EXPLORING THE CYBER-ROHE

MĀORI IDENTITY AND THE INTERNET

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This thesis investigates the internet as a site of identity construction and poses the question *Does the internet contribute to Māori identity offline?* at its core. Previous research in this area concentrated on Māori language use online or was otherwise focused. A comprehensive exploration of Māori cyberspace and its use is missing to this day. This thesis hence has two objectives; firstly to develop a broad but in-depth understanding of the Māori webspace and secondly to investigate Māori internet users’ experiences. Engagement with theoretical and conceptual secondary literature provides the necessary background information to contextualize the empirical part of this thesis which consists of a mixed-methods approach: hyperlink network analysis, investigation of sample-sites regarding their content and language use, online questionnaires directed at Māori website providers and semi-structured interviews with regular users of Māori internet sites.

The research concludes that the internet can indeed be considered a relevant site of identity negotiation and assertion of Māori as an ethnic group. It was found that a wide range of content pertinent to Māoridom was made available, the Māori language was utilized and the internet’s structure was increasingly indigenized. However, on the level of the individual the internet’s potential as a site of identity construction is more ambivalent and is strongly linked to each person’s life circumstances. The research showed that while an increasing number of Māori gain access to the internet, content concerned with Māori cultural knowledge is limited in depth. Māori with a strong identity and with ready access to knowledgeable individuals view face-to-face interaction as paramount when learning about Māoridom. Those with a strong identity as Māori but who cannot easily approach
knowledgeable people face-to-face due to their circumstances perceived access to information online to be paramount. Both groups then see the internet similarly unsuitable in furthering their Māori identity but their reasons differ; the first because they value traditional practices and the latter because their level of knowledge exceeds the basic information available online. The internet, this research concludes, is hence most apt to function as a starting point for individuals discovering or asserting their identity as Māori.
The above pepeha (personal proverb) situates me within the world. This is a very common way to introduce oneself within Māori society by explicitly stating where one belongs and from whom one descends. My mountain, my river and my iwi (tribe; I am referring here to my home province) are all located in different regions of Austria. They all represent the many places I have lived in and the many places that shaped my life. But my pepeha also locates me within New Zealand and Malaysia. It is these connections that influenced my path to New Zealand and to this thesis.

This PhD has been long in the making and the following pages very much represent the journey I have been on and the baskets of knowledge (kete mātauranga) that have been filled. The following pages cover a broad spectrum of issues and information. However, it is important to provide background information on Māori identity, Aotearoa/New Zealand’s history as well as the contemporary context. It is hoped that this then allows for this thesis to function as a well-based in-depth exploration of Māori cyberspace as a site of identity negotiation, construction and maintenance.
The old saying that it takes a whole village to bring up a child seems to be true for a thesis as well. My thesis-village had its center at the University of Auckland but it spread the whole globe. Many supporting hands and minds contributed to the development and completion of this thesis, all in their own special way.

Without the generous financial support of the University of Auckland by means of the International Doctoral Scholarship I would not have been able to even begin. I am very appreciative of my supervisors Steve Matthewman and Lane West-Newman. They allowed me the freedom to do what I needed to do. They not only supported me with their academic advice and experience but more so with their openness and understanding. They gently pushed when my work did not progress and eased off when pressures became too much. Thank you for believing in me and for letting me know that what I was doing was not half bad.

Other staff-members within the department have been influential in the completion of this research as well of whom I would like to acknowledge Tracey McIntosh and Bruce Curtis especially. The support of the departmental administrators has also been very valuable to me. The academic assistance within the department, faculty and university were highly treasured. So were the generous office space, the constant flow of coffee, the occasional lunches and cakes and the collegiality created through opportunities to meet fellow PhD students. All were equally important to my sanity and progress. My te reo classes at Unitec and the study evenings with my friend Christine were influential to my appreciation and understanding of the Māori world. Thank you to all the staff and students there, too.
My thesis-village also included some new friends whom I will dearly miss when I finally put down my roots elsewhere again. The many colleagues and various office mates on the 9th floor hung in there with me. Good on you, mate! Special mentions are due to Janet for being my gym-buddy and an open ear throughout and to the members of Red Ants on the Ground; the Germans ‘rocked’ the same boat as me. Thanks for the weekends of distraction and our Frauenabende. Tim, thanks for being a friend to Zed. Along with Helen and Charles, who so generously took us into their family, you guys made being away from home slightly easier.

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To my beloved husband, I am most grateful that you kept supporting me all this time, for your willingness to cook more than Erbsenreis and instant noodles, for your commitment to my writing and most of all your patience and love. I am very much looking forward to our next adventure in life together.

The biggest ‘Thank you’ of course goes out to my participants without whom this research could not have been possible in this form. Vielen herzlichen Dank!
Ngā Whakamihi

Arā tērā kōrero o mai rā anō e kī rā, mā te opeope a te katoa i te tamaiti, e tū rangatira ai ia i te ao, ā, hāngai pū ana tērā kōrero ki tēnei tuhinga roa āku. Nā, ko taku pā tuhinga roa, tīmata ati i te manawa tonu o Te Whare Wānanga o Tāmaki Makaurau, huri noa i te ao whānui. Ka mutu, nā ngā āwhina nui a te katoa i tinana ai tēnei tuhinga roa.

Ā, me kore ake rā te *International Doctoral Scholarship* a Te Whare Wānanga o Tāmaki Makaurau, kua kore he tīmatahanga mōku. Kāti, anei rā te mihi ki aku kaiwhakahaere, a Steve Matthewman rāua ko Lane West-Newman. I tukuna au e te tokoru nei kia rere. Ka noho ko ō rāua mātauranga, ko ō rāua wheako hai hoa haere mōku, waihoki, nā tō rāua ngākau tuwhera mai me tō rāua whai mahara anō hoki i puta ai te ihu o tēnei. Tēnā rawa atu kōrua i kaha whakapono nei ahakoa he aha, ka ekea tonutia e au ngā taumatia.

Arā noa atu ētahi o te tari me tino mihi e au, arā, ko Tracey McIntosh rāua ko Bruce Curtis ērā. Pērā anō ngā kaiwhakahaere o te tari, kei te mihi kei te mihi. Ā, kāore tonu i tua atu i ngā akoranga mātauranga me te kaha tautoko a te tari, a te manga me te whare wānanga anō hoki. Te wāteatea o tōku ake tari, te rere noa o te kawhe, te hora o te kai, te tūtaki, te nohonoho tonu i waenga i ngā tauira e whai nei i te tohu Kairangi. Nā koutou rā i mauri tau ai te noho a tēnei, tae noa ki te mutunga. Me te mōhio anō hoki, nā aku mahi ako reo tonu i Unitec me ngā akoranga reo i te taha o taku hoa o Christine i ngā maruahiahi, i pūrangiaho ake ai Te Ao Māori nei. Koutou rā ngā pouako, koutou hoki ngā ākonga, ka nui te mihi.
He hoa hou anō hoki ōku i taku pā tuhinga roa, ā, mokemoke ana rā tōku ao kia wehe atu nei au ki wāhi kē noho ai. Heoi, ki aku hoa mahi me aku hoa o te tari o te papa tuaiwa i piripono nei ki ahau. Kei runga noa atu koutou, e hoa mā! Me āta whakanui anō hoki e au taku hoa haere whare pītakataka, taku hoa taringa areare a Janet, me ngā mema o te *Red Ants on the Ground*; i te waka kotahi mātou ko ngā Tiamana e hoe tahi ana. Anei rā te mihi ki a koutou i whakapūreroi rā i a a, ā, ko mihi anō hoki ki tō tātou Frauenabende. Ki a koe Tim, tēnā rā koe i whakahoahaoa nei ki a Zed. Tae noa hoki ki a Helen rāua ko Charles i whakatanga whenua rā i a māua, arā, i mauri tau ai rā tā mātou noho i wā kāinga kē noa atu.

Ā, me tino mihi anō hoki ōku whānau. Kia ora koutou ngā 'Malaysians', te roa hoki o te korehanga o *ucu*. Ki ngā 'Austrians', tē taea te pēhi te kōingo mō koutou katoa me te whakatipuranga tamariki kāore nei au i whai wāhi atu. Aku mihi nui anō hoki ki tōku tuakana ki a Bine, te poutokomanawa o tōku whānau i matea nuitia rā e au. Ki a Liese rātou ko Martin ko Tobias hoki, aku hoa whakanui i ngā huritau me ngā Kirihimete. Me tōku whaea tonu, ko ia hoki te mea whakamōhio mai e pēhea ana te ora me ngā mahi a tēnā, a tēnā. Mei kore koutou! Ā, heoi anō a Dr. Dipl. Ing. Flo i tutuki wawe rā āna nei mahi i mua noa atu i āku. Tū whakahīhī ana ahau i a koe.

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<td>3LD</td>
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<td>AMIO</td>
<td>Aotearoa Māori Internet Organisation</td>
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<td>Defense Advanced Research Projects Agency</td>
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<td>Domain Name Commissioner</td>
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<td>DNS</td>
<td>Domain Name System or Space</td>
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<td>Department of Conservation</td>
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<td>gTLD</td>
<td>Generic Top-level Domain</td>
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<td>GVU</td>
<td>Graphic, Visualization and Usability Center</td>
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<td>ICANN</td>
<td>Internet Corporation for Assigned Names and Numbers</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
</tr>
<tr>
<td>IDN</td>
<td>Internationalized Domain Names</td>
</tr>
<tr>
<td>IL</td>
<td>Incoming Hyperlink</td>
</tr>
<tr>
<td>IP</td>
<td>Intellectual Property</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>ISOCNZ</td>
<td>Internet Society NZ</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet Service Provider</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>LIP</td>
<td>Language Interface Pack</td>
</tr>
<tr>
<td>LME</td>
<td>Learning Media (<a href="http://www.learningmedia.co.nz">www.learningmedia.co.nz</a>)</td>
</tr>
<tr>
<td>MAS</td>
<td>Massey University (<a href="http://maori.massey.ac.nz">http://maori.massey.ac.nz</a>)</td>
</tr>
<tr>
<td>MAT</td>
<td>Te Matatini (<a href="http://www.tematatini.org.nz">www.tematatini.org.nz</a>)</td>
</tr>
<tr>
<td>MHN</td>
<td>Māori Hyperlink Network</td>
</tr>
<tr>
<td>MLC</td>
<td>Māori Land Court</td>
</tr>
<tr>
<td>MMU</td>
<td>Māori Music (<a href="http://www.maorimusic.com">www.maorimusic.com</a>)</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education (<a href="http://www.minedu.govt.nz">www.minedu.govt.nz</a>)</td>
</tr>
<tr>
<td>MOrg</td>
<td><a href="http://www.maori.org.nz">www.maori.org.nz</a></td>
</tr>
<tr>
<td>MOZ</td>
<td>Māori in OZ (<a href="http://www.maori-in-oz.com">www.maori-in-oz.com</a>)</td>
</tr>
<tr>
<td>MP3</td>
<td>MPEG Audio Layer 3; MPEG stands for Motion Pictures Expert Group</td>
</tr>
<tr>
<td>MTR</td>
<td>Mā te Reo (<a href="http://www.ma-tereo.co.nz">www.ma-tereo.co.nz</a>)</td>
</tr>
<tr>
<td>MTS</td>
<td>Māori Television Service</td>
</tr>
<tr>
<td>MUD</td>
<td>Multi User Domains</td>
</tr>
<tr>
<td>NM</td>
<td>Navigation Menu</td>
</tr>
<tr>
<td>NSF</td>
<td>National Science Foundation</td>
</tr>
<tr>
<td>NSFNET</td>
<td>National Science Foundation Network</td>
</tr>
<tr>
<td>NSN</td>
<td>Native Sovereign Nations</td>
</tr>
<tr>
<td>NZCER</td>
<td>New Zealand Council for Educational Research</td>
</tr>
<tr>
<td>NZMIS</td>
<td>New Zealand Māori Internet Society also known as Te Whānau Ipurangi (<a href="http://www.nzmis.org.nz">www.nzmis.org.nz</a>)</td>
</tr>
<tr>
<td>NZoA</td>
<td>New Zealand on Air</td>
</tr>
<tr>
<td>NZRS</td>
<td>NZ Registry Services</td>
</tr>
<tr>
<td>OL</td>
<td>Outgoing Hyperlink</td>
</tr>
<tr>
<td>PDF</td>
<td>Portable Document File</td>
</tr>
<tr>
<td>PIS</td>
<td>Participant Information Sheet</td>
</tr>
<tr>
<td>PUK</td>
<td>Pūkana (<a href="http://www.pukana.co.nz">www.pukana.co.nz</a>)</td>
</tr>
<tr>
<td>RNZ</td>
<td>Radio New Zealand</td>
</tr>
<tr>
<td>SNA</td>
<td>Social Network Analysis</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned Enterprise</td>
</tr>
<tr>
<td>TAI</td>
<td>Tai Tokerau Tourism (<a href="http://www.taitokerau.co.nz">www.taitokerau.co.nz</a>)</td>
</tr>
<tr>
<td>TLA</td>
<td>Transaction log analysis</td>
</tr>
<tr>
<td>TLD</td>
<td>Top-level domain</td>
</tr>
<tr>
<td>TMP</td>
<td>Te Māngai Pāho</td>
</tr>
<tr>
<td>ToWT</td>
<td>Treaty of Waitangi Tribunal (<a href="http://www.waitangi-tribunal.govt.nz">www.waitangi-tribunal.govt.nz</a>)</td>
</tr>
<tr>
<td>TPK</td>
<td>Te Puni Kōkiri; Ministry of Māori Development (<a href="http://www.tpk.govt.nz">www.tpk.govt.nz</a>)</td>
</tr>
<tr>
<td>TRoNT</td>
<td>Te Rūnanga o Ngāi Tahu (<a href="http://www.ngaitahu.iwi.nz">www.ngaitahu.iwi.nz</a>)</td>
</tr>
<tr>
<td>TRW</td>
<td>Te Rōpū Whakahau (<a href="http://www.trw.org.nz">www.trw.org.nz</a>)</td>
</tr>
<tr>
<td>TVNZ</td>
<td>Television New Zealand</td>
</tr>
<tr>
<td>URL</td>
<td>Uniform Resource Locator; web-address</td>
</tr>
<tr>
<td>WIF</td>
<td>Web Impact Factor</td>
</tr>
<tr>
<td>WiFi</td>
<td>Wireless Fidelity; short-range wireless interconnectivity standard</td>
</tr>
<tr>
<td>WIPNZ</td>
<td>World Internet Project New Zealand</td>
</tr>
<tr>
<td>WWK</td>
<td>Kaikoura Whale Watch (<a href="http://www.whalewatch.co.nz">www.whalewatch.co.nz</a>)</td>
</tr>
<tr>
<td>WWW</td>
<td>World Wide Web</td>
</tr>
<tr>
<td>Māori Word</td>
<td>English Definition</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Āhua</td>
<td>Appearance, character</td>
</tr>
<tr>
<td>Aotearoa</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Aroha</td>
<td>Compassion, love and sympathy</td>
</tr>
<tr>
<td>Haere</td>
<td>To go</td>
</tr>
<tr>
<td>Haka</td>
<td>Posture dance</td>
</tr>
<tr>
<td>Haka peruperu</td>
<td>Haka performed with weapons</td>
</tr>
<tr>
<td>Haka taparahi</td>
<td>Haka performed without weapons</td>
</tr>
<tr>
<td>Hākari</td>
<td>Feast</td>
</tr>
<tr>
<td>Hāngi</td>
<td>Earth oven</td>
</tr>
<tr>
<td>Hapū</td>
<td>Sub-tribe</td>
</tr>
<tr>
<td>Hongi</td>
<td>Smell; pressing of noses</td>
</tr>
<tr>
<td>Hui</td>
<td>Gathering; sometimes also used to refer to meetings or conferences</td>
</tr>
<tr>
<td>Huia</td>
<td>Extinct bird</td>
</tr>
<tr>
<td>Irirangi</td>
<td>Spirit voice</td>
</tr>
<tr>
<td>Iwi</td>
<td>Tribe</td>
</tr>
<tr>
<td>Ka kite anō</td>
<td>See you again</td>
</tr>
<tr>
<td>Kaikaranga</td>
<td>Female caller</td>
</tr>
<tr>
<td>Kaikōrero</td>
<td>Speaker, orator</td>
</tr>
<tr>
<td>Kaitiaki</td>
<td>Guardianship (often in reference to land), guardian</td>
</tr>
<tr>
<td>Kanohi-ki-te-kanohi</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Kapa Haka</td>
<td>Line/posture dance</td>
</tr>
<tr>
<td>Karakia</td>
<td>Prayer, incantation</td>
</tr>
<tr>
<td>Karanga</td>
<td>Call (of welcome)</td>
</tr>
<tr>
<td>Kaumātua</td>
<td>Elders (plural); singular: kaumatua</td>
</tr>
<tr>
<td>Kaupapa Māori</td>
<td>Māori understanding, practices and principles</td>
</tr>
<tr>
<td>Kawa</td>
<td>Cultural protocols</td>
</tr>
<tr>
<td>Kawaihiko</td>
<td>Electronic net; name of New Zealand’s first computer network</td>
</tr>
<tr>
<td>Kāwanatanga</td>
<td>Government</td>
</tr>
<tr>
<td>Kete Mātauranga</td>
<td>Knowledge basket</td>
</tr>
<tr>
<td>Kia ora</td>
<td>Hello</td>
</tr>
<tr>
<td>Koe</td>
<td>You</td>
</tr>
<tr>
<td>Koha</td>
<td>Gift, contribution</td>
</tr>
<tr>
<td>Kōhanga Reo</td>
<td>Language Nest – Māori immersion pre-school</td>
</tr>
<tr>
<td>Kōrero</td>
<td>Talk, speech</td>
</tr>
<tr>
<td>Kōrero Mai</td>
<td>Drama series aimed at learners of te reo; means talk to me</td>
</tr>
<tr>
<td>Korowai</td>
<td>Cloak</td>
</tr>
<tr>
<td>Kuia</td>
<td>Female elder</td>
</tr>
<tr>
<td>Kura Kaupapa Māori</td>
<td>Māori immersion primary school (based on Māori practices and principles)</td>
</tr>
<tr>
<td><strong>Kūwaha</strong></td>
<td>Door, gateway</td>
</tr>
<tr>
<td><strong>Mana</strong></td>
<td>Authority, prestige, standing, power</td>
</tr>
<tr>
<td><strong>Manaaki</strong></td>
<td>Hospitality and respect towards visitors</td>
</tr>
<tr>
<td><strong>Manuhiri</strong></td>
<td>Visitors</td>
</tr>
<tr>
<td><strong>Māori</strong></td>
<td>Indigenous population of Aotearoa/New Zealand</td>
</tr>
<tr>
<td><strong>Māoritanga</strong></td>
<td>Māori culture</td>
</tr>
<tr>
<td><strong>Marae</strong></td>
<td>Kin-based meeting grounds</td>
</tr>
<tr>
<td><strong>Marae ātea</strong></td>
<td>Courtyard in front of a Māori meeting house</td>
</tr>
<tr>
<td><strong>Mataku</strong></td>
<td>Inspiring fear</td>
</tr>
<tr>
<td><strong>Mātauranga (Māori)</strong></td>
<td>(Māori) knowledge</td>
</tr>
<tr>
<td><strong>Mātou</strong></td>
<td>Us (exclusive; us, but not them)</td>
</tr>
<tr>
<td><strong>Mihi, mihimihi</strong></td>
<td>Greeting</td>
</tr>
<tr>
<td><strong>Mōhio</strong></td>
<td>Know, clever, intelligent</td>
</tr>
<tr>
<td><strong>Mōhiotanga</strong></td>
<td>Information, knowledge</td>
</tr>
<tr>
<td><strong>Moko</strong></td>
<td>Traditional Māori tattoo</td>
</tr>
<tr>
<td><strong>Mōteatea</strong></td>
<td>Traditional chant</td>
</tr>
<tr>
<td><strong>Ngā</strong></td>
<td>Specific article, <em>the</em> (plural)</td>
</tr>
<tr>
<td><strong>Ngā Whakahou Ture</strong></td>
<td>Legislative Reforms</td>
</tr>
<tr>
<td><strong>Ngaro</strong></td>
<td>Lost, forgotten</td>
</tr>
<tr>
<td><strong>Niupepa</strong></td>
<td>Newspaper; also the name of the digital Māori newspaper archive</td>
</tr>
<tr>
<td><strong>No reira</strong></td>
<td>Consequently; commonly used to ring in the closing of a speech</td>
</tr>
<tr>
<td><strong>Noa</strong></td>
<td>Ordinary, absent of limitations, opposite of <em>tapu</em></td>
</tr>
<tr>
<td><strong>Pākehā</strong></td>
<td>Widely used for European New Zealander</td>
</tr>
<tr>
<td><strong>Pānui</strong></td>
<td>News, newsletter</td>
</tr>
<tr>
<td><strong>Paua</strong></td>
<td>Shellfish, abalone</td>
</tr>
<tr>
<td><strong>Pepeha</strong></td>
<td>Personal proverb; identifies the speaker within her/his genealogical, geographical and historic setting</td>
</tr>
<tr>
<td><strong>Piupiu</strong></td>
<td>Waist skirt</td>
</tr>
<tr>
<td><strong>Poi</strong></td>
<td>Ball on a string commonly used during waiata-a-ringa</td>
</tr>
<tr>
<td><strong>Poroporo</strong></td>
<td>Edible green</td>
</tr>
<tr>
<td><strong>Puha</strong></td>
<td>Edible green</td>
</tr>
<tr>
<td><strong>Pūkana</strong></td>
<td>Contortion of the eyes common during haka; children’s TV-show</td>
</tr>
<tr>
<td><strong>Rangatahi</strong></td>
<td>Youth</td>
</tr>
<tr>
<td><strong>Rohe</strong></td>
<td>Territory, region, boundary; associated with <em>mana</em></td>
</tr>
<tr>
<td><strong>Rōpū</strong></td>
<td>Group</td>
</tr>
<tr>
<td><strong>Rūnanga</strong></td>
<td>Council, authority; often related to iwi</td>
</tr>
<tr>
<td><strong>Taha Māori</strong></td>
<td>Māori side</td>
</tr>
<tr>
<td><strong>Taina</strong></td>
<td>Younger same sex-sibling; now also applied to other relationships</td>
</tr>
<tr>
<td><strong>Tamariki</strong></td>
<td>Child/children</td>
</tr>
<tr>
<td><strong>Tāngata whenua</strong></td>
<td>People of the land; locals; often used to emphasize the indigenous status of Māori</td>
</tr>
<tr>
<td><strong>Tangihanga</strong></td>
<td>Funeral wakes; often abbreviated as <em>tangi</em></td>
</tr>
<tr>
<td><strong>Taonga</strong></td>
<td>Treasure</td>
</tr>
<tr>
<td><strong>Tapu</strong></td>
<td>Sacred, divine, under restrictions; opposite of <em>noa</em></td>
</tr>
<tr>
<td><strong>Tātai</strong></td>
<td>Genealogical recital</td>
</tr>
<tr>
<td><strong>Tātou</strong></td>
<td>Us (inclusive)</td>
</tr>
<tr>
<td><strong>Tauparapara</strong></td>
<td>Incantation</td>
</tr>
<tr>
<td><strong>Taura here iwi</strong></td>
<td>Semi-formal group of one iwi in the territory of another</td>
</tr>
<tr>
<td><strong>Te</strong></td>
<td>Specific article, <em>the</em> (singular)</td>
</tr>
<tr>
<td><strong>Te ao Māori</strong></td>
<td>The Māori world</td>
</tr>
<tr>
<td><strong>Te Ataarangi</strong></td>
<td>Community Māori language courses for adults</td>
</tr>
<tr>
<td><strong>Te Karere</strong></td>
<td>TVNZ Māori news; means the messenger</td>
</tr>
<tr>
<td>English</td>
<td>Māori</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Te Matatini</td>
<td>Performing Arts Festival</td>
</tr>
<tr>
<td>Te Ohu Kai Moana</td>
<td>The Treaty of Waitangi Fisheries Commission</td>
</tr>
<tr>
<td>Te Puni Kōkiri</td>
<td>Ministry of Māori Development</td>
</tr>
<tr>
<td>Te reo Māori/ rangatira</td>
<td>The Māori/chiefly language</td>
</tr>
<tr>
<td>Te Taura Whiri i te Reo Māori</td>
<td>The Māori Language Commission</td>
</tr>
<tr>
<td>Te Wahapā</td>
<td>Estuary; Māori language bulletin-board</td>
</tr>
<tr>
<td>Te Wai Pounamu</td>
<td>South Island</td>
</tr>
<tr>
<td>Tikanga (Māori)</td>
<td>(Māori) custom</td>
</tr>
<tr>
<td>Tipuna</td>
<td>Ancestors, grandparents (pl.); sing.: tipuna</td>
</tr>
<tr>
<td>Tohunga</td>
<td>Experts of traditional knowledge with high status</td>
</tr>
<tr>
<td>Tuakana</td>
<td>Older same sex-sibling; now also applied to other relationships</td>
</tr>
<tr>
<td>Tui(a)</td>
<td>to sew, tuia is the passive form</td>
</tr>
<tr>
<td>Tukutuku</td>
<td>Traditional woven wall panels</td>
</tr>
<tr>
<td>Tukutuku ao whānui</td>
<td>World Wide Web</td>
</tr>
<tr>
<td>Tūrangawaewae</td>
<td>Place to stand</td>
</tr>
<tr>
<td>Urupā</td>
<td>Cemetery</td>
</tr>
<tr>
<td>Waatea</td>
<td>Radio New Zealand National Māori news bulletin</td>
</tr>
<tr>
<td>Wāhi tapu</td>
<td>Sacred place</td>
</tr>
<tr>
<td>Waiata</td>
<td>Song</td>
</tr>
<tr>
<td>Waiata kori</td>
<td>Action song</td>
</tr>
<tr>
<td>Waiata-a-ringa</td>
<td>Action songs</td>
</tr>
<tr>
<td>Wairua</td>
<td>Spirit</td>
</tr>
<tr>
<td>Waka</td>
<td>Canoe</td>
</tr>
<tr>
<td>Waka Huia</td>
<td>Name of a archival television show; means treasure box</td>
</tr>
<tr>
<td>Wānanga</td>
<td>School/house of learning; widely used to refer to tertiary education providers</td>
</tr>
<tr>
<td>Whaikōrero</td>
<td>Oratory, formal speeches</td>
</tr>
<tr>
<td>Whakairo</td>
<td>carving</td>
</tr>
<tr>
<td>Whakapapa</td>
<td>Ancestry, genealogy</td>
</tr>
<tr>
<td>Whakatauki</td>
<td>Proverb</td>
</tr>
<tr>
<td>Whānau</td>
<td>Extended family</td>
</tr>
<tr>
<td>Whanaungatanga</td>
<td>Lived relationship and care between whānau members</td>
</tr>
<tr>
<td>Whare</td>
<td>House</td>
</tr>
<tr>
<td>Whare nui</td>
<td>Meeting house</td>
</tr>
<tr>
<td>Whare wānanga</td>
<td>University</td>
</tr>
<tr>
<td>Whenua</td>
<td>Land</td>
</tr>
</tbody>
</table>
The journey of this thesis began in June 2000 with the visit of Erich Kolig from Otago University to the University of Vienna. There he presented a lecture and seminar course on *Indigenous Cultural Revivalism in Australia and New Zealand*. For a presentation at the end of the seminar course I decided to take a closer look at Māori internet sites to see if what I had heard about during the lecture was represented online as well. Indeed, things were happening in cyberspace. Websites which had been up and running for some time provided diverse information: on the Māori language (te reo Māori); on cultural practices like carving and weaving; on cultural protocols (kawa). They offered insight in the organization of Māori society, explaining about iwi, hapū and whānau (tribe, sub-tribe, and extended family) whilst also addressing historic as well as contemporary struggles with the Crown and attempts to address these issues on legal, cultural and social levels.

