally appropriate models and processes" (Overall, Tapsel and Woods 2010, 157). Harmsworth (2006, 9) proposes several potential structures and while their focus is "the development of effective enterprise governance to lift performance and accountability, and to improve professionalism and objectivity in strategic planning and decision-making" they do also propose the division into social service, commercial and taumata.

There are a number of governance structures, both traditional Māori and adapted western, that could be used depending on the specific context. While here the 'supplier cooperative' model was proposed because it would ensure their operational independence was not compromised and the birders suggested it, there are other forms that could be more appropriate in different situations. The key is to assess both the specific context of the situation and the cultural institutions to determine a specific solution for the structure of executive governance, as can be seen in the diagram below:

Framework for challenging authority at the executive level



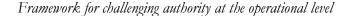
The model outlines how the cultural institutions are the starting point of the solution, they are then channelled through the specific context of the situation, including the level at which there is an issue as well as the wider situation, and these two inputs are then used to design a solution that is then applied to the specific level of authority necessary. In the birder example the operational level suppliers wish to retain the relative autonomy they have with the benefits of having some form of collective executive authority, with the supplier collective providing a suitable solution that has resonance with traditional institutions.

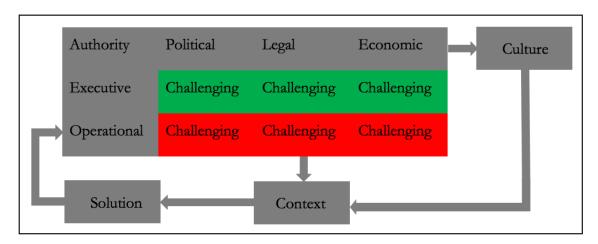
Operational challenges demand appropriate methods of leadership, while this is not the only solution it is critical and. This section will examine the exercise of authority from the executive to the operational level. Traditional Māori rangatiratanga (leadership) was "predicated on maintaining sanctions, risk-management, administering resources, generous hosting of guests, protecting tribal estates and serving the kin group" (Tapsell and Wood 2008, 197). It was relatively conservative in nature, focused on the status quo. This form of leadership has been described as 'transactional' as it was generally interested in the day-to-day routine transactions among people including how they communicate and the interplay of values and needs as this ensured ongoing stability and certainty of outcomes (Katene 2010). As Tapsell and Wood (2008, 197) go on to note, "Like all things Maori, rangatiratanga too has a complimentary but different counterpoint, which is best described as potikitanga - the quest by aspiring younger individuals to be recognised by wider kin for outstanding achievement". This embodies a more 'transformational' approach, where the leader led by example, demanded the group go beyond their normal routine, and ventured into riskier territory. This form of leadership involves role modelling; inspirational motivation; being visionary; individualised consideration; and intellectual stimulation (Katene 2010). While the transformational approach offers insights into how leadership can motivate change when the

situation is dire or requires innovative strategies, the transactional approach fits better with the operational challenges outlined in the pounamu industry, probably because it is not a crisis. The main suggestion here was for efforts directed at building trust, which can also be understood as the need to balance profit with the value of collective belonging through increase legitimacy of leadership, with an emphasis on communication.

Based on the traditional institutions of leadership, Mead (2006) has outlined pumanawa (talents) for contemporary leadership: 1. Manage, mediate and settle disputes to uphold the unity of the group. 2. Ensure every member of the group is provided base needs and ensures their growth. 3. Bravery and courage to uphold the rights of hapū and the iwi. 4. Leading the community forward, improving its economic base and its mana. 5. Need for a wider vision and a more general education than is required for everyday matters. 6. Value manaakitanga. 7. Lead and successfully complete big projects. 8. Know the traditions and culture of their people, and the wider community. There are obvious resonances with the outlined solution here too, and these eight pumanawa also provide a good guide for other possible methods of leadership for overcoming operational level issues. It is probably best to think of them as interconnected, particularly with number eight underpinning and shaping the others. They are largely transactional in their focus, however; they only cover a conservative approach to leading. This suggests there may need to be a focus on the rangatiratanga/potikitanga dynamic, that modern forms of leadership may need to balance both conservative and risky actions, depending on context, as a means of achieving a cultural match. Generally speaking, the form of leadership adopted needs to be driven by the specific context. As Overall, Tapsell and Woods (2010) outline, examined above, instituting this dynamic may require changes to governance structures, providing space for both a stabilising rangatira and a disruptive potiki role in an organisation. However, depending on the size and structure of the organisation this may not be necessary, rather the current leader may simply seek to adopt more risky, disruptive or innovative strategies or methods. Furthermore, the values and needs aspects of the conservative rangatira/transactional approach do not need to be abandoned – risk, disruption and innovation may involve utilising core Māori values. There are several other leadership styles identified in the general literature and the inherent flexibility of the Māori institutions means they can be utilised. Alongside transactional and transformational forms of leadership, there are several others commonly listed: democratic, where the group takes part in decision-making; autocratic, which is extremely hierarchical and the leader makes the decisions; bureaucratic, where leadership is guided by rules and regulations; laissez-faire, which sees group members given freedom to innovate; and situational, which requires the leader to change styles depending on the context. While not all have a direct relationship to traditional Māori forms of leadership there are several similarities with many. For example, the peace time leadership style would have had elements of both democratic and laissez-faire while in more threatened times leadership would be more autocratic. This fluidity means it was situational, that the style changed to suit the context. Māori leadership was always charismatic, with personal mana very much a product of an individual's charisma as well as their actions. Likewise, it was always bureaucratic in that it was defined and informed by tikanga at all times.

For the pounamu sector, however, the more conservative focus on building trust is appropriate as the industry does not require risk, disruption and innovation but rather coherence. Again, just as with the executive level challenges, the key is for the context to guide the application of culturally matched solutions, as outlined in the diagram below:





Final Thoughts

Economically speaking, Māori stand at a critical crossroads. Through the Treaty of Waitangi settlements many iwi now have considerable financial capital and assets. However, Māori corporations and businesses still operate in the settler economy, one that was set up to favour the settlers and remains shaped by Western ontological and epistemological assumptions. There are

several interconnected threats to the continued operation in the settler economy: gradual 'leakage' of this capital back into the wider settler economy; and the potentially self-aggrandising nature of corporate-beneficiary model.

This report has examined how these threats can be avoided or at least ameliorated by proposing alternative models for hapū and iwi economic development. Generally, the path to successful development is considered to require both a cultural match with traditional Māori institutions and contextual calibration to ensure they function well in the contemporary climate. While this report examined a range of problems across the cultural, political, legal and economic institutional spheres it homed in on problems at the political level because they are being the most important to address, because they influence the other spheres, and the most addressable.

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