My intention to investigate this matter in more detail in my Magistra-thesis led me to visit Aotearoa/New Zealand for the first time in 2001. I realized then that the online world represents but one side of the coin and the experiences of users with the online material are just as central as well as the wider socio-political context offline. The topic was put on hold since the scope of a Magistra-thesis does not allow for such an extensive research project. Instead I returned back to Austria to write my thesis on something completely different. But *aufgeschoben ist nicht aufgehoben* (It is only a

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1 Angela Ballara (1998), Toon van Meijl (1995) and Steven Webster (1998) all express concerns in translating hapū as sub-tribe, due to the central and independent position of hapū in Māori society. However, as Māori society is not static, the present socio-political situation and current popular practice justify the use of this translation. Ballara (1998, p. 17) further notes that “modern tribes [...] sometimes come to assume such a structure.”
pleasure deferred), as we like to say in German, I was able to return to this topic in my Doctoral-thesis.

Māori, like many other indigenous peoples, are continuing to face a *Struggle Without End* as Ranginui Walker’s (2004) prominent book title reminds us. A struggle that permeates all areas of life: health, education and many other socio-economic aspects (Ministry of Social Development, 2008); political representation – recently highlighted yet again by the government’s stern stand against Māori seats on the planned Auckland ‘Super City’ council (Tahana, 2009a); and when it comes to ‘old’ and new forms of media (Bell et al., 2008; Jo Smith & Abel, 2008). But like many other indigenous peoples Māori take on these struggles and fight for survival. Robyn Kamira (2001, p. 8) writes:

> The Maori strive for cultural survival – in the face of physical threat, we fight; in the face of colonisation, we redefine, reclaim; in the face of information technology, we position ourselves so that we and everyone else can know we are distinct. ²

In a later article Kamira (2003) reflects on political, social and cultural changes in the face of technological developments that Māori faced through increasing contact with Pākehā (non-Māori, Europeans). These contemplations lead Kamira to be cautiously optimistic that information technology can be useful in Māoridom’s effort towards socio-economic development and ‘cultural survival’. Unlike Māori struggles, the internet has a relatively short history (Moschovitis, Poole, Schuyler, & Senft, 1999). In its beginnings it was seen by many as a technology with great potential for empowerment and self-representation of marginalized groups. Early utopians saw cyberspace as “a world where anyone, anywhere may express his or her beliefs” (J. P. Barlow, 1996, n.p.). The internet had its ups and downs. Michael Latzer (2009, p. 600) poignantly notes: “the internet changed three times within a decade, from boom

² The authors use Macrons (ā, ē, ī, ō and ū) and Tīkanga Māori (Maori Cultural Orthography) throughout this thesis to indicate stressed vowels in Māori words. Māori words may appear in several variations in this text within quotes because of inconsistencies in publications. For details on the history of the orthography of the Māori language see Ray Harlow (2007). Further, Te Taura Whiri i te Reo Māori (n.d.), the Māori Language Commission, provides a detailed overview on *Māori Orthographic Conventions*.  

2 Macrons (ā, ē, ī, ō and ū) are used throughout this thesis to indicate stressed vowels in Māori words. Māori words may appear in several variations in this text within quotes because of inconsistencies in publications. For details on the history of the orthography of the Māori language see Ray Harlow (2007). Further, Te Taura Whiri i te Reo Māori (n.d.), the Māori Language Commission, provides a detailed overview on *Māori Orthographic Conventions*.  

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to gloom and halfway back to cautious optimism.” The rise of the internet in New Zealand took place at a time when the government and Māoridom struggled regarding broadcasting, particularly on the subject of the establishment of a Māori television channel to have Māori voices and stories heard from a Māori perspective and in their own language.

Māori individuals and organizations were quick to adopt this technology. According to a statement by Ross Himona on his homepage http://maaori.com, this particular website is the first Māori site and has been in existence since 1995. Only two years later in 1997 Māori for the first time attempted, however unsuccessfully at that time, to adapt cyberspace to their needs by trying to instigate a Māori-specific second-level domain name. Like Kamira (2001; 2003), others acknowledged the possibilities this technology potentially held for Māori culture, language and society and highlighted inherent risks. Russell Brown (1996a) in a Māori magazine called Mana wrote about the advantages the World Wide Web (WWW), e-mail and discussion lists can present for the very different purposes Māori communities, businesses and individuals might have. Brown, however, only very briefly addresses negative outcomes. This matter is addressed in detail by authors such as Alasdair Smith and Robert Sullivan (1996), Te Taka Keegan (2000), Ruth Lemon (2001), Sarah Peters (2001), Sally Pewhairangi (2002) and Sandra Falconer (2003). All of these writings highlight the tension between the potential of the technology and the risks of losing oneself as Māori on the net.

The list of Māori specific internet research is, to this day, undersized. Smith and Sullivan’s (1996) article is partly empirically informed, however it is mostly unstructured in its approach. The authors list and briefly describe existing Māori websites thus providing a snapshot of Māori cyberspace at the time. The most extensive research was so far undertaken by Keegan and his colleagues on te reo Māori used within websites in 1998 and 2001, indicating a high utilization of this

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3 Last accessed on 14.07.2010

4 Robyn Kamira and Sarah Peters both have started research work in this area, but appear not to have completed their degrees (PhD and Masters respectively) to this day.
indigenous language on the web (Keegan & Cunningham, 2003; Keegan, Cunningham, & Benton, 2004). Keegan (2007) further undertook a dissertation on language use in bilingual digital libraries investigating whether the default language influences users’ language choice during their stay. Transaction Log analyses showed that ‘first impressions’ do matter, even on the net. Konrad Peszynski for a Bachelor Honors-thesis interviewed Māori online-shoppers on the matter of trust and established that some Māori cultural understandings and practices are influential in online shopping behavior (Peszynski, 2001; Peszynski & Thanasankit, 2002). Zlatko Kovacic (2001) approached Māori websites using Multidimensional Scaling for the purpose of establishing a basic understanding of Māori cyberspace by locating the sites in relation to specific dimensions and to each other.

Previous research addressing the subject of ‘Māori and the internet’ has been very specific and focused. This thesis therefore has two main objectives:

1. to develop a broad yet thorough understanding of Māori cyberspace and
2. to learn about Māori users’ experiences and expectations.

To achieve these objectives, the socio-political context of Māori cyberspace is considered and a multi-methodological approach is taken. It is of primary concern to establish who provides information and which internet sites are acknowledged by other sites by means of hyperlink reference and are thus more visible on the WWW. One aspect of the research is on how Māori identity is portrayed and what information is provided on ‘Māori websites’. It is also of interest whether any aspect(s) are given greater prominence. Language is an important aspect of ethnic identity. The Māori language was in danger of being lost as an everyday language. However this was averted due to the commitment of many individuals, families, tribes and other organizations. Whether this indigenous language is used on the

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5 Throughout this thesis websites with information on Māori culture, society, history as well as content of general interest to Māori or aimed at a Māori audience are referred to as Māori internet or websites. The focus of this research is indeed on the WWW and the websites it holds, however the terms internet and cyberspace are used interchangeably disregarding that they in fact are very different concepts. This practice is quite common, even within academia and, accompanied with this declaration, therefore seen as justifiable.
internet is therefore another aspect the research investigates. This thesis takes the analysis of Māori cyberspace beyond the point of merely engaging with the representation of Māoridom online. It also considers the perspective of website hosts and Māori internet users.  

The fundamental research question of this thesis is: Does the internet contribute to Māori identity offline? In order to answer this, this thesis begins by providing background information on the Māori mediascape. A historic overview is taken of print, radio and television whilst looking at the struggles Māoridom faced and the milestones achieved along the path for their voices to be heard and their stories to be told in ‘mainstream’ media. The internet began to be more widespread in New Zealand during the mid 1990s and was certainly viewed as a useful technological development Māori could turn to to achieve their interests. However at the same time a cautious approach was taken and risks, particularly regarding culture and control, came to be debated. A review of conceptually based literature along with previous research in this area provides the background and inspiration for this doctorate. This is hence an important aspect of Chapter One.

Chapter Two takes a slightly unusual approach to the matter of identity. Theoretical considerations usually precede empirical exemplifications. However, this thesis reverses this practice. It is in great part based on works of Māori writers and aims to provide well informed contemporary understandings of Māori identities. It illustrates the complexities of an indigenous peoples in a ‘post-colonial’ society facing great pressures due to political and social circumstances. Globalization, migration (both within New Zealand as well as on an international scale) and intermarriage (tribal and between Māori and non-Māori) have great impacts on the life of many Māori, either directly or indirectly through relatives and friends, and on how Māori identity is perceived. Māori identity is not homogenous or stringently ‘traditional’, but rather it incorporates a range of tribal interconnections, rural – urban differences and socio-

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6 Providers of Māori websites range from individuals to interest groups and societies, businesses, government agencies and other organizations. Throughout this thesis these will be referred to as either providers or hosts.
economic realities. In addition, traditional social and cultural practices and different levels of knowledge exist thus creating a wide range of Māori identities. This is followed by an engagement with theoretical approaches to the matter of identity. Why are we who we are, as individuals and as social groups? A review of writings concerned with ethnic identity on both these levels is helpful in answering this question. Social constructionist, symbolic interactionist along with post/late-modern contemplations interlink with considerations regarding the role of media, or more precisely of the internet, as a location of identity construction. Whereas post-modern thinking prevailed in early research on identity and the internet, more recent approaches aim to relocate the use of this technology embedded in everyday life and the surfers’ offline identity.

When writing on the internet the matter of the digital divide – in its basic form understood as the gap between those who have access to information technologies and those who do not – continues to be of relevance, particularly in this country where such stark socio-economic differences between Māori and Pākehā prevail (Ministry of Social Development, 2008). Chapter Three investigates New Zealand’s internet connectivity and establishes whether the digital divide indeed is a reality in Aotearoa before exploring the country’s cyberspace in the form of its domain name space. Māori were influential in creating the first real indigenous webspace by insisting on the creation of a Māori specific second-level domain name – .maori.nz – as part of New Zealand’s domain name system in addition to the very restrictive .iwi.nz. This development was given some attention in local newspapers and technology magazines at the time, however, more substantial writings on New Zealand’s internet hardly take note of this event; one such case is Keith Newman’s (2008) Connecting the Clouds: The Internet in New Zealand. With more than 700 pages Newman allocated but one brief paragraph on the implementation of .iwi.nz and makes mention of .maori.nz’s launch in a Time Line only. An in-depth
engagement with these matters therefore was crucial to gain a better understanding of Māori’s involvement in shaping New Zealand’s webspace.7

Chapter Four aims to methodologically situate both the research and the researcher. The practice of Pākehā researching Māori is viewed critically by many (L. T. Smith, 1998). The ability of non-Māori to have the relevant (cultural) knowledge necessary to contribute meaningfully to a better understanding of issues of substance and interest to Māori society is questioned. Pākehā research in many cases has been a very one-sided engagement often leaving only the researcher with substantial gains – be it regarding knowledge, status or even economic value. These concerns are addressed at the beginning of Chapter Four and my competencies and limitations as a cross-cultural researcher are reflected upon. My restricted knowledge of Māori cultural and social practices is indeed one of the greatest limiting factors; however, I am confident that the four-pronged methodological approach chosen for this research allows a contribution to new, broad and useful knowledge concerning Māori cyberspace. These four methodological steps are a hyperlink network analysis undertaken to demarcate the ‘virtual research field’; content- and language use analyses of 22 sample-sites; a short online questionnaire directed to the hosts of Māori websites; and semi-structured in-depth interviews with Māori individuals who are regular users of such sites. Chapter Four provides information on each method along with practical considerations specific to this thesis.

Most previous research on (indigenous) webspaces selected their research objects non-randomly. Utilizing the method of network analysis in a hyperlinked environment not only allows one to see how internet sites are interconnected, but the results can further be utilized for the selection of whole populations or a sample. The hyperlink network analysis established a network of 215 Māori sites concerned with a broad range of topics – referred to as the Māori Hyperlink Network (MHN)

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7 The neologism cyber-rohe used in the title of this thesis is a signifier for this. The term rohe means territory or boundary and is closely associated with concepts of power, control – with mana. This compound was created for the title of a presentation addressing these developments at the University of Auckland (Muhamad-Brandner, 2007) and aims to stress the influence Māori exerted within Aotearoa’s cyberspace.
throughout this thesis. This network is not merely concerned with internet sites present on the web, but more crucially with those which are also recognized by others. The MHN is constituted by websites which received at least two hyperlinks from other sites within the network. Network analytical measures including the network’s density, the member’s in-out-degree and two centrality measures provide a wealth of information. In addition to these, a basic content analysis of all internet sites that are part of the MHN was undertaken, focusing on the language use within the index-pages, contact possibilities and the location of the provider of the site. All these findings (with the exception of the contact possibilities) were used for the selection of the sample drawn upon in subsequent research steps.

Chapter Five discusses results relating to the MHN along with findings of the online questionnaire. This survey was directed at the providers of MHN-sites since they have great influence over what is actually available online. The questionnaire established why and when an online presence was launched, monthly user statistics and the plans for future developments regarding the use of te reo Māori for their site. The issue of intellectual/cultural property and cultural appropriateness of information and the concerns of hosts were given consideration as well as the advantages and possible disadvantages they see for Māori internet users. Chapter Five however only includes general information provided by the hosts regarding their websites, as more specific aspects relating to the internet and te reo Māori are discussed in other relevant chapters.

The sample-sites were downloaded and analyzed in detail regarding language use, structure and content. Chapter Six investigates the sample-sites’ content. It is of great interest whether Māori identity as discussed in Chapter Two finds representation online. Are all aspects mentioned by secondary literature on Māori identity embodied within these websites? What might this tell us about Māori identity? Are pictures and multimedia (e.g. short videos or music) incorporated or are the sites mostly plain text? The (self-)representation of Māoridom within these visual texts is analyzed as well. As websites usually grow in size and increasing content is added to the structure over time, ease of navigation or support services regarding information
retrieval like search functions and sitemaps can be useful. The structures of the sample-sites were therefore traced along with any available navigational support.

An overview of the language use on the index-site showed that few sites welcome their visitors in Māori. These findings are in contradiction with Keegan and his colleagues’ (2003; 2004) work briefly introduced above. This led to the inclusion of a more thorough analysis of the language use within the sample-sites. Word- and word form frequency counts contributed to a greater understanding of the actual use of te reo Māori. The results from this analysis are presented in Chapter Seven. This chapter further includes findings relating to te reo Māori gained through other methods of analysis like the online survey and interviews.

Lastly, but certainly not less importantly, semi-structured interviews were undertaken with five Māori individuals who were regular users of the internet and of Māori websites. Chapter Eight investigates their views, perceptions and experiences. What are they looking for on the WWW? Is it basic information, entertainment, community and iwi access or something else besides? Are they satisfied with the available content? Do they have any concerns similar to those of the academics discussed before? These matters are preceded by talks about what they personally see as important aspects of Māori identity and their personal background.

A combined discussion and conclusion chapter draws all of the strands together and returns to the overall question of the research and its findings. Reflections on the research’s contribution to a greater understanding of Māori cyberspace are balanced by those on its limitations. For example, by focusing on websites only, the research inevitably ignores other aspects of the internet. These include forums, newsgroups, guestbooks, e-mail communication and social network applications like Facebook and Bebo. This thesis therefore ends with some thoughts on further research in these areas.
Chapter One – Te Wāhanga Tuatahi

Āhua Rangahau: Research Background

This chapter begins to investigate the wider context of this research, Aotearoa/New Zealand’s mediascape. A historic approach is taken in the exploration of early Māori literacy and the wide spread of Māori newspapers. After their demise, Māori interests and perspectives were for a long time excluded from mainstream media. Hence, various advocates within Māoridom began to work towards the acknowledgement, consideration and self-determination of Māori media interests. Socio-political power relations are intrinsically interlinked with these developments and are therefore explored.

This historic approach is extended to existing literature concerned with Māori use of the internet during the 1990s, allowing an insight into the views academics, most of whom are Māori, had at the time regarding advantages and disadvantages of this particular innovation. The chapter closes with a review of previous research on indigenous peoples’ utilization of cyberspace followed by studies more specifically interested in investigating te ao Māori (the Māori world) online. This provides an overview of existing research in the general area of this thesis upon which it builds and aims to extend in order to contribute to a broad, well based and empirically supported understanding of Māori cyberspace.
Historic development of Māori media

Most histories of Aotearoa/New Zealand begin with the times of increased contact with Europeans (Pākehā) during the early years of the nineteenth century. This is unapologetically the case here as well. The impact of this contact on Māori society certainly has been great and it is central to many aspects of this thesis. The recounting of historic events here will focus on developments regarding communication and media.8

Māori have a long tradition of adapting to and changing with their surroundings. When they first arrived in Aotearoa from East Polynesia they were greeted by an environment they were unaccustomed to. The climate was different, so were the vegetation and food supplies. Lifestyles and technology were modified to suit the requirements of the new home (R. Walker, 2004, chapter 2). Centuries later, new tools and knowledge encountered upon the arrival of Europeans were eagerly incorporated into daily life and adapted where necessary (Schaniel, 2001).

Such was the case with literacy; Māoridom traditionally is an oral society. Lyndsay Head and Buddy Mikaere (1988, p. 19) stress that Māori did not simply take up literacy in its pākehā form, particularly as a means of communication, but rather adapted it to “a Maori style of thinking”. This argument is supported by Tīmoti Kāretu (2002) who points out that letters in particular were written in the style of formal speeches (whaikōrero). A similar point is made by Jane McRae (2002) who looks at oral traditions and how they were applied to newspapers at the time.

Michael Jackson (1975) highlights that literacy did contribute to far-reaching changes particularly in its influence regarding the development of new social positions; most Māori learned to read and write from Māori teachers who co-existed side by side with tohunga (experts of traditional knowledge with high social status). Kāretu (2002, p. 11) observes that literacy “must have been both liberating and

8 Chapter Two explores social aspects in more detail.
confining”. Liberating in the sense that traditionally one’s status was strongly associated with the ability to whaikōrero: the recalling of events and genealogies in formal speeches, the use of sayings to strengthen an argument and the ability to convey complex social, political and spiritual matters from memory. Being able to commit all this knowledge to paper indeed ‘must have been liberating’. No longer did one have to fully rely on one’s memory. Though herein also lies the predicament. Once something is written down it easily becomes treated with greater authority whether or not the information is indeed accurate.

Māori interest in newspapers in the nineteenth century as a means of gaining information and for the communication of ideas and views particularly by way of letters to the editor led, according to Jennifer Curnow (2002), to more than 40 newspapers being published in the Māori language or bilingually. Newspapers owned by Māori gained greater significance after 1860.9 The content of all these newspapers varied from parliamentary proceedings, information on laws, matters relating to land transactions, speeches given on different marae (kin-based meeting grounds), to lyrics of songs and traditional sayings (Curnow, 2002). Letters to the editor-sections in newspapers were used as an extension of traditional forms of discussions usually taking place on marae (Kāretu, 2002).

The early decades of the twentieth century saw the number of Māori–language newspapers decline. Jennifer Curnow (2002, p. 33) argues that this was largely because competent writers and speakers of te reo Māori (the Māori language) were declining because of shifts in the education system to English-only tuition. The reduction in readership further contributed to financial difficulties which were also common for English-language newspapers. Today a number of iwi-based (tribal) newspapers and magazines are published along with pan-tribal ones. Mana Magazine is an example of the latter; it informs on current events and news, on Māori

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9 A fact on the side, Māori learned the trade of printing in Vienna and the first printing press was given to two Waikato chiefs by the Austrian Emperor Franz Josef I. (Hogan, 1994, as cited in Curnow, 2002; M. D. Jackson, 1975).
individuals and on how they contribute to their local communities as well as on lifestyle and entertainment matters (Stuart, 2003).

Mainstream media since the early 1900s mostly dismissed the inclusion of Māori matters or reported only on negative aspects (Media Research Team et al., 2005; Pihama, 1997; Spoonley & Hirsh, 1990; Stuart, 2003). Ranginui Walker wrote about issues of importance to Māoridom in a weekly column for the New Zealand Listener between 1977 and 1992.10 The first Māori radio broadcaster, Airini Grennell, went on air in 1927 (Easton, 1989, as cited in Beatson, 1996, p. 76) but it was not until the Second World War that the Māori language was used more frequently, unfortunately for poignant reasons: the announcement of names of fallen Māori soldiers (Fox, 1993, p. 128). In 1942 Wiremu Parker began to read a regular news segment in te reo Māori (Beatson, 1996; Fox, 1993). Similarly, television shows with relevance to Māori or on Māori history were very “sporadic” (Boyd-Bell, 1985, p. 195) aspects of New Zealand’s television schedule. Māori as a viable and distinct target audience with the interest and right to be entertained and informed on events from a Māori perspective and/or in te reo were not recognized for a long time by broadcasters. During the 1970s the calls for adequate programming became increasingly vocal and developments concerning Māori broadcasting slowly began to gain momentum with Television New Zealand creating an (under-resourced) Māori Unit in 1980 (Dunleavy, 2008; Fox, 1993; Rewiti, 2006).

However, the recognition of Māori in broadcasting continued to be slow in the years to come and was held back by far-reaching political developments. Māoridom was already hit hard by the economic downturn in the years of the later 1970s and was further affected by neo-liberal economic and social policy changes which were rapidly introduced in the 1980s (Coleman, Dixon, & Maré, 2005). The Labour-led government elected in July 1984 began to rule with a double edged sword. On one hand, the government wanted to appeal to Māori voters by increasingly appearing to commit to a bicultural environment. One significant step was the passing of the

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10 The Listener is a nationwide current affairs magazine. A selection of Walker’s columns are published as Ngā Pepa a Ranginui: The Walker Papers (R. Walker, 1996).
Treaty of Waitangi Amendment Act (1985). The Treaty of Waitangi Tribunal (Waitangi Tribunal) which was established in 1975 thereby saw its ability to hear grievances against the Crown extended to breaches of the Treaty reaching back to its signing in February 1840 (R. Walker, 2004). The Waitangi Tribunal in its very influential findings in 1986 on the ‘Wai 11’ claim found the Māori language a Māori ‘treasure’ to be protected as warranted under the Treaty of Waitangi (Treaty) and that the government could achieve this through broadcasting (Beatson, 1996; Fox, 1993; Hay, 1996; Mill, 2005).

While more strongly supporting Māori Treaty rights and fostering a bicultural discourse, the government impelled neo-liberal economic reforms which increased hardship and unemployment amongst Māori (Coleman et al., 2005). Public funding for broadcasting was greatly reduced by 1985 and the broadcasting sector began to be deregulated to allow free market principals to determine radio and television content and to cover an increasing proportion of the costs for public programming (Dunleavy, 2008, pp. 801-805).

With each step the government’s ability to fulfill the before mentioned ‘Treaty responsibilities’ regarding the protection of te reo Māori by means of broadcasting became increasingly compromised. The government planned to take deregulation and commercialization to the next level: the privatization of broadcasting state assets (Dunleavy, 2008; Fox, 1993; Mill, 2005). In preparation, the government created two state owned enterprises (SOE) – Television New Zealand (TVNZ) and Radio New Zealand (RNZ) – in 1989 which were intended to be turned into private ownership later on.

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11 The Treaty of Waitangi Act (1975) established the Treaty of Waitangi Tribunal which then had the ability to hear claims regarding contemporary breaches of the Treaty only.

12 This claim was introduced to the Waitangi Tribunal by Huirangi Waikerepuru and Ngā Kaiwhakapūmau i te Reo, the Wellington Māori Language Board, and aimed for the official recognition of the Māori language. Detailed information and the Tribunal’s report on this claim are available from www.waitangi-tribunal.govt.nz.

13 Limited public support for locally created broadcasting content was made available through New Zealand on Air (NZoA) which was set up in 1989. Commercial gain however was still a strong determinant in the allocation of NZoA contributions (Dunleavy, 2008, p. 803). Māori broadcasting only later on was separately provided for by the establishment of the Māori Broadcasting Funding Agency, Te Māngai Pāho (TMP), in 1993. This agency funds “te reo Māori and tikanga [customs] Māori programmes and music for television and radio broadcast” (Te Māngai Pāho, n.d.). For the year ending 30th June 2008 TMP provided funding totalling over $53 million for both radio and television (Te Māngai Pāho, 2008).
The state is a Treaty partner, but the private sector is not. Therefore, a complete shift in ownership into private hands would have made it impossible for the government to meet any obligations towards its partner under the Treaty or for it to be held responsible for any breaches (Kelsey, 1990, p. 45). Māori protested against these developments and filed a case with the New Zealand High Court. The positive judgment led the government to oblige TVNZ and RNZ to “guarantee Maori access to necessary facilities” (Mill, 2005, p. 198) and to set aside radio and television frequencies for use by Māori.14

Iwi organizations were granted licenses of radio frequencies which contributed to the development of today’s network of 21 iwi-radio stations, which, since 2003, can also be listened to online at www.irirangi.net. Jo Mane (2000) notes the potential of iwi-radio, particularly for language revitalization, in her MA-thesis but comes to the conclusion that “inadequate and irresolute broadcasting policy” (p. 78) and the increasing importance of commercial gains are “able to blatantly undermine” (p. 77) this. Nonetheless, the direct control over content by Māori and the relatively low production costs made radio highly successful very quickly compared to television (Fox, 1993; O'Regan, 1990).

Nationwide television broadcasting began in New Zealand on June 1st 1960. Māori content however was scarce and usually limited to performances of traditional dance and song (Boyd-Bell, 1985; Stephens, 2004) until a six-part documentary series titled Tangata Whenua (Barclay & King, 1974) was screened in November and December 1974. This series was not only significant because of its in-depth engagement with ‘the people of the land’ (translation of the title) but also because it was directed by Barry Barclay, a renowned Māori film maker, and it accommodated Māori tikanga (customs) during the production process including the treatment of the film material

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14 These historic developments concerning the far-reaching neo-liberal reforms are only covered in small detail here and are focused on the most central and relevant events necessary in this context. The interested reader is directed to Jane Kelsey’s influential books A Question of Honour? (1990) and The New Zealand Experiment (1997) as well as Brian Easton’s (1997) The Commercialisation of New Zealand.

_Tangata Whenua_ broke the monocultural mould of New Zealand television. It gave Maori an opportunity to speak for themselves about their lives. It went some way towards informing Pakeha New Zealanders about Maori attitudes and values, it whetted a Maori audience's appetite for more documentaries reflecting Maori viewpoints, and it opened the way for later programmes, such as _Koha_ and _Te Karere_, produced by Maori.

However, it was not until six and nine years (respectively) had passed that the programmes King mentioned became regulars on New Zealand’s television screens. _Koha_ (gift) was launched in 1980 and ran until 1988. It was the first regular Māori television show. Tainui Stephens (2004, p. 108) describes this early programming as “a ‘window’ onto the Māori world”. In hindsight he understands this to have put an expectation on Māori to “display and explain [themselves] to people who were not Māori” instead of being a programme primarily catering to Māori interests.

In 1982 the influential Māori broadcaster Derek Fox was made responsible for the creation of a two-minute long daily news bulletin in te reo Māori during the Māori Language Week. Fox (1990, p. 103) reminisces: “I accepted the task, but ignored the brief. Instead of news in Maori, I opted for Maori news, and set out to collect material of interest to Maori viewers.” By the end of the week, Fox was called back to his regular duties and the Māori news disappeared yet again. It was not until 1983 and after increasing pressure on TVNZ that _Te Karere_ (the messenger) became a permanent feature. _Te Karere_ continues to be presented in te reo Māori and provides up-to-date national and international news from a Māori perspective.

In 1987 _Waka Huia_ (treasure box) began to be screened in te reo. This archival programme was developed as a “means to preserve the reo and mātauranga Māori [Māori knowledge] of our tribal elders” (Stephens, 2004, p. 109) by recording tribal histories and stories told by local leaders. Current social issues are covered as well and captured for future generations. _Marae_ developed out of Waka Huia in 1990.
with a series entitled *Marae: When the Haka Became Boogie* growing into a separate magazine-style show by 1992.15

A programme targeting bilingual and bicultural teenagers became a regular on New Zealand television about a year later. *Mai Time* presented music videos, news on celebrities and events of interest to youth (Stephens, 2004) until it was discontinued after 12 very successful years (Throng, 2007). Another programme targeting a slightly younger audience is TVWorks’s *Pūkana* (contortion of the eyes). Presented in te reo Māori, the show allows children to get involved in games and competitions both on screen and via telephone. Its website was analyzed as part of this research and is discussed in more detail later on. A number of drama series like *Kōrero Mai* (Talk to me) and *Te Reo* aim to combine entertainment with elements of language learning (Stephens, 2004). An internationally acclaimed (Glynn & Tyson, 2007) and award winning (South Pacific Pictures, 2008) drama-series – *Mataku* (inspiring fear), dubbed the Māori *X-Files* – was produced in 2001 and 2002 and tells supernatural stories inspired by traditional lore.

Today two Māori television channels are available. The first – *Māori Television Service* (MTS) – began to broadcast on April 28th 2004 with the aim to promote te reo and Māori culture (Kiriona, 2004; *The New Zealand Herald*, 2004). The path to MTS’s launch was long and steep as the title of an article on this issue by Jo Smith and Sue Abel (2008) indicates: *Ka Whawhai Tonu Mātou* (Struggle without End). The government began consultation on this matter with Māori organizations and broadcasters in 1991 but progress was extremely slow (Ministry of Commerce, 1997).

A trial run for a Māori television channel – *Aotearoa Television Network* – was introduced in 1996 which was forced to suspend its services in 1997 because of funding shortages (Dunleavy, 2008; Jo Smith & Abel, 2008). With the realization

15 The history of Marae is not easily accessible and the information provided here was generously shared by Victor Allen (Associate Producer and Senior Researcher) for the program with TVNZ (V. Allen, personal communication, 05.05.2009).
“that Māori television services must be established” (Ministry of Commerce, 1997, p. 8) the government started to be somewhat more committed and MTS was planned to launch in 2002. However, the Māori Television Service Bill was caught in a “legislative vacuum” (Jo Smith & Abel, 2008, p. 3) until it was finally voted on in 2003. Trisha Dunleavy (2008) points out that between this successful vote in parliament and the actual launch of the television channel in 2004 public funding was already made available for the creation of suitable programmes for the future. The consequent programming was and continues to be very successful as results from research undertaken by Business and Economic Research Limited show. A press release (Māori Television, 2009) was issued in time for the channel’s fifth birthday announcing that the number of viewers increased threefold since MTS’s launch with a 1.5 million strong audience tuning in per month.

Vanessa Poihipi’s (2007) research with Māori MTS viewers from Dunedin showed the participants’ stance to be significantly encouraging and affirmative, particularly regarding how MTS presents a picture of Māori which positively counters the one portrayed in mainstream television. The research notes the channel’s acknowledgement of tribal diversity and its role in developing a “sense of iwi/Māori pride” (p. 18). The participants also highlighted the importance of MTS in overcoming Dunedin’s isolation from the rest of Māoridom. The only important criticism voiced relates to the geography of Dunedin and the great distance to MTS which is located in Auckland. In this context it was noted by the interviewees that programmes on local events are often not visited by the person reporting on it, ignoring the importance of face-to-face interaction in Māori society.
Poihipi’s work is a clear indication of the great value of MTS to Māori individuals and Māoridom as a whole. In spite of this, the majority of the channel’s overall viewers are in fact not Māori as MTS highlights to potential advertisers on their website:

More than two thirds of Māori Television's audience are non-Māori who are looking for local programming such as Hyundai CODE and Native Affairs, and our diverse range of inteligent [sic] and entertaining international movies and documentaries. (Māori Television, n.d.)

Because of the great achievement in gaining audience shares and the channel’s ability to attract non-Māori viewers MTS is viewed by many as a public broadcasting success, particularly as many of its programmes have a distinct “New Zealand-ness” (Nicol, 2006). It is one of the purposes of the channel to provide shows for a broad audience, all the while focusing on the overall goal of the channel – to play a central role in the revitalization of the Māori language and Māori tikanga. MTS’s programming, despite its ‘New Zealand-ness’, has contributed to a “disrupting of the hegemony of New Zealand settler society” (Jo Smith, 2006, p. 27).

A shift in the channel’s ‘identity’ can be noted since its launch in 2004. Smith and Abel (2008, p. 8) illustrate this by looking at the change in MTS’s catchphrase, which used to be ‘Mā rātou, mā mātou, mā koutou, mā tātou’ (For them, for us – but not them, for you, for everyone). The use of the variety of Māori pronouns, including the distinction between the inclusive ‘us’ (tātou) and the exclusive ‘us’ (mātou) indicates the complexity and variety of the channel’s audiences. However, this acknowledgment of difference was removed when the catchphrase was considerably shortened to the inclusive ‘Mā tātou’ only. The authors further note a focus on a “construction of national identity” by referring to “New Zealand life, New Zealand stories and New Zealand people” (Jo Smith & Abel, 2008, p. 8). A notion supported by the above mentioned research commissioned by MTS, as the press release notes that “Many Maori (73 per cent) also agree that Maori Television makes them feel

16 *Hyundai CODE* is a humorous sports programme whereas *Native Affairs* is a current affairs show.
proud to be a New Zealander” (Māori Television, 2009, n.p.). This apparent push towards nation-building and focus on a broad New Zealand audience increasingly takes place “at the expense of Māori” (Jo Smith & Abel, 2008, p. 11). The authors particularly mention Taiarahia Black’s criticism of MTS. He disapproved of MTS’s management’s decisions regarding te reo Māori: “those running Maori television have lost sight of their core aims by diluting reo Maori content” (Massey News, 2007a). A report on the quality of the Māori language used on MTS revealed in May 2009 that the standard of the language indeed could be improved (Tahana, 2009b).

MTS countered Black’s criticism in 2007 by noting that a second channel was in the process of being launched in 2008 to better service fluent speakers of te reo Māori (The New Zealand Herald, 2007b). Māori Television on March 28th 2008 has been joined by Te Reo, a digital channel available only via Freeview’s satellite/digital service. This new channel in particular focuses on Māori speaking households and provides all its programmes in the Māori language (Freeview, n.d.).

Ian Stuart (2003, p. 46) categorizes Māori media as “developmental media” on the basis of their specific purposes: the elevation of an indigenous language and culture; to teach Māori and possibly the wider society about te reo and tikanga Māori; to make “positive images of Maori” available; and the reporting of news from a Māori perspective. The previous description of existing literature concerned with Māori media highlights that this ‘separate’ media developed because the mainstream media for too long ignored Māori needs and interest. Māori Television was particularly successful in achieving all of these aspects highlighted by Stuart (2003). Nonetheless, the developments surrounding MTS also highlight the ongoing tension between Māori interests and goals regarding language and cultural revival and reassertion and of wider political and social interests.
Literature review

The following review of existing literature shows that academics in New Zealand were quick to intellectualize the potential this technology held for Māoridom and further highlighted inherent risks. Most of these writings were conceptual in nature and only few individuals also turned to empirical investigations.

One of the earliest works on *Māori Electronic Information* was done by Alastair Smith and Robert Sullivan (1996).\(^\text{17}\) They discuss positive developments regarding digitalization of information relevant to Māori: easier access, particularly if retrieval is possible from a remote location via the internet; advanced search–ability and usability for research – both academic and non-academic like tribal research for claims to the Waitangi Tribunal; additional opportunities for non-Māori to learn about Māori culture; and “preservation of Māori information” (A. Smith & Sullivan, 1996, p. 111).

At the same time the authors draw our attention to possible ‘threats’ when information is made available in electronic forms. Difficulties in directing who is allowed to retrieve information and to what ends it is accessed are of great concern along with the uncertainty around the treatment of digitized forms of treasures (in particular cultural artifacts or pictures of ancestors, but also sacred information like genealogies and tribal stories) without regard to cultural values and concepts. They further propose one consequence few authors address: access difficulties to information if publication is increasingly restricted to CD–ROM, electronic databases or the internet. Smith and Sullivan (1996, p. 112) conclude that this development “can restrict access, making information available to those able to pay, but effectively inaccessible to those who can’t”.

\(^{17}\) A later paper by A. Smith (1997) focuses more specifically on the internet. It too offers a brief overview of websites of relevance to Māori or provided by Māori that existed at the time and overall addresses similar concerns as the earlier paper.
Sally Pewhairangi (2002) approaches the internet from a cultural safety perspective and addresses the same concerns expressed by Smith and Sullivan around intellectual and cultural property rights, questions of control, Māori language, access and skills as well as correctness of information. Pewhairangi (2002, p. 141) points out that mistakes and misrepresentations particularly of traditional knowledge reduce their mana (prestige, authority) with the result that “the ability to portray a strong Maori presence and greater bicultural understanding is diminished”.

Te Taka Keegan (2000) besides being one of the very few who engages in empirical research regarding the broad issue of Māori and the internet (see below) also presents some of his thoughts and experiences concerning Māori culture and language on the web. His attitude is predominantly positive, nonetheless, he expresses caution – regarding language standardization, technological difficulties in displaying Māori script, intellectual property and the inappropriate publication of sacred information as well as the possibility to lose oneself as Māori on the net. In Keegan’s (2000, p. 1) view most of these concerns can be overcome by “holding true to cultural values”.

Keegan (2000, p. 2) further proposes an undemanding solution pertaining to sensitive or sacred knowledge like genealogies: “if we have information that is tapu [sacred] then don’t publish it on the Internet”. Such practice is indeed in accordance with the cultural value relating to the dissemination of restricted knowledge. This point is shared by Smith and Sullivan (1996, p. 112) who also direct our attention to the possibility of restricting access to such information by providing it in te reo Māori only. Then again, this would exclude many Māori who are not proficient in the language. Besides, with no other access restrictions in place, it would allow a small group of proficient non-Māori to retrieve this information as well. Moreover, such knowledge is usually restricted to tribal members only (Marsden & Henare, 1992) and a ‘linguistic’ gate-keeping might not be effective in safeguarding it from Māori belonging to other tribes either.

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18 Census data for 2006 showed that over 24 percent of Māori were able to speak the Māori language and 16 percent of all speakers of te reo were non-Māori (adapted from Statistics New Zealand, n.d.-a).
In most cases where non-Māori or even unauthorized, unknowledgeable Māori publish sensitive or incorrect information the situation commonly can be resolved through communication. Ruth Lemon (2001) reminds us that transgressions of cultural values and beliefs are usually not intentional but rather occur for reasons of ignorance and unawareness. Smith and Sullivan (1996) illustrate this point with a widely referred to incident involving a tattooing site publishing an article on Māori tattooing (moko) which included a picture of “preserved tattooed Maori heads hung on meathooks”. The head is a tapu body part whereas anything associated with food is considered profane (noa). The host was approached but refused to remove the picture referring to “freedom of speech” (A. Smith, 1997). The author of the article was then approached directly resulting in the picture being removed from public display.19

The internet and its impact on Māori not only finds consideration by academics but also by (Māori) media, indicating that discourses about these matters are of concern and interest to wider society. Mana Magazine for example very early on in the history of this technology in New Zealand published an article by Russell Brown (1996a) focusing on the internet as a communication tool. Brown sees the net as a positive development for Māori, particularly for Māori organizations such as tribes. The internet, he argues, can be utilized in three distinct ways by Māori to Spread the Word, as the title of the article suggests. E-mail can be used by iwi for targeted and restricted information exchanges with their hapū (sub-tribes). Conversely, the World Wide Web makes information accessible to all tribal members or to customers and partners of Māori businesses. Political and current affairs discussion from a Māori perspective could make use of newsgroups and Usenet. Brown also cautions of the challenges relating to public/private spheres of publication.

The above review of existing publications regarding Māori and the internet shows that both an academic and popular interest in this broad matter existed and that

19 Reference to this incidence is made by Lemon (2001), Pewhairangi (2002) and most recently in a parliamentary speech by the Minister of Māori Affairs Pita Sharples (2009) on the Copyright (New Technologies) Amendment Bill.
despite the awareness of potential perils most also saw great possibility. Well structured empirical engagements with these issues are to this day however rather rare. Those that exist are subject to consideration in the following section.

**Empirical approaches to indigenous cyberspace(s)**

Quantitative projects specifically interested in indigenous internet use are infrequent. In New Zealand, some general surveys, for example the *World Internet Project New Zealand* (Bell et al., 2008), include Māori individuals to allow a better understanding of differences between ethnic groups in their use of this technology. A similar approach was taken in a Statistics New Zealand (2007b) report on *Information and Communication Technology in New Zealand*. A report by Te Puni Kōkiri (2001) on *Maori Access to Information Technology* while focusing on Māori, nonetheless is informed by a nationwide ACNielsen Netwatch survey undertaken in 2000.¹⁰

One of the earliest empirical engagements with indigenous peoples’ utilization of cyberspace was undertaken by Mark Warschauer as part of a two year long ethnographic research project which included participant observation and interviews with users, students, parents, educators and other key-persons (Warschauer, 1998). One article (Warschauer & Donaghy, 1997) reported specifically on the development of *Leokï*, an online Hawaiian language bulletin-board, and its use by students of a Hawaiian immersion school. The research project overall allowed the development of a broadly-informed understanding regarding the aspirations of Hawaiian language speakers, learners and educators when it comes to the use of new technologies in the context of language revitalization as well as the difficulties and concerns associated with it both on a technological and cultural level. The Hawaiian language is in a similar situation as te reo Māori. This is also one of the areas which attracted a lot of attention by previous research concerned with Māori cyberspace (see below). Warschauer’s work, however, was not only focused on how the internet can support the learning and use of Hawaiian and its dialects but also how this technology allows

¹⁰ These surveys are discussed in more detail in *Chapter Three* in the context of the digital divide in Aotearoa.
users to negotiate and strengthen their cultural identity through online interactions with other speakers and (the then sparse) content as well as through the creation of content about Hawaiian culture and history from their own perspective and in their own language (Warschauer, 2000).

A similar bulletin-board (but in te reo Māori) was introduced by Richard Benton (1996): *Te Wahapū* (estuary). It was developed to support both teachers and learners of te reo Māori through various means. A key-attribute of the board is having the possibility to exchange messages in Maori with others. This is accomplished through the set-up of several 'conference areas' each with a specific focus for interaction. Another central aspect of *Te Wahapū* is the availability of searchable databases. One of these focuses on “new and technical words in Māori” (p. 190). Users can further post messages in one of the conference areas requesting the translation of words not included in the database. Such cases are then included in the database extending its range of vocabulary even further. The case study is very technical and focuses greatly on the technological background of the system and its challenges. The paper is, it is noted, informed by “follow-up conversations” and by “looking in the system log” (though the reader is not provided further information on these). These allowed Benton to observe that while the bulletin-board is visited, users are less likely to post messages due to the lack of skills or low confidence (p. 198). While *Te Wahapū* certainly has positive effects for learners and teachers of te reo Maori, Benton nonetheless also notes these problems as well as difficulties in gaining regular access which contribute to the system being underutilized.

The topic of self-representation online was subject of *Inuit in Cyberspace*, a book by Neil Christensen (2003) based on research undertaken in 1998 for his MA-thesis. This research took place at a time when internet research was still greatly concerned with online identity, its disembodiment and multiplicity, Sherry Turkle’s (1995) *Life on the Screen* being the example par excellence. The focus of Christensen’s research however was directed towards how Inuit identity is integrated online. This was achieved by a multi-methodological approach. More than a thousand e-mail addresses were collected online from anyone “with affiliation to the Arctic
“communities” (Christensen, 2003, p. 33) to whom an e-mail invitation to a very short online questionnaire was distributed. 131 completed the survey; of those 70 committed to engage in a more in-depth exchange via e-mail. This was supplemented by a content analysis of Inuit websites to learn more about the motivations of hosts to use a specific site design and content to ascertain identity. Pragmatic use of the internet, e-commerce and self-representation to non-Inuit are all aspects Christensen identifies. Though his research does not address the reverse impact of the technology on Inuit identity specifically he does remark on the identity affirming potential of the internet for Inuit.

Christensen (2006) later approached web-pages more strongly influenced by Lefebvre’s understanding of space as a complex social relationship. Christensen illustrates this by an in-depth engagement with a Greenlandic homepage and highlights that internet sites are, like other social spaces, continuously changing and influenced by various social forces and developments. This detailed exploration of a single site is published in *Native on the Net: Indigenous and Diasporic Peoples in the Virtual Age* (Landzelius, 2006). Another chapter in this edited collection is contributed by Maximilian Forte (2006) on Caribbean indigenous peoples who are “socially marginal groups whose historic authenticity is questioned” (Forte, 2006, p. 146). The chapter highlights how these groups’ use of the net allows a reassertion and reaffirmation of not only their identity amongst themselves but also of their existence to the world. Forte undertook classic anthropological fieldwork as well as “online participation and observation”. With one ethnic group – Taino\(^{21}\) – the research was in fact restricted to the virtual realm only. Forte helped develop some of the researched groups’ websites which not only facilitated the achievement of their goals but additionally allowed the researcher unique insights into the groups’ aspirations.

\(^{21}\) Forte (2006, p. 134) states that Taino are widely perceived to have vanished from existence in Puerto Rico and refers to them as “new revivalist” groups based in the United States.
Ellen Arnold and Darcy Plymire (2004) contributed a chapter on *The Cherokee Indians and the Internet*. For this they analyzed the sites of two Cherokee Bands – Eastern and Western – both of which have very different target audiences and vary in design and content. Both websites have in common that they make information on ancestors available in supporting tribal members to reconnect with their people. But where the focus of the Western Band lies more on the tribal community, the site of the Eastern Band directs more attention towards tourists, providing information on their region as a tourist destination. Arnold and Plymire (2004, p. 256) arrive at the conclusion that the internet can be a useful technology to “protect and preserve the unique cultural heritage and identity of the Cherokee people and, at the same time, to expand their control over their own affairs”.

Then again, they based their argument on the observation of two internet representations, unlike Rhonda Fair (2000, p. 204) who analyzed 92 sites of “federally recognized Native American tribes listed by Indian Circle”. Fair was interested in the self-representation of Native Americans. Hence, the focus was directed towards the use of images and the assessment of the target audience. The use of images and content, she ascertains, differs depending on who the main audience is. For example the depiction of tribal leaders and members dressed in non-traditional clothing on sites and pages are directed towards tribal members whereas ‘traditional’ garments are prominently deployed within websites targeted towards outsiders. The discussion of the findings is contextualized in a broader theoretical context of ethnic identity, accommodation, acculturation and resistance which are all aspects of importance in this research as well. Fair (2000), like Arnold and Plymire (2004), stresses that self-representation on internet sites is strongly connected to who the main target audience is. The use of stereo-typical representations is common and influenced by economic calculations to appear more familiar to others, especially

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22 The discussion here refers to the Arnold and Plymire’s chapter included in the second edition of *Web Studies* (Gauntlett & Horsley, 2004). The first edition was published four years earlier (Gauntlett, 2000). Arnold and Plymire analyzed the same websites for both editions allowing them to point to some changes that took place.

23 Web-rings are one of the many ways to access information online. Websites within such rings are interconnected and the surfer can navigate to the next/previous site in the ring, skip sites or select the next site randomly.
tourists. Representations on locally oriented sites however highlight that Native Americans continue to resist acculturation and assimilation.

Dyson, Hendriks and Grant (2007) edited an interesting book entitled Information Technology and Indigenous People where the various contributions cover wide areas, both in terms of geography and content. The reader is introduced to many successful initiatives on information and communication technologies in the areas of education, language and archiving but the book remains at a conceptual level for the most part. One of the empirically based contributions is by Te Taka Keegan, Sally Jo Cunningham and Mark Apperley (2007). This chapter investigates the language preferences of users of a bilingual digital library holding historic New Zealand newspaper articles in te reo Māori based on Keegan’s (2007) doctoral research. For his thesis Keegan was interested in the language selection and the perceptions of users of two digital libraries in Aotearoa and Hawaii which he to a great part established via transaction log analyses (TLA).

Being a computer scientist, Keegan (2007) was more strongly interested in what the results mean for the design of indigenous information retrieval services with a focus on improving usability. His work however did not ignore the question of whether a digital environment is able to contribute to indigenous language maintenance. Keegan showed that this is the case as many users make the deliberate choice to select the indigenous language for navigational and information retrieval purposes. This was more so the case for the Hawaiian Nūpepa than the Niupepa-collection.24 Focusing on the New Zealand context, the TLA registered all visits between January 1st and December 31st 2005 and showed that close to 40,000 visits were requested in te reo Māori making up just over 20 percent of all visits. For the Niupepa collection Keegan also investigated whether a change in the default language setting (English or Māori) affected the visitors’ language choice. Results showed that this simple linguistic decision by hosts matters as a significant increase of use of Māori was

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24 Keegan (2007) attributes this to the different levels of English content; whereas the Hawaiian Nūpepa directory has very little, the New Zealand Niupepa has close to 70 percent of its content either fully bilingually available or provides abstracts in English.
noted when the default setting was te reo. Users were more likely to be ‘encouraged’ or even perhaps challenged, to make use of the indigenous language:

[T]here were 21% more reo Māori requests when the default language was set to te reo Māori. These requests were made by approximately the same number of clients, indicating that setting the default language to reo Māori did not encourage new clients to use te reo Māori, rather it encouraged bilingual clients to use te reo Māori more often (T. T. Keegan, 2007, p. 326).

The TLA allowed Keegan to go into considerable depth regarding the surfing behavior of the users of the two digital libraries ranging from visit/reading time to details on when switching between languages occurred. He further established where people were from based on their IP-address which allowed a comparison between international and local users and an intra-national discussion. 25 Furthermore this analysis was supplemented by ‘feedback’ from users of the digital libraries in the form of online questionnaires, observation and interviews allowing an understanding of how the digital libraries are used, common purposes for visiting it and the motivation behind the language choice in this electronic environment. The interviews in particular showed that Māori not only treasured the content of the articles held by Niupepa, but also the language itself. The library was, in a sense, not only used as a source of information, but also as a tool to improve their te reo or to learn from their ancestors.

Te Taka Keegan and his colleagues (Keegan & Cunningham, 2003; Keegan et al., 2004) can also be seen to be the first to engage scientifically with Māori internet sites and their utilization of te reo Māori. In December 1997 they began to investigate the question whether the internet is used to ‘speak’ te reo Māori. The authors attempted to locate ‘all’ websites with relevance to Māori through a snowball method (following the links of known internet sites) and by searching for words which are germane to Māoridom using a variety of search engines. Eventually only those sites with a ‘substantial’ proportion in te reo Māori were included for analysis. “Hence

25 IP-address stands for internet protocol-address which are unique identifiers assigned to each device that is connected to the internet.
pages that had a Māori greeting, or a single proverb, phrase, song, or incantation in Māori were not considered to be significant enough to be included in this survey” (Keegan et al., 2004, p. 27). Two surveys were conducted: one in 1997/98 which was followed up in late 2002. The pages were rated on a scale between one and four, the latter meaning that a page was fully in Māori (T. T. Keegan, personal communication, 20.09.2006).

The comparison of the two surveys showed that te reo Māori is not only utilized online, but also that hosts increasingly decided to provide content in Māori. The earlier analysis located 41 sites and 304 pages, the later 100 sites and 30,346 pages in varying degrees of Māori. In both cases a significant share of pages were delivered in great parts in Māori however it was very common to see some English words or phrases included in most cases. Sites using both languages were most frequent, but within those Māori was not used to a similar extent as English. Some bilingual sites provided the ‘Māori-versions’ in the English language as well which is an ongoing practice (see Chapter Seven). Navigation in Māori (for example buttons or links) was also becoming an ever widespread practice in-between the two surveys (from seven percent of the sites to 42 percent).

Keegan et al. postulate the potential of the internet in fostering the use of Māori in its oral form. However, the first survey showed that this aspect of the technology was not employed in 1998 at all. An increase in files carrying sound was noticeable in the second survey. What is more, the quality of the material was high as most came from native speakers. Changes were ongoing in terms of who was providing Māori language sites and the main functions of the sites as well. Government increasingly accommodated the Māori language. By 2002 one-third of all sites were affiliated with government. A shift in the recognition of the importance of te reo in the education sector is represented online as well:
In 1998 tertiary providers, education initiatives and schools (both primary and secondary) together account for 1 in 13 of all Web sites, where in 2002 this was 1 in 4. Since this is where some of the large Māori language collections are located, this grouping accounts for 63% of the total Web pages (Keegan & Cunningham, 2003, p. 2).

The influence of this sector is also represented when looking at the central purposes of the sites: those specifically concerned with the language itself were reported to be most common in 1998, followed by homepages about individuals and their lives in te reo Māori and the sharing of historic knowledge. In 2002 the personal pages disappeared from the top three which was then headed by educational purposes followed by the other two purposes with historic knowledge staying in third place. In both years other topics included religion, health and nature related issues.

Many aspects specifically concerned with language use discussed by Keegan et al. (2003; 2004) are supported by findings in this research as well; most notably changes in orthography practices to represent the stretched vowel and reasons hindering the Māori language development online. However, one central difference stands out: the overall level of te reo utilization as established in this research is much lower than what was reported by Keegan and his colleagues. The reasons for this important contradiction in the findings are certainly linked to the difference in methodology, but possibly also to other factors; all of which are subject of Chapter Seven. 26

A primarily statistical approach to the analysis of Māori cyberspace was taken by Zlatko Kovacic (2001). Nine internet sites were selected to “cover a broad range of topics from news, informational, cultural, tribal, political and educational” (p. 55). Another selection criterion was the requirement for a search function to be part of the structure. These nine websites were analyzed regarding the occurrence of 44 ‘key concepts’ derived from two influential books on Māori culture: Cleve Barlow’s Tikanga Whakaaro: Key Concepts in Māori Culture and Michael King’s edited selection Te Ao Hurihuri: Aspects of Maoritanga.

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26 Both of these areas that Keegan has been working in over the last decade have also been presented and published in te reo Māori; most of which are available from his staff-page at Waikato University (Keegan, 2010).
Kovacic (2001) established the number of occurrences of these key concepts within the websites using the local search engine and standardized these according to the size (number of pages) of the site. The derived data was analyzed using Multidimensional Scaling, “an exploratory technique used to uncover the ‘hidden structure’ of a set of data […] to derive a spatial representation of the nine Māori web sites” (p. 55). Three dimensions were used for the analysis in this case and a correlation matrix between the key concepts and three dimensions was created to aid in the interpretation of the spatial plot. The three dimensions were categorized as general cultural, intra tribe dynamics and educational (p. 56). Each internet site can then be located within the space created by these dimensions and the similarities or closeness between the websites can be established.

It appears that the central motivation for this research was to test the suitability of Multidimensional Scaling for the purpose of establishing a basic understanding or overview of Māori (or any other relatively closed) cyberspace. The usefulness of the results are discussed by Kovacic from a marketing perspective – the knowledge of the spatial location of a site (in relation to specific dimensions and other websites) can aid in the decision-making regarding advertisement placements and gives a possible indication of who might be visiting a particular site compared to others. A statement at the end of the paper however indicates a more in-depth interest on the part of Kovacic regarding the analytical approach itself applied to larger sets of internet sites as well as the “perceptions of visitors in regard to the presentation of Māori cultural values” (Kovacic, 2001, p. 57) within websites. The chance to follow up on this interest though has unfortunately not yet eventuated (Z. J. Kovacic, personal communication, 30.01.2009).

Contrary to Kovacic’s work, Konrad Peszynski (2001; Peszynski & Thanasankit, 2002) was interested in the opinions and experiences of Māori internet users but not the online environment itself. For an Honors-thesis Peszynski (2001) undertook qualitative research on Trust and the Māori Internet Shopper and established whether existing literature on trust in internet shopping is in accord with Māori understandings and views. Therefore Māori professionals from Wellington were
interviewed using semi-structured interviews. As part of these, Peszynski also
provided a one page summary of the findings from his literature review regarding
trust in online shopping. The interview participants were asked to read this summary
and to share their views on whether these matters in fact applied to them.

When engaging in online shopping having trust in a website is very important
because of the risks of fraud and of theft or misuse of personal information. For
Māori the sharing of personal information online is a particularly sensitive matter
which was highlighted by Peszynski’s work. Generally, the overall impression of a
site was seen to be of great importance by the participants; easy navigation, photos of
individuals behind the online shop, their contact details – preferably a phone number
– were all aspects contributing to a more positive feeling towards specific online
shops. Certain strategies employed by hosts to appear more trustworthy, for example
web-seals, were not necessarily seen as a strong indicator of trustworthiness. Neither
were testimonials from previous consumers of a particular site. Positive experiences
shared by consumers personally known to the participants were much more
influential. The importance of personal face-to-face relationships in the development
of trust and closeness and their relevance in everyday life were relocated to this
online activity. Recognizable and reputable names known within Māoridom also
inclined the shoppers to have more positive attitudes towards an internet site.
Language matters were of concern in this research as well. Participants indicated that
bilingual provision of online shopping sites would make them more inviting to
Māori.

Peszynski’s research shows that most issues discussed in academic writings on trust
in online shopping indeed are of relevance to Māori but at the same time cultural
aspects highly relevant to Māori offline are affecting online behavior as well. This
fact could have been emphasized more strongly in the discussion of the analysis.
Nonetheless, one has to keep in mind that the research has been undertaken as part of
an Honors-degree necessarily limiting its scope which is a fact Peszynski (2001, p.
40) himself acknowledges in his concluding remarks.
The most recent empirical study undertaken in this area focused on te reo Māori within local and central governmental websites. A survey of 123 such sites was carried out by the Human Rights Commission (HRC) and highlights the persistence of monolingualism (with very few exceptions) within this governmental cyberspace. Unfortunately, at the time of writing only a short press release and a speech by the Human Rights Commissioner Joris de Bres had been available publicly (see HRC, 2009) and a short report was aired on *Waatea News* (Rerekura, 2009b).\(^\text{27}\)

A research project in progress is Whetu Simon’s doctorate. In late 2007 it had been announced that Simon received the *Te Tipu Putaiao Fellowship* to undertake research regarding “successful internet strategies to enhance the economic, cultural and social wellbeing of Māori” (*Massey News*, 2007b, p. 5). Simon is particularly interested in Māori e-businesses and to find new “opportunities for collectively owned resources” (ibid.). Unfortunately, at the time of writing no further publications or information on this research could be found.

**Chapter summary**

Media indisputably can have detrimental impacts on indigenous peoples. Television and radio are so invasive that interest in stories and traditions give way to narratives broadcasted. The use of native languages in the community and home is affected as well and traditional everyday activities are displaced by hours in front of the television (Mander, 1991). However, media can also have the opposite effect as the examples discussed in this chapter show. Faye Ginsburg (2002, p. 211) stresses that it is imperative to consider the wider context when engaging with the subject of ‘indigenous media’. They are often part, she remarks, of “broader movements of cultural autonomy and political self-determination. These movements exist in complex tension with the structures of the dominant culture”.

\(^{27}\) It is interesting to note that the HRC survey did not receive widespread attention despite the press release issued by the HRC. A search of the *Newstext Plus* database only revealed the press release (HRC, 2009), the *Waatea News* Bulletin on *Radio NZ* (Rerekura, 2009b) and a *Waikato Times* article (Akuhata, 2009)
This chapter aimed to do precisely that – to consider the wider historic and socio-political context of the Māori mediascape and of early Māori internet use, evincing the ‘tension’ between Māori revitalization movements, increasing input in mainstream media and control over ‘separate’ Māori media and ‘the structures of the dominant culture’. Chapter Three explores the structure of the internet, the domain name system and extends the investigation of these ‘tensions’ further to this field specifically.

The review of writings contemplating the meaning and impact this technology might hold in store for Māori culture and traditions showed the heightened awareness of Māoridom regarding potential pitfalls. It also illustrated that these concerns did not necessarily lead to increased apprehension. Instead this technology was met with experience, open-mindedness, alertness and was approached proactively.

Empirical engagements with this matter are, less common. On a global scale a number of very interesting and insightful research projects on indigenous peoples’ use and engagement with the internet can be noted. A selection of research projects which influenced the outlook of this research in various forms were presented here. They, along with the studies more specifically concerned with Māori and the internet, are the grounds this doctorate is build upon. It has been suggested that research concerned with Māori cyberspace was to this day mostly undertaken with a focused view not allowing us to see the broader picture. Ultimately this thesis aims to build upon previous research to increase our understanding on how the internet might function as a location of identity construction or maintenance. The following chapter hence continues from here and addresses what it actually means to be Māori.
Identity has been and continues to be a central focus of interest within the social sciences. Two broad and very distinct approaches can be discerned, essentialist and social constructionist understandings. Within these broad paradigms researchers are concerned with various attributes and settings. This study focuses on social constructionist understandings of ethnic identity, both on the level of the individual and of groups.

Most works on ethnic identity begin with theoretical considerations followed by empirical realities to illustrate the authors’ arguments. This chapter however takes a different approach and begins by investigating various aspects of Māori identity. Data from official statistics, particularly the New Zealand Census, is used throughout this thesis. It is therefore important (and not least interesting) to understand how definitions of Māoriness have changed. Issues concerning traditional and non-traditional characteristics of Māoriness feature prominently in publications and therefore receive prioritized attention. This is followed by theoretical contemplations concerning social identity, ethnicity and media as sites of identity construction. The purpose of this is to provide a ‘definition’ of the understanding of Māori identity underlying this research and to specify the theoretical influences informing the analysis and perception of the topics at hand.
Māori ethnicity in official statistics

The question of who actually is considered Māori when reading about statistics is of great importance. For many years the ‘blood quantum’ of individuals in addition to their ‘living condition’ was seen as indicative of an individual’s Māoriness:

In 1883, when the first New Zealand Official Year Book was published, “half castes living as members of Maori tribes” were distinguished from “half-castes living as Europeans”. Half-castes were allocated to a category according to their mode of living whereas persons greater than half-Maori blood were allocated to the Maori population, regardless of their mode of living. (Department of Statistics, 1988, p. 44)

Increased intermarriage and more Māori ‘living as Europeans’ saw the differentiation become more difficult to uphold and was discontinued (Department of Statistics, 1988, p. 44). Nonetheless, the concept of ‘race’ continued to be influential until the 1986 Census when a significant adjustment was undertaken: a move away from “fractions of origins” (p. 50) while still keeping the indicator ancestry based. The 1991 Census brought further changes. Individuals of Māori descent were asked to also state their tribal affiliation(s). The principal question inquired into the person’s ‘main’ affiliation followed by “What other iwi (tribes) do you have strong ties with?” (Department of Statistics, 1993). The privileging of tribal identity was criticized (C. W. Smith, 1998; G. H. Smith, 1995) centrally because Māori identity was required “to conform to the needs of the state” (G. H. Smith, 1995, p. 37) particularly in relation to the Rūnanga Iwi Act (1990). Slight adaptations in the wording occurred in the 1996 and 2001 survey forms, but kept true to the cultural/ancestry

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28 The concept of blood quantum nonetheless did not fully disappear from official statistics until the mid 1990s “[a]s the births, deaths and hospital data collections used a ‘fractions of blood’ question until 1995” (Statistics New Zealand, 2004b, p. 21). It also did not yet fully disappear from people’s mindsets; Tess Huia Mooke-Maxwell (2003, p. 129) briefly mentions this issue in her PhD. Some of the (older) participants refer to blood quantum when talking about their identities.

29 Māori writers also refer to this act as Rūnanga a Iwi Act, to be grammatically correct (Pihama & Smith, 1998). The act developed out of the government of the day’s policy of devolution, in this case of social- and health services. Iwi were viewed as the perfect structure to provide services to Māori and it promised to empower iwi. Criticism of the act was widespread and focused on the fact that it indeed did not ‘empower’ iwi but rather transformed them into a quasi-government department with no input into policy (C. W. Smith, 1998).
differentiation (Statistics New Zealand, 2004b, p. 22). In 2006 prioritization of replies was discontinued (amongst other reasons) because it overrode and ignored the self-identification of individuals with multiple ethnicities and produced biased outputs. \(^{30}\)

The 2006 Census established that 17.7 percent (more than 643,000 individuals) of all people living in New Zealand were of Māori descent. 14.6 percent (more than 565,000 people) of New Zealand’s population named Māori as part of their ethnic identity. Almost 53 percent stated that this was the only ethnicity they identify with (Statistics New Zealand, 2007d). More than 4,000 non-descent-Māori self-identified as Māori in 2006 a further 6700 individuals did so who did not know whether they are of Māori descent or not (Statistics New Zealand, 2006a). Table 1 illustrates this complex picture:

<table>
<thead>
<tr>
<th>Māori categories</th>
<th>2001</th>
<th>2006</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descent</td>
<td>604,110</td>
<td>643,977</td>
<td>39,867</td>
</tr>
<tr>
<td>Descent and Ethnic</td>
<td>487,320</td>
<td>522,579</td>
<td>35,259</td>
</tr>
<tr>
<td>Descent, not Ethnic</td>
<td>116,790</td>
<td>121,398</td>
<td>4,608</td>
</tr>
<tr>
<td>Ethnic Group</td>
<td>526,281</td>
<td>565,329</td>
<td>39,048</td>
</tr>
<tr>
<td>Ethnic, not Descent</td>
<td>5,322</td>
<td>4,059</td>
<td>-1,263</td>
</tr>
<tr>
<td>Ethnic, Descent unknown</td>
<td>6,846</td>
<td>6,798</td>
<td>-48</td>
</tr>
</tbody>
</table>

Table 1: Census 2001 and 2006: Māori descent and ethnic group
Adapted from: Statistics New Zealand (2006a)

As reflected in the 2006 Census, 102,366 people with Māori ancestry were not able (or willing) to declare their tribal (iwi) affiliation (Statistics New Zealand, 2007d). The knowledge of which appears to carry sizeable weight when it comes to identifying as Māori: in the 2001 Census “almost half (46 percent) of Māori descendants who did not know their iwi did not identify as part of the Māori ethnic group. In comparison, only 12 percent of Māori descendants who knew their iwi did not identify as part of the Māori ethnic group” (Statistics New Zealand, 2002a, p.

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\(^{30}\) The order of prioritization was: “first ‘Māori’, then ‘Pacific Peoples’, followed by ‘Asian’, ‘Other’ and ‘European’” (Statistics New Zealand, 2004b, p. 13).
 Nonetheless, the number of people who know that they have Māori ancestors but do not hold information on their tribal affiliation continues to decrease:

<table>
<thead>
<tr>
<th>Number of iwi</th>
<th>1996</th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>One iwi</td>
<td>310,002</td>
<td>292,614</td>
<td>316,866</td>
</tr>
<tr>
<td>Two iwi</td>
<td>85,560</td>
<td>107,274</td>
<td>127,080</td>
</tr>
<tr>
<td>Three or more</td>
<td>30,669</td>
<td>54,591</td>
<td>68,376</td>
</tr>
<tr>
<td>Not elsewhere included*</td>
<td>153,483</td>
<td>149,631</td>
<td>131,652</td>
</tr>
</tbody>
</table>

Table 2: Number of iwi for the Māori descent population: 1996–2006 Census

* “Response Unidentifiable, Response Outside Scope and Not Stated. People who did not know the name of their iwi are included in this category”

Adapted from: Statistics New Zealand (2007e, table 34)

The number of Māori, no matter if considered by ethnicity, descent or if looking at iwi affiliations, continues to grow since the early twentieth century (Pool, 1991). A decrease can be noted in those Māori individuals who are not of Māori descent or who do not know about their descent.

**Historic background**

Māori society underwent far-reaching changes after European (Pākehā) settlement. Up until the Second World War the two main population groups of Aotearoa/New Zealand were living in relative separation. Pākehā were dwelling in the urban centers and Māori in rural areas (Ballara, 1998; Pool, 1991). As Steven Webster (1998) highlights, the combination of loss of land and growing communities meant that what was left of the land was not able to sustain everyone and greater numbers of families became transient, moving where available work led them. The government pursued the alienation of Māori from their lands via the establishment of the Native Land Courts after the New Zealand Wars – 1845-1872 (Belich & Stephens, 1998; Wright, 2006) – and forced increasing numbers into paid employment. The lower wages paid to Māori laborers, “often recruited on the new tribal [iwi] rather than the old hapū [sub-tribe] basis” (Ballara, 1998, p. 256), allowed roads, bridges and other

31 Comparable data for the 2006 Census is unfortunately not available.
infrastructure to be built. A great number of Māori have been separated from traditional forms of life and work even before industrialization and urbanization became increasingly influential.

The early twentieth century saw Māori find employment in the agricultural sector on dairy farms or as shearsers until the Second World War, when a move towards manufacturing took place (Keiha & Moon, 2008; Metge, 1964; Pool, 1991). Beginning in the 1920s attitudes towards the Māori population and culture started to improve somewhat and Māori politicians gained in influence (King, 2001; Miles, 1984; Webster, 1998), one example being Sir Apirana Ngata whose Māori Land Development Scheme promoted agricultural and economic advancement amongst rural Māori providing more opportunities to sustain life in tribal areas. Being Māori in these days still meant for many to live off the land, to grow vegetables, gather seafood or catch fish and to participate in activities within the community. Relationships were close-knit and sharing with whānau (extended family) was common practice (Metge, 2004). Māori were knowledgeable, skillful as well as resourceful, and therefore being Māori was something to be proud of as participants in Carla Houkamau’s (2006, p. 141) research stressed.

The focus on the primary sector was strongly influenced by New Zealand’s greatest export market of the time – Great Britain. Technological advancement freed labor from the agricultural sector allowing a redirection towards manufacturing production which began to gain momentum after the Second World War (Miles, 1984). The need for unskilled workers rose, attracting families in even greater numbers to leave their homes and whānau behind and to start a new life in urban centers. Campbell Gibson (1973, p. 82) highlights the extraordinary speed of this change: “the urbanization of the Maori population since 1936 has been more rapid than the urbanization of any national population or of any other sizable ethnic subpopulation at any time in history.” A slow-down began in the 1970s (Pool, 1991, p. 7) but numbers continued to increase nonetheless, reaching 84.4 percent of the total Māori population living in urban centers in 2006 (Statistics New Zealand, 2007d, p. 3).
The “drift to the cities” (Metge, 1964, p. 2) was seen negatively by kaumātua (elders) because too many left their way of life behind. Contact with Pākehā became increasingly common, partly due to the “pepper-potting” (Meredith, 2006, p. 248) of Māori families within Pākehā communities. Encounters with discrimination, oppression and marginalization became more common for many individuals as well, leading many parents to raise their children pākehā. Participants in Houkamau’s (2006) research brought up during these times frequently referred to their parents wanting the best chance for them which meant for them to be able to fit in. Parents’ choice to not provide a strong Māori upbringing left a group of Māori who were not able to acquire the skills and knowledge necessary to develop a secure Māori identity.

Beginning in the 1960s, but gaining considerable momentum in the following decade, Aotearoa was characterized by influential social changes. Global anti-war-, anti-apartheid- and human rights social movements prepared the ground for the Māori renaissance (Moon, 2009; Poata-Smith, 1996). Resistance to western forces began as early as 1843 when Te Rauparaha protested (first peacefully, then with force) against a land claim by the New Zealand Company (R. Walker, 1984, p. 269). What differentiated these movements from earlier ones is the increased understanding, acceptance and even support by Pākehā. This development is partly attributable to the fact that Pākehā themselves were increasingly looking for an identity as New Zealanders opposed to being “a transplanted Briton” (Spoonley, 1995, p. 99).

Increased awareness of existing inequalities, of historic and contemporary cases of land loss and other grievances encouraged growing numbers of people to articulate their opinions publicly in marches and land occupations. Hauraki Greenland (1991) looks at radical movements beginning in the 1970s and notes the cross-linkage of differences in values and morals, the devastating social problems associated with the loss of land in the past and more recent times and how this saw the protest directed at Pākehā society and its institutions. The focus on the notion of tāngata whenua (people of the land) highlights the “Maori guardianship of land and their right, by
virtue of their ‘peoplehood’, to self-determination” (Greenland, 1984, p. 94). The traditional concept of kaitiaki (guardianship) unites all Māori in their right and responsibility to control their lands according to Māori values and beliefs. Greenland (1984, p. 98) notes that one of the effects of the radical movements can be seen in the development of a political consciousness regarding land which in turn led to a strengthening of Māori identity as distinct from Pākehā.

Differences were highlighted and traditional markers associated with whakapapa (genealogy), tikanga (customs) and mātauranga Māori (Māori knowledge), to a lesser degree te reo (language), were promoted as positive. Māori identity was seen as a positive force (Greenland, 1991). These movements “created a greater awareness of conditions of oppression, conflict and the desire for redress” (McIntosh, 2005, p. 47) which prepared the soil for the renaissance of traditional Māori identity markers. Tracey McIntosh (2005, p. 43) reminds us that ‘traditional’ need not be understood in the sense of historic but rather as “articulated by Maori”.

**Traditional identity markers**

Arapera Ngaha (2004) surveyed Māori regarding their rating of certain aspects of Māori identity. The results suggest that whakapapa continues to be understood most central to Māori identity with 82 percent of the respondents indicating it as ‘being essential’. Upbringing, customs and an upheld connection to one’s marae (meeting ground) are all viewed similarly – over 40 percent rate these markers as crucial. Whanaungatanga (lived relationship and care between whānau members) and some form of connection to tribal land are viewed as ‘essential’ by fewer than 40 percent. The survey indicates that te reo was perceived by fewer respondents (29 percent) as being central to their identity. The following sections hence focus on whakapapa, te reo Māori and cultural practices in the form of the marae encounter and the performing arts in order to gain an understanding of traditional Māori identity markers.
Whakapapa

Whakapapa on one hand is mundane. Every human through birth is connected to preceding and current generations. At the same time whakapapa is a taonga (treasure) and a form of knowledge which is particularly tapu (sacred). It “forms the foundation of Maori society” (Royal, 1992, p. 21). Whakapapa establishes behavioral rules, allows claims to Māoriness, tribal membership, land and other resources. Each Māori individual is expected to know from whom she/he directly descends but knowledge on farther reaching genealogical lines relating the ‘Mortal Man’ to the ‘Gods’ is held only by experts (C. Barlow, 2002). As connections became more complex this information was noted in whakapapa books which regularly also contained waiata (songs) and important historic events. The containing knowledge is passed on to a carefully selected person after a long process of teaching in order to preserve the taonga (Metge, 1964, p. 52; 2004, p. 91).

The dissemination of this information is equally considered to be tapu. Some whakapapa, if accessed by non-tribal persons, might even be harmful to their welfare (R. Walker, 1986). Joan Metge (1964, p. 52) notes that aspects of many individuals’ or tribes’ whakapapa are known by the wider community. Nonetheless, controversies still arise when this knowledge is made publicly accessible without restrictions, particularly if it is available to anyone through publication. The internet contributes even further to this debate. An article by Adam Gifford (2000) allowed one website-owner (Ross Himona from http://maori.com) to justify the provision of his tribe’s whakapapa. He reasons it is already widely known and he also notes the global context of contemporary Māoridom: “Most of my hapu is in the diaspora – they're in Australia, the United States, Europe, Japan. I know those people appreciate being able to get our whakapapa on site” (Himona, as cited in Gifford, 2000). This controversy is also of concern to the users interviewed (see Chapter Eight).

Renewed interest in whakapapa has been growing, particularly amongst people who know that they are of Māori descent but who do not hold detailed information on their ancestors. Resources providing assistance on where to start one’s genealogical
research and what needs to be considered and respected when embarking on such a journey are also available (Joyce, Mathers, & Māori Interest Group of the NZSG, 2006; Royal, 1992). However, knowledge of whakapapa is not concerned with mere connections between generations as Tahu Kukutai (2003, p. 21) and other commentators make clear: “Whakapapa is not simply about having ‘Māori blood’ but knowing about that descent and having a meaningful relationship to it.” Genealogy and surrounding aspects like being able to relate to whānau, hapū, iwi, land, ancestors and the connected history are brought together when a Māori person introduces her/himself in the form of pehepa (personal pronouns). These pehepa contain important information on the background of individuals, the land, water and people they relate to and are, according to Margaret Mutu (2001), usually learnt from an early age, mainly through stories and experiences, today often in kōhanga reo (language nests or Māori immersion pre-schools).

Whakapapa organizes social interaction and relationships within Māori society. Within a whānau love and affection (aroha) are expressed openly and solidarity (manaaki) is very important. Manaaki is the mutual support of whānau members in times of need which is associated with mana (prestige). Mana of an individual or group does not increase by having more possessions or wealth, but rather by giving (Reilly, 2004, p. 68). Whakapapa is also important in organizing celebrations and attributing central roles in ceremonies. This becomes most apparent when a person passes away. Everyone with a genealogical connection to the deceased is expected and will do everything in her/his power to pay tribute at the tangihanga (funeral). Whanaungatanga and manaaki require everyone to contribute according to their abilities; be it time, labor or material contributions to any family/tribal occasion (Metge, 2004; Salmond, 2004).

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32 NZSG stands for New Zealand Society of Genealogists.
Te reo Māori

Ngaha’s (2004) survey saw Māori participants put a comparatively low level of importance on te reo. She nonetheless observes that a diminished command and use of the Māori language may limit “the deeper understandings of our pepeha, tātai [genealogical recitals] and whakatauki [proverbs] in expressions of identity” (Ngaha, 2004, p. 45, my emphasis). Te reo Māori has been under threat of disappearing after having been the only means of communication in Aotearoa. Various factors contributed to the development of te reo Māori into a minority language, not least because the Native Schools Act (1867) established English as the language of instruction (Te Puni Kōkiri, 1999, p. 6) seeing Māori banned from school grounds. The first national language survey conducted in the early 1970s made clear that Māori as a living and everyday language was becoming a critical concern (Te Puni Kōkiri, 1999, p. 6).

The awareness that this unique language was under threat of being lost brought about important revitalization movements. One of the earliest is Te Ataarangi. Beginning in 1979 Māori tutors aimed to teach the language to other Māori adults by focusing on speaking and listening skills (Te Puni Kōkiri, 1999). The most acclaimed (even internationally) achievement of the revitalization movement is Kōhanga Reo (Spolsky, 2005, p. 73). Kōhanga are early childhood education centers conducted fully in Māori and based on Māori traditions and beliefs with a strong involvement of kaumātua who are in many cases native speakers (Mutu, 2001). The first kōhanga opened in 1982 and their numbers increased rapidly. Immersion education at the school level is called Kura Kaupapa Māori. The first kura (school) at primary level was established in 1985 and eight years later it extended to secondary level. None of these early Māori educational institutions were funded by the state until the passing of the Education Amendment Act in 1989 which made it possible for kura to be nominated or created as state schools. In 1993 two Wānanga (kaupapa Māori tertiary level education providers) were established followed by a third institution which opened in 1997 (Te Puni Kōkiri, 1999).
Additionally to these initiatives the Waitangi Tribunal’s conclusion that te reo Māori should be considered a taonga under the Treaty of Waitangi (see Chapter One) had a positive effect, as shortly after the Māori Language Act (1987) was passed. Māori then became the first official language of an indigenous peoples on a national level.\textsuperscript{33} Te reo Māori has “a legally privileged, albeit delicate, status in New Zealand” (Starks, Harlow, & Bell, 2005, p. 13), as it was the country’s first official language and was only joined by the NZ Sign Language in 2006 when the New Zealand Sign Language Act was implemented. English continues to be a de-facto official language by widespread use only (Wurm et al., 1996). The Māori Language Act also established a Māori Language Commission called Te Taura Whiri i te Reo Māori (Te Taura Whiri) with the main role to uphold “Māori as a living language and as an ordinary means of communication” (Te Puni Kōkiri, 1999, p. 10). In 2003 after consultation with Māori language experts and communities The Māori Language Strategy was announced by Te Puni Kōkiri and Te Taura Whiri (2003, p. 7). In this five intertwined goals were set to be achieved by 2028: to increase language skills, extend the opportunities to use and learn te reo, support local leadership and initiatives, and lastly, to increase the recognition of te reo.

The increasing awareness and positive attitudes along with the various revitalization initiatives indeed saw the number of speakers of te reo Māori increase.\textsuperscript{34} The 2006 Census established a Māori speaking population of 157,100 people in New Zealand. This amounts to four percent of New Zealand’s residents. The vast majority (84 percent) self-identified as Māori. Within the Māori population about 23 percent stated to have the ability to have a conversation in te reo Māori (Ministry of Social Development, 2008, p. 82). Figure 1 below illustrates the distribution of speakers of Māori according to age and gender based on Census 2006 data:

\textsuperscript{33} Other languages (e.g. Sámi and Inuktitut) had achieved the status as an official language prior to this, but only within specific regions and not within a whole nation state (May, 2004, p. 255).

\textsuperscript{34} While absolute numbers of te reo speakers have indeed continued to increase until 2006, the Māori population grew quicker. Therefore, the proportion of te reo speakers in fact decreased compared to the 2001 Census (Ministry of Social Development, 2008, p. 82).
The level of proficiency has also improved as a Te Puni Kōkiri (2008) report highlights. In 2006 a small but increasing number of Māori (14 percent) considered themselves to speak te reo well or very well and slightly fewer (13 percent) indicated that they spoke fairly well. The passive skill of listening allowed greater confidence amongst the interviewed individuals with 21 percent placing themselves in the well or very well category and 22 percent in the fairly well. Getting involved in activities on the marae, listening to Māori radio stations and watching television programs in te reo were all factors contributing to greater listening proficiency. Reading skills are at a similar level – 21 percent surveyed were reading well or very well in Māori whereas fewer (19 percent) read te reo fairly well. The active skill of writing again is lower than its passive counterpart (17 and 15 percent indicating well/very well and fairly well writing skills respectively). In all skill areas improvements between 2001 and 2006 are noticeable in the two most proficient levels detailed above. Further, regarding the lowest proficiency level (‘No more than a few words or phrases’)
substantial decreases are observable across the board (Te Puni Kōkiri, 2008, tables 8 and 9).

Overall, the concerns surrounding this indigenous language begin to ease, but if it remains to be associated with negative labels the choice to speak te reo Māori in public will always be hampered (Boyce, 2005, p. 96). Figures from the 2006 Survey of the Health of the Māori Language (Kalafatelis et al., 2007) showed that the use of te reo Māori in public situations like shopping continues to be much lower than in private spheres or traditional Māori spaces like marae.

**Cultural practices**

Knowledge of traditions, legends and myths and participation in Māori communities (such as whānau, hapū or iwi) and in Māori cultural practices are of great importance in enabling identification and to be identified as Māori (Kawharu, 1984; Kukutai, 2003; Metge, 2004). Many traditions take place in Māori communal spaces, with the marae remaining most central:

The marae is the focal point of Maori culture and communal activities [...] Despite the corrosive effect of missionaries on the culture of Maori society in New Zealand and the assimilationist policies of successive governors, the marae as an institution has persisted into the modern era (R. Walker, 1992, pp. 15 and 17).

When talking about contemporary marae the term usually refers to a whole complex of buildings (or facilities) – most prominently the meeting house (whare nui) which is named after an ancestor or an important event and is decorated with carvings, paintings and weavings – and a courtyard called marae ātea (R. Walker, 1992). Marae create a distinctive Māori space governed by Māori values and customs and they provide opportunity to develop a great variety of skills ranging from carving, weaving, dancing, singing, to martial arts and oratory.
While marae are usually associated with a particular tribe, with increasing numbers of Māori moving to urban centers the desire (and need) to have a ‘place to stand’ away from the homeland arose (Meredith, 2006). The first urban marae (besides those belonging to tāngata whenua) were founded by migrant tribal groups with relations to and permission from local tribes. An increasing number of marae belong to churches, secondary schools and tertiary institutions as well as pan-tribal organizations like Urban Māori Authorities. Most of these marae appear and function very much like the rural counterparts: they provide a space for hui (gatherings), tangihanga, family reunions, weddings and other celebrations (H. M. Mead, 2003; R. Walker, 1992).

The protocols and traditions followed on marae establish particular roles and relationships and provide space for whanaungatanga to be upheld and strengthened.\textsuperscript{36} One central aspect of any marae encounter is the differentiation between tāngata whenua and manuhiri (visitors) who are called upon the marae by the kaikaranga, a skilled woman extending the initial welcome to the visitors. The karanga is a “spiritual call” providing a safe passage in a highly tapu situation (Tauroa & Tauroa, 1986, p. 51). Speeches (whaikōrero) have a central role on the marae as they welcome the ancestors and the people present and acknowledge the whare nui and the motivations for the gathering. The language of these very formal speeches is (almost) always Māori; whakatauki, tauparapara (incantations) and metaphors are used and references made to events in the past as well as whakapapa. Both, tāngata whenua and manuhiri are given the opportunity to speak. Following the speeches, a koha (gift) is presented by the visitors. This can be food contributions or valuable items but today the “koha in an envelope” (Tauroa & Tauroa, 1986, p. 82) is most common. Koha establish a relationship of reciprocity or fulfils such obligations (H. M. Mead, 2003, chapter 11).

\textsuperscript{36} Many resources addressing those who are unfamiliar with the setting of the marae set out to equip individuals for their first visit by explaining the dos and don’ts (see for example Harawira, 1997; Salmond, 2004; Tauroa & Tauroa, 1986).
The final central aspect of formal welcome ceremonies is the lifting of the visitors’ tapu which is achieved by both sides shaking hands, hongi (pressing of the nose), or kissing. Through this the manuhiri are established as honorary tāngata whenua. By sharing a meal together the transition of the manuhiri from a highly tapu state upon arrival to one of noa (free of limitations; cooked food is considered noa) is completely fulfilled (R. Walker, 1992). The feast (hākari) has another important function: to offer hospitality and respect to the guests. The mana of the people and the success of the gathering are closely tied to the ability to provide sufficiently for everyone. The support of all whānau members is therefore of upmost importance. Not everyone contributes to the formal aspects of a gathering but their part is of no less importance, on the contrary. Youth are also expected to help and learn all necessary skills by observing. They naturally progress in their roles of duties as they grow up (Salmond, 2004). The voluntary work of the whānau, though, is not only restricted to the times an actual hui takes place. The upkeep of the grounds and buildings is just as important and provides further opportunities for people to strengthen the bond of whanaungatanga and is often referred to as working-bees.

Marae interactions influence the individual’s identity and behavior which is taken with them outside the grounds of the marae thereby impacting even on those who do not attend marae gatherings (Durie, 1999). Most writers describe the marae as a form of safe-haven where everyone can immerse in Māori specific ways of behaving, thinking and interacting; where relationships and tasks are more important than time schedules; where the past is not only remembered but brought into the present; where the individual is located within the wider context and interconnectedness between humans, the natural and the spiritual world are important aspects of interactions and thought. The marae functions as a place where everyone can recharge their strength and just be Māori. One of the most important occasions where this can be achieved is unfortunately a very sad time for many: the tangihanga.

The ceremonies surrounding the death of a person are one of the best maintained facets of Māoridom (Sinclair, 1990). Aspects of the actual rituals have been influenced by European practices and values, but traditional attitudes, purposes and
practices of great importance to Māori continue to impact on the tangihanga today. Most tangihanga take place on marae allowing the deceased to return home one last time. The central purpose of tangihanga on one hand is to comfort the wairua (spirit) of the deceased to allow it to successfully become an ancestor and on the other hand to comfort the bereaved. Aroha and manaaki emphasize the personal relationships between the mourners (Oppenheim, 1973; Voyković, 1981). The coming together of family and friends, some of whom may have not been seen for a long time, renews these relationships. Further, due to the tangihanga taking place on marae and following Māori practices, it allows Māori to fully immerse and develop a feeling of unity. In Harry Dansey’s (1992, p. 110) words: “the deep well of Maoritanga [(Māori culture) is] tapped so that all who come may refresh and strengthen themselves”.

But not all Māori perceive occasions like tangihanga to contribute positively to their identity. The experiences recounted by young adults in van Meijl’s (2002, p. 58) research highlights notions of disassociation. During their childhood, tangihanga were seen as being important and positive for their identity but this changed during their teenage years. The expectation to take an active part when becoming older can lead to discomfort, shame and embarrassment. Karakia (prayer), waiata and oratory carry central functions throughout the rituals and ceremonies surrounding tangihanga, but the teenagers concerned did not hold these skills leaving them marginalized.

**Performing arts**

The performing arts on the other hand are practices most Māori today are able to relate to positively in one way or another. Despite western influences, and in the case of the action song (waiata-a-ringa, waiata kori) partly because of them (Armstrong, 1964, p. 103), performing arts continue to be an “integral part of Māori life” and are not limited to entertainment only (Matthews & Paringatai, 2004, p. 115). Today the haka (posture dance) is the most widely known performing art because it is also closely associated with rugby. Fans expect the New Zealand national team (The All Blacks) to perform a haka before kick-off, so much so that it evokes media attention
if it is done out of the public’s eye (International Herald Tribune, 2006; Vecsey, 2006). Haka are commonly perceived as war-dances, but in fact not all are. Haka can be distinguished in two broad types; those performed with weapons (haka peruperu) and those without (haka taparahi) (Gardiner, 2007).

The action song (waiata-ā-ringa or waiata kori) is a relatively new development based on the traditional haka waiata, which is slightly less energetic in its movements and slower in pace than haka (Ngata & Armstrong, 2002). Many contemporary songs were composed during the wartimes expressing the emotions of departure, homecoming and loss (Gardiner, 2007; Kaiwai & Zemeke-White, 2004; Ngata & Armstrong, 2002; Shennan, 1984). Today the waiata kori is central at any Māori occasion because it was able to stay highly relevant by merging traditional Māori aspects with contemporary Pākehā influences:

It typifies a harmonious blending of the old and the new, it embodies the music and the poetry that is the very soul of the people, and above all, it is a vigorous expression of the pride and of the hopes and aspirations for the future (Ngata & Armstrong, 2002, p. 10).

Themes for songs in the past and present alike are motivated by current issues and events (Kāretu, 1993, p. 49). Armstrong (1964, p. 123) mentions common inspirations for the composition of a new haka or waiata are to welcome and farewell loved-ones, expressions of disagreement and grievances, triumphs and similar events. Tīmoti Kāretu (1993, p. 49) also provides examples of recent compositions addressing social problems like smoking, obesity, traffic accidents and intergenerational conflicts.

Many of these new compositions are created for regional and national kapa haka competitions which “have become the modern-day substitute of the more violent

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37 Mervyn McLean and Margaret Orbell (1990) provide not only brief introductions to the distinction in purpose and lyrics of different song type, but also to their musical variations.
clashes of the past” (Gardiner, 2007, p. 136). Critical voices claim that these new-age battles cause the tribal variations of both song and dance to diminish because of increased exchanges, uniformity of styles (Papesch, 2006; Shennan, 1984, p. 46) or that growing professionalism and creativity threaten traditional elements (Richards & Ryan, 2004, p. 115). Te Rita Papesch (2006, p. 35) also criticizes the incorporation of overseas movements. But most writers agree, the levels of competence increased substantially because of these competitions and that in more recent times “a recapturing of traditional styles and dress” took place (Gardiner, 2007, p. 15) allowing Māori culture to be lived and celebrated. The national Māori Performing Arts Festival (Te Matatini) had its beginnings in 1972 and over the years developed into a showcase of Māori excellence. The regional competitions leading up to it get Māori individuals all over the country involved – be it as performers or spectators. Kapa haka groups are particularly relevant to youth, as Belinda Borell (2005a) highlights. In her research many of the participants were either actively involved in a kapa haka group at their school or were supporters.

**Belonging or being homeless in a cultural sense**

The move to urban centers had brought economic improvements for some Māori but at the same time it was devastating for many in cultural and social respects. Huia Tomlins Jahnke (2002) looked specifically at the differences between Māori women who were able to maintain a relationship with their origins differentiating between those who maintained a “metaphysical link” and those with a “physical” connection “to the home-place” (p. 506). *Experiencing* whānau- and tribal ties, learning about the land and history, about tikanga and values during childhood was central for developing a deep identity as Māori for both groups, though, how this was achieved differed. The physical connection is established by a person either permanently living within the boundaries of the hapū to which she/he is associated through

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38 Hector Kaiwai and Kirsten Zemeke-White (2004, p. 142) define kapa haka as “a generic term used today to describe a ‘Māori associated’ musical tradition that is based around the performance of haka (dance), mōteatea (traditional chant), the modern poi (the poi dance), and waiata-ā-ringa (action song)”. Poi are small balls attached to a string.
whakapapa or by visiting the “home-place to carry out active participatory roles in family and tribal affairs” (p. 505).

Actually partaking in life with extended family and activities on marae and engaging with the land allowed a physical relationship to the home-land to develop. Learning about people and locations never encountered through stories told by relatives and other adults and the emphasis on values like manaaki within the setting of the home were crucial in attributing a mere genealogical connection with deeper meaning and to create a ‘metaphysical home-place’ to which the person could relate. A Māori upbringing, while the means might vary, is important in developing a sense of home and Māori identity (Tomlins Jahnke, 2002), a notion also seen as being of great significance by Ngaha’s (2004) participants.

Its absence, not knowing about whakapapa and one’s history, can lead to the opposite: ‘cultural homelessness’ (McIntosh, 2005, p. 42). A number of research projects in recent years began to address the issue of ‘cultural homelessness’ as well as the negative side of enculturation. Often focusing on adolescents these individuals are perceived as lacking orientation and going through life lost and distanced from their roots and communities. Being Māori through whakapapa does not mean that others will acknowledge this fact if an individual does not look or act accordingly. But an increased awareness exists that the strict adherence to traditional markers of identity can be problematic (Houkamau, 2006, p. 218).

Borell, van Meijl and Houkamau all call for a consideration of unconventional or, as Borell refers to them, ‘experimental’ markers when addressing contemporary Māori identity. In the actual expression of such markers these authors differ to a great extent which is likely due to the different populations they investigated. Van Meijl (2002; 2006) was interested in the experiences of Māori youth who abandoned school and were partaking in marae based vocational training. Borell (2005a; 2005b) focused on adolescents living in South Auckland. Houkamau (2006) interviewed Māori women between 18 and 75 years separated in three age cohorts. Differences in life-experience between kuia (female elders) and rangatahi (youth) and regarding
education are strong contributors towards the variations of identity markers throughout the studies.

Houkamau (2006, p. 222) suggests that Māori humor and enjoying ‘Black’ music are relevant to Māori identity, the latter aspect particularly to younger people. Other aspects considered important for identification as Māori are the shared “oppression” that Māori faced, the Treaty of Waitangi and the Māori renaissance” (ibid.). The involvement in tertiary education appears to be especially relevant in the development of an awareness and understanding of matters relating to the Treaty and important historic events, since most did not engage with these issues in detail before entering university; Borell and van Meijl do not mention these aspects in any way.

Borell (2005b, p. 200) ascertains that her participants perceive particular forms of family life as indicators for Māori identity. The lack of “routines such as taking meals together and having family outings” and “bad parenting” were associated with being Māori. The following two aspects relevant to the identity of Māori youth are to some degree influenced by the location of Borell’s study. Firstly, a (usually very loose) connection to a gang is common and often influenced by the wider family or community. Secondly, the greater Pacific Island population of South Auckland enables an affinity of Māori youth with these communities. An identification with a Pacific Island culture is often given when parents come from a mixed background, but to many rangatahi a close relationship and involvement with the Pacific Island community is important not only because they share similar experiences, but also because Pacific Islanders are perceived slightly more positively within New Zealand society (Borell, 2005b, p. 202).

A distinctive aspect of Māori identity suggested by van Meijl’s (2002, p. 59) participants relates to education where being Māori is frequently equated to being a “slow learner”. For his participants in many cases having been “guided to a special class of slow learners […] left] a lasting impression on the development of their

39 In the 2006 Census seven percent of those who identified as Māori also stated belonging to the Pacific Island group (Statistics New Zealand, 2007d).
identity as Maori” (ibid.). For many under-achievement indeed is a reality, however, changes in the education system ranging from kura to improved mainstream education focusing not only on the individual student, but also to involve whānau and the wider community (Ministry of Education, n.d.) contributed to Māori students leaving school with higher qualifications (Ministry of Social Development, 2008).

The strongest similarity ascertained by all three authors relates to the socio-economic situation. Being Māori for many means being poor, having just enough to eat, being unemployed and facing a higher likelihood of imprisonment or teenage pregnancy; statistics readily picked up by public- and media discourse. But these factors are perceived as contributing towards a positive identity by many, because they require strength, resourcefulness, skills, efficiency and modesty to get by in everyday life; all were similarly important attributes required in the past. The experience of scarcity or deprivation is a common and strongly influencing factor amongst Māori, which, in some respects also impacts on other unconventional aspects of Māori identity. Another common identity marker can be seen in the importance of belonging; not necessarily to a hapū or iwi, but rather to a suburb, town, community or organization like churches, voluntary groups or sports clubs. Affinity and shared interests, not essentially related to the Māori world at all, replace the centrality of belonging to and being accepted by a tribe.

These experimental markers represent, as Houkamau (2006, p. 223) highlights, “the person’s unique interpretation of what it means to be Māori which reflects their own social background, relationships and circumstances.” Many notions of traditional Māori identity are still appreciated in this context like interpersonal relationships, the importance of family and belonging to a local community but most of all to take strength from and to be proud of being Māori.
Tribal identity

Tribalism is a central aspect of Māori society and identity. The fundamental forms of social organization and identification in the past were whānau and hapū. Ballara (1998) in her highly acclaimed *Iwi: The Dynamics of Māori Tribal Organisation from c. 1769 to c. 1945* takes a historic perspective on hapū and iwi and on how various changes affected the social organization of Māori society. Throughout the book the significance of hapū becomes apparent, but also their diversity. It was common for tribal groups to fuse, split, re-form, disappear and to grow. Most hapū were highly transient between small settlements, moving from one resource to the next within their own territory. Some ‘squatted’ in the territory of others and it was further common for a number of different hapū, even from different iwi, to live in larger communities. Overall, hapū were greatly independent and flexible, but at the same time part of a highly interdependent system; kin-group alliances for various reasons were widespread, both for peaceful enterprises and military purposes (which were usually short-lived, local and small-scale). Increasing depopulation caused by epidemics and intensifying conflicts increased transience and the mixing of groups as refugees sought protection by neighboring groups. Small hapū disappeared as an acting group or merged with others and some sought the strength of even greater unity.

The Musket Wars of the early 1800s were, as Ballara (1998, p. 237) points out, not the cause for the social change in Māori society, but rather its accelerator. Van Meijl (1995, p. 317, citing Cleave 1983 and Sutton 1990) argues that “at this time the tribal organisations and their paramount chiefs […] had settled firmly”. However, Ballara does not see an institutionalization of iwi as the central socio-political organization until much later when threats extended to whole regions, particularly during the New Zealand Wars; she rather highlights the increase of non-kin alliances during the Musket Wars which in turn intensified the identification with descent groups (Ballara, 1998, p. 240). Peace was brought about on one hand by a balancing out of firearms (van Meijl, 1995, p. 317) and on the other by the increased influence of Christianity (Ballara, 1998).
New modes of settlement (permanent villages, higher population density, division along denominations or believers and non-believers) and economic opportunities impacted greatly on the two central aspects of traditional social organization: whakapapa and connection to tribal land. Increased intermarriage resulted in many hapū having whakapapa connections to different iwi. And with increased contact to the settlers, a growing number of individuals did not only have a multitude of tribal affiliations, but also had genealogical connections to Pākehā. Intermarriage has always been an important political strategy. In times of increased migration between tribal areas mana over land was not simply ascertained by conquering the people or by establishing oneself on land. Rather the offspring of intermarriage with tāngata whenua established their rights to land through whakapapa (Ballara, 1998).

Additionally, occupation and participation were, and continue to be, of great importance (Kawharu, 1984). However, the close connection to tribal land was weakened by migration during the years of war and later because of economic mobility in search of employment.

The greatest impact on land and tribal organization, though, occurred through land alienation (both legal and illegal), the Native Land Court proceedings and government policy (Maaka, 1994). The government’s preference to deal with larger tribal groups pushed hapū towards the backdrop of the socio-political scene. Ballara (1998, chapters 20 and 21) stresses that not all regions were affected equally and illustrates how different groups approached these challenges, using Tūhoe and Te Arawa as examples. Thus it becomes apparent that the situations, developments, threats and strategies differed, but eventually saw similar outcomes in all areas: the promotion of the iwi as the main political force.

Until the 1980s government ignored the tribal nature of Māoridom whenever possible and rather conceptualized Māori as one homogenous ethnic group (C. W. Smith, 1998). Nonetheless, Māori continued to uphold their tribal organizations. After the Second World War, the rapidly increasing rate of urbanization accompanied with adverse government policies saw the mana of tribal organizations, their leaders and culture negatively affected. The earlier mentioned revitalization
movements beginning in the 1960s were pan-tribal in nature. However, the establishment of the Treaty of Waitangi Tribunal (Tribunal) had an influential impact on the ‘revitalization’ of tribalism in Aotearoa. One claim brought before the Tribunal is of particular relevance in the context of this thesis because the unfolding events surrounding the distribution of the settlement amongst Māori influenced the understanding of what constitutes a tribe, which also impacted on Aotearoa’s cyberspace (see Chapter Three).

The Muriwhenua Fisheries Claim was concerned with the question of fishing rights of tribes in the Muriwhenua (far-north region of Aotearoa) and how they would be affected by an introduced quota-system for commercial fishing. The Tribunal’s finding led to the restriction of the quota-system in the far-north. A short time later, Tainui and Ngāi Tahu jointly achieved the extension of these restrictions for all of the country. Details of the historic developments relating to these Fisheries Claims would surpass the scope of this section; suffice it here to say, negotiations led to two agreements which, taken together, returned about 23% of commercial fishing rights plus a large lump-sum to Māori. The agreements were formalized by government in two acts in 1989 and 1992. A share of the assets was to be managed by Te Ohu Kai Moana (The Treaty of Waitangi Fisheries Commission) for the benefit of all Māori but other assets were to be transferred to iwi. Neither of the acts however clearly defined what was to be understood under the term iwi (Webster, 2002).

This left it to the Fisheries Commission to decide on a characterization of iwi they would work with. The Commission was influenced by the government’s definition developed for the Rūnanga Iwi Act (see Footnote 29 above) which “defined for Māori” (Carter, 2004, p. 117) that the features of ‘traditional’ iwi should comprise a genealogical lineage to an ancestor, hapū, marae, a defined district and “an existence traditionally acknowledged by other iwi” (ibid.). The act was only in existence for

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40 The interested reader is directed to Paul Moon (1998; 1999), Hal Levine (2002), Webster (2002), or the Tribunal’s website (www.waitangitribunal.govt.nz) for further details.
six months before being repealed by the incoming new government but it has a continuing influence on Māori society (O’Sullivan, 2007).

Government agencies prefer to engage with iwi regarding social service provision, funding and the allocation of the above fishing assets. Whānau and hapū are subsumed under iwi which are on one hand ‘freeze-framed at 1840’ (Maaka, 1994, p. 314) and on the other required to be modern legal entities. Those organizations not meeting the government’s criteria are denied the (official) status as iwi. The saga of the allocation of the fisheries settlement came to a close with the passing of the Māori Fisheries Act in 2004 setting out a mixed scheme of allocation to iwi: “inshore quota [is to be allocated] in proportion to the coastline of that iwi, while deepwater quota is to be allocated 25 per cent as to coastline and 75 per cent as to the population of the iwi” (Te Aho, 2005, p. 154).

Treaty settlements are an important step forward in righting the wrongs of colonialism and they have brought advancement and betterment for some tribes. But some voices critically address developments in the context of the neo-liberal political and economic situation in Aotearoa. One prominent and (internationally) well published example is Elizabeth Rata who cautions that “the very colonialism that Treaty settlements are seeking to escape become reinforced in the process” (Rata, 1998, as cited in Maaka & Fleras, 2005, p. 67). Graham Smith (1995; 1998) similarly speaks of ‘neo-colonisation’. One aspect of this neo-colonization is the commodification of iwi (and other aspects of Māoridom) placing tribal organizations in a climate of maximizing profit, increased individualization and competition all of which are contrary to Māori values. Rata’s (1999; 2003) notion of ‘neo-tribal capitalism’ highlights the increasing corporatist nature of iwi while they are still being called ‘traditional’ in a similar vein but further focuses on the exploitative relationship between a neo-tribal elite and the Māori masses (Poata-Smith, 2004; Rata, 2006).

The focus on ‘tribes’ excludes detribalized Māori. In many cases the colonial past contributed to their loss of connection. In the scramble for limited resources they are
yet again overlooked (Rata, 2005, p. 274). Urban Māori groups, particularly *Te Whānau o Waipareira* and the *Manukau Urban Māori Authority*, became active in this regard. Wanting the understanding of iwi to be adapted to be inclusive of pan-tribal organizations like themselves (not least because of the fisheries settlement) they took the matter to the courts. After a long and complex legal process the High Court ruled that iwi meant *tribal* and Urban Māori Authorities were excluded from the fisheries settlement. Despite this ruling, Urban Māori Authorities provide a wide range of government supported services to Māori irrespective of tribal affiliation, though their access to funding is more restrictive compared to iwi (Sissons, 2004).

Detribalized Māori are not the only ones in a state of (tribal) vagueness. Tribal Māori living outside their tribal area (rohe) find themselves in a similar situation. Hugh Kawharu (1984) stresses that full membership requires active participation in tribal affairs but with increasing numbers living in areas distant from their rohe this becomes difficult. Taura here iwi or similar groups are one way to keep the connection to the rohe upright but even this approach can run into problems (Maaka, 1994). Matters of concern are likely to differ between the two groups, particularly if the iwi is occupied with a Treaty claim or negotiations. But even after a settlement is achieved the line of communication between iwi and their distant members can prove difficult and requires specific planning (Solomon, 2006, p. 214).

Metge’s (1964; 2004) work emphasizes that whānau and hapū continue to be of relevance in the everyday life of many Māori and that even in urban settings their importance is great (Gagné, 2004; Kawharu, 1996). Writers like Rata and Maaka or Urban Māori Authorities do not negate the importance of tribal organizations *per se*, but rather remind us that the reality of many individuals differs from the traditional

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41 Pare Keiha and Paul Moon (2008) provide concise background information on both these Urban Māori Authorities and the National Urban Māori Authority instituted in 2003.

42 In 2006 it was estimated that between 115,000 and 125,000 Māori were living in Australia alone (Hamer, 2007, p. xi). Statistics New Zealand does not establish how many Māori live outside their tribal area but considering the rate of urbanization this number can be expected to be rather high. Mark Solomon (2006) states that about half of Ngāi Tahu’s members fall in this category.

43 Taura here iwi is a tribal organization in the territory of another tribe. The local host tribe has to agree on its establishment, so does the group’s home tribe. Taura here iwi are legal bodies with an elected trust board (Maaka, 1994).
concept of Māori social organization. Maaka (1994, p. 329) calls for change led and defined by Māori:

The issue can not be seen in terms of a simple opposition between tribal social organization and pan-Māori groupings; retribalization […] requires a radical redefinition of tribe rather than the revitalization of a traditional sociopolitical grouping. Membership of the new tribe will need to be defined by association, commitment, and domiciliary location rather than by descent alone.

Change is already taking place all over the country (and the world) when kapa haka groups are formed not on the basis of common descent but because of shared interest (Papesch, 2006), similarly to Māori sports clubs, urban marae, or a new understanding of whānau including kin as well as unrelated friends and work colleagues (Hamer, 2007; Metge, 2004). Change is “inevitable” as Maaka (1994, p. 329) stresses and has always been part of Māori society; a fact pre-eminent in “some of the most popular folk tales of ancient Maori society” (Barcham, 1998, p. 306).

**Social and ethnic identity**

The preceding discussions were concerned with various aspects and issues relating to Māori identity both on the individual and collective level. The concept of identity has enjoyed widespread prominence within the social sciences in recent years and approaches like symbolic interactionism and identity theory receive more and more attention yet again (Stryker, 1987; Stryker & Burke, 2000). At the same time some authors like Rogers Brubaker and Frederick Cooper (2000) voice their concerns about the vague use or even abuse of identity as an analytical concept. While acknowledging and keeping such criticism in mind, we cannot (and neither do Brubaker and Cooper) dismiss that identity matters in everyday life. Various conceptions or usages of the concept of identity exist which, in its broadest sense, “is the human capacity – rooted in language – to know ‘who is who’” (Jenkins, 2008b, p. 5). It is not an object one has, but rather Richard Jenkins goes on, a process which provides meaning, a map of sorts for life as social beings.
In New Zealand, as the preceding pages showed, ethnic identity, the knowledge of ‘who is who’ continues to be influential in organizing many spheres of social life. An ethnic group, Talcott Parsons (1975, p. 56) writes, is “a group the members of which have, both with respect to their own sentiments and those of non-members, a distinctive identity which is rooted in some kind of a distinctive sense of its history”. For most of the history of Aotearoa there has not been any such concept as ‘Māori identity’ or ‘Māori people(s)’ (Ballara, 1998; R. Walker, 1989). However, ethnic groups are constantly negotiated, their boundaries adapted and (re)located (Barth, 1969/1996) and their label changed (Jenkins, 2008b). The presence of and interaction with the ‘other’ is paramount for a group to develop self-consciousness and for their status as a separate group to gain social significance.

The importance of the past cannot be underestimated in understanding ethnic groups in the present. The word ‘māori’ was widely used in pre-contact times in its adjective form meaning normal or ordinary. Herbert W. Williams (1957, p. 179) in his highly acclaimed dictionary gives various examples regarding its usage like ‘tangata maori’ which was used to refer to “human being, as opposed to a supernatural being”. However it was not employed as a signifier of group identity until around 1850 when it became used as a noun with its now commonly understood meaning: “Person of the native race, New Zealander” (H. W. Williams, 1957, p. 179). The various tribes were ‘ordinary’ to each other compared to ‘pākehā’ people who were foreign.44 The word Māori signifies a relationship between ‘them’ and ‘us’ which developed over time through interaction between the groups. It denotes differences between the groups and emphasizes similarities within their ‘boundaries’. These boundaries are, as Frederik Barth (1969/1996, p. 300) stresses, socially constructed. Whereas the ‘nominal’ aspect of Māori ethnic identity, the name (Jenkins, 2008a, p. 58), appears to have been introduced by Māori themselves (H. W. Williams, 1957, p. 179), the

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44 Atkinson (1892) arrives at the conclusion that ‘tangata maori’ with the above noted meaning is likely to have been used by the ‘natives’ to emphasize their humanness compared to the ghostly, supernatural appearance of early European visitors. Over time the word developed into a common reference term in everyday interactions. H. W. Williams (1957) notes the terms ‘pakepakehā’ and ‘pākehakeha’ to mean “[i]maginary beings resembling men, with fair skins”.

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meaning associated with it, though, developed (and continues to do so) through interaction within and across groups.

Barth’s (1969/1996) seminal introduction to *Ethnic Groups and Boundaries* continues to be influential to the thinking of many writers on ethnic identity. His emphasis on the boundary of ethnic groups and their continuing existence despite possible – or rather likely – changes to the social forms of organization and cultural aspects associated with these groups find relevance here. Anthropologists (and other social scientists for that matter), he criticizes, focus too much on the ‘cultural stuff’ making ethnic groups appear fixed and unalterable. In turn, Barth’s argument stresses the importance of historic developments and human agency in ‘boundary maintenance’ of groups, their shape and level of significance.

The preceding discussions concerning Māori identity markers showed how ethnic boundaries were maintained to varying degrees despite governmental policies and actions by Māori. The impact of human agency becomes particularly apparent when looking at the development of tribal organizations and their central position within Māoridom and political discourse today. The boundary between Māori and Pākehā (and the rest of New Zealand’s populations) continues to be maintained through the acknowledgement of the Treaty of Waitangi and the persisting focus on biculturalism ahead of the multicultural reality (Bartley & Spoonley, 2005).

Māori group identity is influenced by ‘the other’. Jenkins (2008a) criticizes that many discussions of group identity focuses on the internal processes with the effect of neglecting outside pressures. He differentiates between two distinct processes: group identification and categorization. Group identification in fact is created by internal processes of developing understandings of belonging and group membership based on common history, experiences and in the case of ethnic groups shared ancestry. Categorization on the other hand shifts the focus on ‘the other’s’ perception of and ability to define a group’s identity. This is not to say that all categorization processes become internalized and become part of the process of group
identification. However, depending on the context, categorization can impact on a group’s identity.

The above discussions are suggestive of many examples. The case of the education shall function as a brief but explicit example. Māori students, it was noted above, in the past were prohibited to speak te reo Māori on school grounds and corporal punishment was a frequent consequence for breaking this rule. Also, Māori pupils were perceived and treated as slow and lazy learners by the school system. This in turn contributed to a change in behavior and outlook of parents regarding the upbringing and education of their children, downplaying Māori aspects in their lives and shifting to a stronger Pākehā upbringing. These negative ascriptions affected the self-perception of Māori in this regard.

Categorization however can also lead to a reaffirmation of group identification which in turn can affect categorization. These processes are not simply intertwined but a two-way relationship is possible (Jenkins, 2008a, p. 57). A positive shift in the education sector’s perception of Māoriness and its importance to the success of Māori students now prevails. At all levels of the education sector, Māori language, culture and social organization are seen as important contributors to the success of Māori students. This example highlights the interrelatedness and two-way relationship between internal and external processes as these positive developments had their onset in Māori initiatives and took place to a great extent due to the relentless efforts of Māori parents and educators. Jenkins (2008a; 2008b) refers to this throughout his writings as the “internal/external dialectic” in identity construction which is central to the understanding of ethnic identity applied in this thesis as well.

Categorization can only have an impact if one group is able to dominate or exert authority over the other (Jenkins, 2008a, p. 55). The preceding pages highlighted the dominance of Pākehā over Māori at many occasions; war, land, language, cultural practices and not least regarding social organization. Joane Nagel (1986) impresses on us the far reaching power government possesses when it comes to processes of
categorization. This becomes apparent in the earlier tracing of Statistics New Zealand’s shifting definition of Māori identity. The impact of political discourse and judicial authority over the understanding of iwi was discussed briefly as well. In this case, the particular example of urban Māori organization further illustrates how categorization and group identification are inter-linked processes. The processes of “ascription and assertion” as Stephen Cornell and Douglas Hartman (2007) refer to Jenkins’ categorization and identification equivalents, are always in “interaction”.

Group identity “is never”, they posit, “the product of one or the other” (Cornell & Hartmann, 2007, p. 84).

In this regard it has to be noted that Māori group identification and categorization were embedded in two very distinct socio-political contexts after the signing of the Treaty of Waitangi which can be associated with shifts in power. The earlier situation was strongly influenced by assimilationist ideals significantly limiting Māori exertion of self-determination (Awatere Huata, 1984; R. Walker, 2004). The later circumstances however were and continue to be shaped by notions of a bicultural nation state which sees Māori regaining power in some areas more than in others (Maaka & Fleras, 2005; Moon, 2009). The importance of political acknowledgement (or lack thereof) of ethnic groups in the shaping of ethnic boundaries need not be underestimated as Nagel (1998, p. 244) and others remind us as it can “increase identification and mobilization among ethnic groups not officially recognized”. Both processes, the acknowledgment and the continuing ignorance of Māori as a significant political group when opportune to dominant political and social forces, have been central to the revitalization movements of the 1960s and continue to be as highlighted in recent controversies surrounding the Foreshore and Seabed Act (Gagné, 2008) or the Auckland ‘Super City’ council (Tahana, 2009a).

Cornell and Hartmann (2007, p. 77) add a further notion to our understanding of ethnic identity, its ‘comprehensiveness’. This concept reflects the level of extensiveness to which ethnic identity organizes interactions and other aspects within society. If ethnicity contributes to a high degree to the social organization of the life of group members and of collectives the authors refer to a ‘thick identity’. On the
other hand, if the organizational role is minor Cornell and Hartmann designate such a case as a ‘thin identity’. At this end of the comprehensiveness spectrum an ethnic identity is more strongly associated with feeling merely a member or being proud of one’s ethnic background but everyday life is, in organizational terms, hardly influenced by the ethnicity. Herbert Gans (1979/1996) calls this ‘symbolic ethnicity’.

It is crucial to consider the comprehensiveness of an ethnic identity within a specific context as it too can wax and wane over time. Māori identity was not existent before the arrival of ‘the other’ and cannot be said to have been influential in its impact on social life within Māoridom; the preceding engagement with Māori identity markers and practices though stresses that Māori ethnicity is indeed very comprehensive in its contribution to social organization and it is not only restricted to Māoridom either. The All Black’s haka and the common practice of having Māori ceremonies in the public and political spheres are testimony to that. Figure 2 below illustrates the possible variation of ethnic identity along two axes when bringing the level of comprehensiveness and the degree to which an identity is asserted or assigned together.
Social interaction within and across group boundaries in a specific historical context come together in their construction of a collective identity along a continuum of assigned/ascertained and thick/thin. Māori identity can be understood to be increasingly ascertained and becomes ‘thicker’ as Māori world-views, practices, language and knowledge become influential in evermore spheres of everyday life in Aotearoa.

Parsons (1975), in *Some Theoretical Considerations on the Nature and Trends of Change in Ethnicity*, proposed that in modern times with increasing complexities of roles and social possibilities individuals are faced with growing difficulties to develop a relatively stable individual identity. A revival or return to ethnic groups is hence seen as a possibility for individuals to achieve greater stability in their self-identity. Ethnic self-identity is, similar to group identity, a ‘social construction’. And as with collective identities they too are fluid, relate to specific life-histories, experiences and knowledge, are adaptable to the current condition and audience and are thus situational (Fenton, 2003; Fishman, 1996; Jenkins, 2008a, 2008b). McIntosh (2005, pp. 39-40) states: “Within New Zealand, my Māori identity is likely to be more constant as the primary focus. Overseas, I am firstly a New Zealander with my
Māori identity being unpacked as my interactions and relationships deepen.” And further she tells us that her ‘authenticity’ as Māori at times becomes questioned: “This challenge has been raised in a number of ways, often with a note of suspicion as to why I would want to be seen this way” (McIntosh, 2005, p. 39). This raises the question of what influences or constrains the development of self-identity.

A variety of different approaches and disciplines are concerned with the matter of individual identity and the self. Psychology certainly leads the way in this area and has prominently influenced the social sciences’ understanding of personal identity formation. The early writings of what became to be known as symbolic interactionism concerned with the interlinking of interaction, experience, reflection and the self provide a useful starting point. The early twentieth century saw the conception of the self as explicitly socially constructed emerge and hence individual identity began to be understood to be changeable.45 George Herbert Mead (1934, p. 135) for example notes:

> The self is something which has a development; it is not initially there, at birth, but arises in the process of social experience and activity, that is, develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process.

Charles Horton Cooley (1922) similarly stresses the process-like development of the self and the consciousness of ourselves as individuals. “Primary groups” (p. 34), our “family and neighborhood”, are central here as it is within these intimate social groups that we develop “a social nature”, an understanding of right and wrong and of the expectations others have of us. We have seen above that whānau continues to play a central role within Māoridom in this regard. This primary group is also incorporated in more institutional settings like kōhanga reo to provide the continual input of the wider community in the upbringing of tamariki (children).

45 Certainly these early writings on the social self were influenced by the works of preceding thinkers. The *Handbook of Symbolic Interactionism* (Reynolds & Herman-Kinney, 2003) provides interesting background information in this regard. Particularly Robert Prus’ (2003) and Larry Reynolds’ (2003b) chapters can be recommended.
Cooley’s (1922, p. 158) concept of the ‘reflected self’, which he also refers to as the now more widely known ‘looking-glass self’, is the personal understanding of ourselves which requires the interaction with others and the imagination of what they think of us. He notes three central elements in this reflective process: “the imagination of our appearance to the other person; the imagination of his judgment of that appearance, and some sort of self-feeling, such as pride or mortification” (ibid.). Our own imagination of ourselves would be meaningless without the reference of others; hence, social interaction, particularly face-to-face, is vital in the emergence of self-identity.

G. H. Mead (1934) similarly sees the self (and mind) develop through interaction with others through which individuals learn to recognize themselves as “objects” (p. 138). By taking the perspective of others the individual is able to reflect about her/himself and to see themselves as others do. Although the influence of the social is most central in the development of an understanding of the self, the social will is not fully forced upon the individual. Mead famously differentiates between two intrinsically intertwined aspects of the self; the social which he terms ‘me’, and the ‘I’ which is the reflexive and active self. In Mead’s (p. 175) words: “The ‘I’ is the response of the organism to the attitudes of the others; the ‘me’ is the organized set of attitudes of others which one himself assumes.” The ‘me’ thus represents the social expectations based in norms and develops by taking on the perspective of other ‘organisms’. ‘Me’ can be manifold depending on the relationships, group associations and roles an individual grows into and maintains and they are linked to specific social context, rather than the individual. Having several tribal affiliations therefore is not necessarily problematic as the Māori individual develops appropriate ‘me’ in interaction within different tribal settings.

The ‘I’, too develops over time and with experiences. In any given situation it is the ‘I’ which determines behavior but it does not do this fully unconstrained but rather in a reflexive process based on previous experiences and the expectations known through the ‘me’. However, for a “self in the fullest sense” (p. 154) to emerge it is necessary to learn not only to consider the expectations of one or few significant
individuals in one social interaction but those of all participants and beyond that of the ‘generalized other’. Mead (1934, p. 154) states: “The attitude of the generalized other is the attitude of the whole community.” It is through knowing the expectations, attitudes and behavior of the generalized other that the social influences the individuals’ actions.

Larry Reynolds (2003a, p. 75) reminds us that the ‘I’ to Mead is a process “not only of acting but of thinking” and stresses the active role of individuals as reflexive agents in their wider social context. Erving Goffman’s (1969) writing on The Presentation of Self in Everyday Life further underscores this notion of agency. On one hand he leaves no doubt that the self is socially constructed. On the other he allows for agency through the individual’s ability to manage her/his appearance to others (Branaman, 1997, p. xlviii). In his observation of everyday social life Goffman (1969) likens the presentation or rather management of the presentation of the self to others in interaction to a theatrical production. Each individual plays various roles throughout their life and acts these out on diverse stages with changing props and co-actors. The individual learns about her/his roles, about what is expected of a specific character and practices. Goffman differentiates between the front and backstage as areas of importance in the presentation of the self. The backstage allows the individual to reflect on possible outcomes of any given behavior, the audience’s expectations and likely reaction to the performance, and ultimately, to consider how best to present oneself. Similarly to Cooley’s looking-glass and Mead’s ‘me’, Goffman notes the individual’s awareness of the expectations the audience have in any given situation.

Both Mead (1934) and Goffman (1969) firmly established that the self never is a finished product but rather is in a constant state of development as new situations, experiences, roles and people are encountered, or, to take Stuart Hall’s (1996, p. 4) well known phrase slightly out of context, identity is about “becoming rather than being”. Today it is (strongly influenced by Goffman’s conception of theatrical roles) widely accepted that individuals’ identity is made up of various aspects, that it is in fact “multidimensional” (Jenkins, 2008b, p. 17). Ethnicity, as one aspect of self-
identity hence is learned through interaction with others from the ethnic group, the generalized other, as well as with non-group members (Jenkins, 2008a). In a reflexive process the individual internalizes what it means to be Māori, what expectations the world around her/him has and acts accordingly. The behavior is customized to each situation and previous experiences considered.

Post/late-modern thinkers however take this multidimensionality, agency and reflexivity in identity formation one step further. Whereas previously the different aspects of identity were seen to provide the individual with guidance and stability, high modernity with its fast technological developments, globalization, de-traditionalization, increasingly unrestricted possibilities of choice, commercialization and consumption makes the question of who we are more complicated and conflicting. Kenneth Gergen (1991, pp. 7 and 16) even envisions that the development of an “authentic self” will not be possible with increasing exposure to “compelling alternatives”. Similarly, Anthony Giddens (1991), too, notes the increasing options and complexity late-modern times bring. Self-identity is neither static or single-faceted but instead of an identity per se Giddens rather discusses the concept of the “reflexive project of the self” which requires the continuance of “biographical narratives” (p. 5). Identity is yet again not an achieved object but an ongoing process subject to constant revision. The self still is seen as constructed, similarly to Cooley’s, Mead’s and Goffman’s understandings. But to Giddens, not unlike Gergen, the individual is required to take even greater directorship in the scripting of their self. In Giddens’ (p. 75) words: “We are, not what we are, but what we make of ourselves.”

Giddens (p. 81) suggests that in late-modern times the choices of everyday life are not guided by tradition and the post-traditional individual relies on lifestyles instead. Lifestyle is conceptualized in a broader sense than the common understanding as “routinised practices […] incorporated into habits of dress, eating, modes of acting and favoured milieux for encountering others”. The individual reflexively chooses one lifestyle over another which differentiates it from tradition. Giddens’ and Gergen’s arguments certainly apply to Māori to some extent. Māori individuals and
collectives, just as other New Zealanders, are deeply embedded in settings of late-modernity. Nonetheless, it is arguable that some of the changes associated with late-modernity, particularly de-traditionalization and the reduced importance of kin or other close-knit groups, which contribute to the increased plurality of options and which require the individuals to be more proactive or self-reliant in the choices they make, are not impacting on the life of all Māori equally profoundly.

This understanding of increased possibility and freedom in any case involves embodied individuals who are rooted in complex social contexts. Humans continue to be social actors,

who are culturally embedded, structurally positioned, and who strive for recognition, fulfillment and meaningful lives. They do so by negotiating their several subject positions in existing configurations of power and inequality, by mobilizing and – if possible, considered useful, interesting or exciting – by engaging creatively with the cultural resources at their disposal (Karner, 2007, p. 84).

Identity theory, particularly Sheldon Stryker’s role theory and the concept of identity salience are useful in understanding the multiplicity of roles individuals find themselves in. This social psychological approach to identity and the many aspects that contribute to it is firmly based in symbolic interactionist understandings of the social construction of the self, however envisions society as vastly complex and differentiated. The self of an individual hence is viewed to “have distinct components […], called role identities, for each of the role positions in society that we occupy” (Hogg, Terry, & White, 1995, p. 256). Through interaction with others the expectations attached to the roles are learned. Some of these roles are only temporary, some of them stay with an individual for great parts of their life, some are influential in many situations, and some are only relevant in certain contexts (Jenkins, 2008b).

This complexity, both in terms of number of roles an individual has and their situational importance, regarding individuals’ Māori identities is particularly
apparent in the discussion of marae encounters. A Māori individual can have very
different roles depending on the concrete circumstances of each encounter. She/he
can be tangata whenua or manuhiri, a waiter or waited on, a kitchen help or in charge
of the hāngī (earth oven), a child free to roam the grounds or responsible to keep the
tamariki from harm, the kaikōrero (orator) or a listener; all of these roles are much
reliant on various factors like their whakapapa, age, gender, skills, commitment and
context. The notion of ‘identity or role salience’ (Stryker, 1968) allows us to
conceptualize this complex assortment of roles in a hierarchical structure. Similarly
to the earlier discussed understanding of the degree of comprehensiveness of an
ethnic group identity in social organization (Cornell & Hartmann, 2007), different
role identities can be variously salient as well, depending on the given context.

Stryker (1968, p. 560) defines identity salience “as the probability, for a given
person, of a given identity being invoked in a variety of situations.” He goes on to
add that whether a role identity becomes salient depends, as noted above on the
specific situation. McIntosh’s (2005, p. 39) personal anecdote illustrates this further
on a more abstract level; at times her identity as Māori is salient but in other
situations it is more relevant to be a New Zealander. Identity salience and the specific
context further depends on the individual’s “commitment” (Stryker, 1968). Peter
Callero (1985, p. 208) stresses that “the assumption that some role-identities are
more a part of the self than others and consequently have a variable effect on the
self” is central to the concept of identity salience.

Jenkins (2008a, pp. 48-50) influenced by Berger and Luckman’s understanding of
primary and secondary socialization suggests that ethnic identity can in some
instances be considered a primary identity, similar to gender. Jenkins (p. 49)
explains:
In a social setting where ethnic differentiation is sufficiently salient and consequential to intrude into the early world of children – over and above the routine acquisition of the ‘cultural stuff’ – ethnicity may be entered into self-consciously, as an integral part of the individually embodied point of view that is selfhood. Thus ethnicity may, depending on local circumstances, be a primary, although not primordial, dimension of individual identity.46

This can certainly be said to be true for some, but not all Māori in New Zealand. The preceding discussions of Māori identity highlight that many develop a deep and meaningful sense of being Māori later in their life not least because of movements like Te Ataarangi. Today’s context in Aotearoa sees ethnicity highly politicized and it is made a conscious aspect already in early childhood in an increasing number of families. The decision to send a child to kōhanga reo instead of kindergarten might be a conscious one. Applying Stryker’s (1968) understanding, an ethnic identity can be highly salient in an individual’s self-identity and therefore be ‘invoked’ in various situations. In any case, for an ethnic identity to remain or even become part of the identity hierarchy, personal commitment is necessary and it has to be meaningful to individuals in everyday in order for it to be more than just a symbolic aspect of their identity.

It was already noted that ethnic identity at the collective level is an intertwined process of self-identification and categorization. This also holds true for the individual as Cooley’s looking-glass self highlights. Miri Song’s (2003) book is intriguingly titled Choosing Ethnic Identity which appears to emphasize the process of self-identification. However, throughout the pages it becomes very clear that the options are variously limited for different ethnic groups and individuals. Some Māori individuals have their Māori identity questioned because they do not look the part or do not possess the right knowledge, be it regarding whakapapa, tikanga or mātauranga Māori. Others are not able to escape it, even if being Māori might not be relevant to themselves or in their daily routines. Also, the continuing association of negative

46 The debate surrounding the primordiality of ethnicity is sidestepped in this thesis. The discussion of identity and ethnicity as socially constructed emphasized here makes clear that a primordial ethnic identity is questionable. The interested reader is directed to Steve Fenton (2003).
stereotypes with being Māori (R. Walker, 1990; Wall, 1997) might lead to questions of why Māori would even want to self-identify as such. Christian Karner’s (2007) three ‘dimensions of ethnicity’ helps our understanding in this respect. These three dimensions are: Ethnicity as structures of action, as a way of seeing and as structures of feeling.

In a context where ethnic identity plays a role in organizing social interactions it provides individuals with an understanding of how the world around them works, their place in it, as well as on the expectations and limitations they are likely to encounter. This knowledge makes life predictable. Influenced by Giddens’ theory of structuration, Karner stresses that ethnicity simultaneously restricts and facilitates individuals’ actions. Giddens’ (1984) theory of structuration aims to overcome the social/structure – individual dichotomy. Instead of seeing neither fully free and unrestricted agents nor individuals completely bound by the social Giddens argues for individual action to be understood as embedded in social structures and further that these same structures are reproduced through action. Structures provide both rules and resources, but, due to the individual’s reflexive ability, similar to Mead’s understanding, Giddens allows room for rules to be broken and to be adapted. This is how social change comes about. Applying this to ethnicity, Karner (2007) stresses that as a structure of action, ethnicity provides both rules and resources for social interaction which can be renegotiated if the circumstances change. However, the emphasis lies on the reproduction of the structure, as this is “motivated by a deep-seated interest in maintaining a predictable, anxiety-controlling social world” (Karner, 2007, p. 28). This makes changes of any ethnicity usually a slow and contentious process which becomes very clear when considering Māori urban groups and their debated status as iwi. Change also takes place within tribes, as Wharehuia Milroy (2008, p. 191) stresses, and the mere ‘shadows’ of the past become the ‘real’ thing:
There are different types of Tuhoe identities now and when I talk about a Tuhoe identity I always think of my own generation as real Tuhoe. But when I compare my generation with our predecessors we are mere shadows of Tuhoe because we have not assumed all those things they had, even their knowledge; we have moved into a different world. But what we hope is that there are some things that are consistently being maintained by the younger generation as we engage with them and talk about who they are and what they are.

This ‘deep-seated motivation’ to keep things as they are, at least at the core, is closely linked to Karner’s second characteristic – ethnicity as a way of seeing. Karner’s argument here is influenced by *Ethnicity as Cognition* (Brubaker, Loveman, & Stamatov, 2004). In this article, the authors frame “ethnicity as a way of understanding, interpreting and framing experience” (Brubaker et al., 2004, p. 52) which involves concepts like stereotyping, social categorization and schemas. Classifying individuals one engages with in ‘us’ and ‘them’ greatly simplifies the world. The concept of schemas however extends ethnicity from simply categorizing people to “how gestures, utterances, situations, events, states of affairs, actions and sequences of actions get classified (and thereby interpreted and experienced)” (p. 43). Schemas are complex mental structures which not only hold knowledge but also norms, expectations, behavior as well as previous experiences (pp. 41-43). Karner (2007, p. 33) notes “some schema are widely shared and tend to inform a non-reflexive processing of information and interpretation of the world” but others are open for reflexive re-interpretation. Concepts such as tapu and noa are widely shared and applied within Māoridom but even such central organizing concepts as these are subject to change. An example for this is the treatment of whakapapa information in public spheres.

Karner’s (2007) last characteristic of ethnic identity – *structures of feeling* is an aspect not often considered in the social sciences in general (West-Newman, 2008). Karner’s argument here is based on Raymond Williams’ (1977, as cited in Karner, 2007) writings which focuses our attention to ethnicity as it is felt by individuals. Karner (p. 34) in this context stresses the importance of “familiar experiences and practices that clothe people’s (early) lives”. Traditional food and familiar smells and
sounds are often associated with positive feelings. Negative feelings in their most extreme form can have devastating results as ethnic conflicts which continue to ravage the world highlight. Negative feelings with less disastrous impacts are however no less important in the lives of the people concerned. Māori anger for example is closely related to processes of colonization and emotions are particularly poignant when related to the loss of ancestral land (West-Newman, 2004). Other negative feelings associated with Māori ethnicity are those of shame, embarrassment and inadequacy (van Meijl, 2002). Feelings, such as belonging, acceptance and connection to the past are likely to contribute to self-identification as Māori.

In this vein, Goffman (1952, p. 461), notes that one of the positive effects of having several role-identities is that it “allows for compensation; he [sic] can seek comfort in one role for injuries incurred in others”. Therefore, if an individual does not succeed in one role she/he can emphasize a different aspect within their identity hierarchy. Māoridom provides many possibilities for being nurtured and the mentoring through relationships such as tuakana and taina (older individuals guiding younger ones) and the communal interrelatedness requires the working together of manifold highly valued roles which all emphasize different knowledge and skills. Māori identity is after all, as Linda Nikora (2007, p. 343) writes, “a source of pride” for many.

The early proponents of social constructionist understandings of identity continue to be undeniably strong in the shaping of today’s views of this matter which still enjoys a similarly high profile in the social sciences. Jenkin’s (2008b) notion of the internal/external dialectic is based on the relationship between Mead’s ‘me’ and ‘I’. Identity theory is similarly rooted in these early social constructionist works. Symbolic interactionism is anchored as an important perspective in media studies. The last section of this chapter accordingly aims to consider media and more specifically the internet as one of the various locations or ‘sites’ of social interaction in which identity presentation and construction takes place (Cornell & Hartmann, 2007).
Identity and the internet

Earlier sections investigated such sites as the political context, cultural practices, social institutions like tribal organization and touched upon experiences embedded in everyday life. Similarly, Chapter One explored the country’s traditional media. John Downing and Charles Husband (2005, p. 133) stress “that the power of non-indigenous media in determining the majorities’ perceptions of indigenous peoples has been, and is, a central plank of the hegemonic determination of indigenous peoples’ world”. New Zealand mainstream media, it has been shown, long ignored Māori or categorized (and arguably continues to do so) Māori as ‘the other’ mostly with negative connotations (Abel, 1997; Phelan, 2009; Phelan & Shearer, 2009; Pihama, 1997; R. Walker, 1990, 2002; Wall, 1997). Self-representation and the creation of counter-hegemonic discourses were structurally and politically limited for a long time. However, changes in the political and media landscape supported the establishment of separate Māori media, which has (particularly in the form of talkback radio and now also in the form of Māori Television) contributed to the development of a ‘national Māori identity’ (Stuart, 2003). Media play an important role in identity construction as one ‘critical site’. Victor Horboken (2004, p. 201) writes:

[…] modern mass communications and, especially ethnic minority media, with their ability to reproduce stereotypes and create a symbolic cultural space, can make a significant contribution to reinforcement of boundaries and consolidation of ethnic identities.

Mass media increasingly function as generalized others, or even, as Barry King (2004, p. 184) writes, they “appear as the most generalised of generalised others”. Experiences are more and more mediated (Giddens, 1991) and media bring countless alternatives to the familiar way of life (Gergen, 1991). For media to be truly

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47 Film and literature created by Māori are not discussed in this thesis. This is not to negate their importance as a site of identity construction and means of decolonization. Engaging and interesting work has been done in this area and the interested reader is directed to Films in Aotearoa (Dennis & Bieringa, 1996) which includes a chapter by Leonie Pihama (1996) entitled Repositioning Māori Representation: Contextualising Once Were Warriors.
successful in reinforcing ethnic boundaries and to achieve goals of positive identity maintenance, empowerment, self-determination and political advancement it is necessary for indigenous peoples to be in “control of the means of production” (Molnar & Meadows, 2001, p. xii) and therefore to be able to exert self-management over their own images.

How about the internet? Writings concerned with computer mediated communication were in the distant past (relative to the history of the technology) prominently focused on communities and identity online. Steve Jones was influential in bringing together early writings in this area. Jones’ collections entitled Cybersociety (1995), Cybersociety 2.0 (1998) and Virtual Culture (1997) investigate life online in their various forms ranging from gay identity online, Indian virtual communities, cyberhate and virtual ethnicity. Many writers at the same time were strongly influenced by postmodern, cybertopian and ‘anything goes’ thinking (Slevin, 2000). The internet was seen as an equalizing and open technology, allowing everyone to share their ideas and viewpoints. The online individual was described as disembodied and freed from all restrictions the body brings with it when interacting offline. Gender, age and other identity markers were perceived to be hidden behind the screen and keyboard in the creation of unlimited identities. Donna Harraway’s (1991; 1997) writings on Cyborgs and Sherry Turkle’s (1995) Life on the Screen were most influential at the time and continue to be to this day. Allucquère Stone’s (1995) retelling of Stanford Lewin’s experiences and interactions as Julie Graham with ‘other’ female Multiuser Dimension (or Dungeons – MUD) users and how it came about for Julie’s offline identity to be revealed is widely known today. The possibilities of cyberspace for the selection of selves are humorously captured in Peter Steiner’s cartoon (Figure 3) originally published in The New Yorker in 1993:

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48 Lewin, a psychiatrist, selected a gender-neutral screen name ‘Doctor’ to signal his profession. In one private interaction with a female user he noticed that the conversation differed from his ‘normal’ interaction with women and realized that he was mistakenly perceived as female. Lewin then not only created a second screen name for his new female online identity but a complex persona to interact with others and to form friendships. For further details see Stone’s (1995) chapter In Novel Conditions: The Cross-Dressing Psychiatrist.
Lisa Nakamura (2008) stresses that the commercialization of the internet in the late 1990s enabled a discussion about identity in all its aspects to emerge. A number of books, articles and chapters appeared at the turn of the twenty-first century, including her own co-edited *Race in Cyberspace* (Kolko, Nakamura, & Rodman, 2000) all of which took a stronger critical approach. These works direct our attention away from the freedom from the real-world shackles to the pertinent inequalities the technology creates and reproduces and the processes of identity construction which were ignored or brushed under the digital carpet. Lori Kendall (2002, p. 118) found in her online research that most MUD users in fact were not creating a different persona when interacting online, but rather “attempt to ‘be themselves’”. This is not to say that Turkle’s and other’s research is invalid. They are representative of the majority of the activities and interactions taking place in MUDs and cyber-communities they explored at the time. However, the technology and its user base changed rapidly and drastically (Robinson, 2007).

The internet grew into an everyday medium for the many who connect on a regular basis (Bakardjieva, 2005; Katz & Rice, 2002; Wellman & Haythornthwaite, 2002). Harrison Rainie (2004, p. xiii) stresses the contextuality of each “cyberventure”. Why a user decides to go online, what she/he does there when they are connected and how it affects them once disconnected may change with each use of the technology, but it is usually linked to life offline. Similarly, Carolyn
Haythornthwaite and Barry Wellman (2002, p. 7) note in the *Introduction* to their seminal book *The Internet in Everyday Life*: “This pervasive, real-world internet does not function on its own, but is embedded in real-life things that people do.” Nakamura (2008, p. 1679) notes that particularly during the text-only days of the internet the technology supported the veiling of embodied identification whereas with increasing use of multimedia and the arrival of what Haythornthwaite and Wellman (2002, p. 4) call the “second age of the Internet” (now widely referred to as Web 2.0) the performance and presentation of the embodied self moves to the center stage. Works like Miller and Slater’s (2000) *The Internet: An Ethnographic Approach* and Christensen’s (2003) earlier discussed *Inuit in Cyberspace* are excellent examples of this shift that took place in academic research. The internet begins to be understood as a technology both shaped by and shaping everyday life and identity. Christian Fuchs (2008, p. 322) poignantly writes:

> The anonymity of cyberspace enables an endless space of possible identities that humans can construct in online communication. But not each individual makes use of these endless possibilities […] Social experiences and the individual history of an individual influence and shape his or her online behavior.

Just as experiences influence identity, behavior and interactions offline, they do so when individuals use the internet. Interaction is central to the development of self-consciousness and of self-identity both on the collective and individual level. In the past it was commonly suggested that the internet drastically alters or reduces the most central form of social interaction, face-to-face interaction, between individuals (for an overview see DiMaggio, Hargittai, Neumann, & Robinson, 2001). While the latter is not the case for many users of the internet today (Bell et al., 2008, p. 13) it nonetheless has the potential, like other technologies before it, to change how and with whom (or what) we interact and how we interpret these interactions (Meyrowitz, 1997).

Giddens (1991, p. 18) stresses that one central characteristic of late-modern times is the “acceleration in time-space distanciation” where social interaction and
relationships are increasingly removed from their immediate location. The internet certainly contributes to this ‘distanciation’ as it supports various types of interactions: chat, social networking, e-mail, websites are but a few possibilities. Certainly, no form of internet mediated interaction takes place in the “here and now” (Berger and Luckmann, 1966, cited in Zhao, 2006, p. 470), unless people sit right next to one another and exchange e-mails or instant messages.

Hugh Miller (1995, n.p.) is particularly interested in interaction created or supported via websites. He notes that in Goffman’s strictest understanding computer mediated interaction is not interaction at all, but concludes for internet sites that they are:

intended to be read by others, often invite comment, can be interactive in various ways, and almost always have an email address for contact. I would argue that they are part of an interactive system, although a pretty restricted one.

Adapting Goffman’s understanding of information and signs being consciously ‘given’ and unconsciously ‘given off’ during interactions to websites, Miller (1995) suggests that hosts consider carefully how and what information they provide, what is to be presented to the audience, the readers, with the aim of presenting themselves in the best possible light. Nonetheless, the ‘restricted interactive system’ of websites also has room for information to be ‘given off’. Not in the same and rich manner as face-to-face interaction, but nonetheless, the audience takes information in through what is provided within a website, just as much as through the content not provided; the people, events, traditions not mentioned, the language not used. This all provides a wealth of information to the visitors as well.

Both Miller (1995) and Laura Robinson (2007) remind us that pre-existing knowledge is necessary in order to be able to present a self online and for the audience to be able to understand and interpret the information ‘given’ and ‘given off’. On the side of the sender of this information, a reflexive process takes place just as much as on the receiver side. And just as knowledge from the offline reality in the form of the ‘I’ and ‘me’ influence the presentation of the self online, experiences
through ‘cyberventures’, contributes to the continuous development of the self (Vieta, 2004).

Any understanding of ethnicity (or ‘race’) much like in traditional forms of media (Cottle, 2000; Downing & Husband, 2005) does not exist naturally in cyberspace, but rather it is introduced by the creators of content (and structure) and the audience in an interactive process which is anchored in their real life experiences. In her book Cybertypes, Nakamura (2002) introduces the concept of ‘cybertyping’ which she defines as

the process by which computer/human interfaces, the dynamics and economics of access, and the means by which users are able to express themselves online interacts with the ‘cultural layer’ or ideologies regarding race that they bring with them into cyberspace (Nakamura, 2002, p. 3).

Several questions have to be considered then: who creates content and who is the audience or readership? Whose ‘cultural layers’, in Nakamura’s terms, influences the construction. Are processes of categorization or self-identification prevalent? And are the meanings of ethnicity, in this case, Māori identity, acceptable to the audience? These are all questions this research aims to address in its empirical engagement with the internet’s structure in its local form, the content available and the perceptions of the users. The answers to these questions will allow a cautious positioning of Māori ethnic identity along the two axes illustrated in Figure 2 on page 68; and the answers will allow considerations on how online representations of Māori identity fare in the interactive cycle between online and offline reality.
**Chapter summary**

Karner (2007, p. 8) affirms that “ethnicity matters in our current era”. It is relevant as it can contribute to far-reaching social consequences. It determines individual and social behavior and it is “a much-used framework of interpretation and political mobilization” (Karner, 2007, p. 10). New Zealand’s intriguing languidness towards citizenship (Bartley & Spoonley, 2005) and the continuing belief in a classless or equal society (Caldwell & Brown, 2007) allow ethnicity to take the center stage, and the commitment to the Treaty and the ongoing relationship it created push it to do so. The ‘cultural stuff’ as Barth (1969/1996) refers to it, in the end is less ‘important’ to ethnicity compared to the question of its significance and meaning to individuals and society. Māori identity is socially and politically relevant and also in economic terms. Rata’s (2005; 2006) and Poata-Smith’s (2004) work remind us of the increasing socio-economic differences within Māoridom. M. Durie (1998, p. 59) further underscores this notion of significant heterogeneity within this ethnic group.

The theoretical material highlighted the fluidity, situationality and the relevance of external influences and power relationships in determining and maintaining group boundaries and ethnic identification. The interaction with the ‘other’, Māori and non-Māori alike, as well as with representations in media all contribute to the ongoing process of the becoming of the self. It has been shown that Māori identity cannot be assumed to be static or ever ‘traditional’ in a primordial/essentialist understanding. This in turn certainly does not make it any less authentic. The fact that Māori identity is negotiated, shaped, modified and impacted upon by external factors and categorization does not negate Māoridom’s active role in this process. Rather, the assertion of Māori identity and what at the present time, embedded in the continuum of the past and future, is seen as relevant and functional to identifying, feeling and

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49 New Zealand’s Permanent Resident status only differs in two areas from the Citizen status. Firstly, the eligibility to a New Zealand passport is denied and secondly, one cannot stand for elections to become a member of parliament. All other rights and responsibilities apply equally to both status groups (Bartley & Spoonley, 2005).
being Māori, is of importance. The beginning of this chapter aimed to explore precisely that: the various aspects asserted by Māori.

The question remains: What understanding of Māori identity is used for this research? Kāretu’s (1992, as cited in Kāretu, 1993, p. 51) notion of an “inclusive supra-Māori identity” provides us with a precise working definition of sorts. An ‘inclusive’, broad and historically as much as contemporarily grounded understanding of Māori identity appears most suitable and useful in this exploratory endeavor into Māori cyberspace.
Chapter Three – Wāhanga Tuatoru

Rohe Tāurungi: Cyber-rohe

This chapter explores Aotearoa’s cyberspace, its history and spread in New Zealand.50 As with most new innovations the adoption rate of the internet varies between different populations in Aotearoa. Hence one central characteristic of the digital divide needs to be considered here: access. It is of interest whether Māori are actually connected. The chapter also briefly looks at initiatives to increase connectivity. Another aspect of interest in a historic context is whether cyberspace in its early years in Aotearoa indeed provided content relevant to Māoridom. Media reports are used to investigate this matter in support of the previously made statement that Māoridom was represented on the web early on.

The chapter also turns to a facet of the online environment often ignored in research; its structure in the form of the domain name system or space (DNS). Aotearoa’s DNS is explored, in particular two second-level domains: .iwi.nz and .maori.nz. The development and uptake of these indigenous domain names are discussed along with surrounding issues and problems as well as other indigenous peoples’ experiences. The chapter closes with an outlook of further proposed changes to the country’s DNS and international developments regarding the internet’s structure.

50 The discussions put forward in this chapter were to a great extent previously published in Information Studies (Muhamad-Brandner, 2008) and in the Journal of Information, Communication and Ethics in Society’s special edition on ICTs and Social Inequality (Muhamad-Brandner, 2009).
Computers and networks in history

The abacus, tabulator and different models of mechanical calculators have a very long history to which electronic computing machines are a comparatively recent addition. During the Second World War COLOSSOS (the first computing unit) was developed to decipher Adolf Hitler’s increasingly complex coded communications. It was up-and-running by December 1943 (W. R. Williams & New Zealand Computer Society, 1985). In New Zealand the first computer (see Figure 4) ever used was rented by the Treasury Department in November 1960 after receiving approval almost two years earlier. Its main purpose was to organize the pay slips of government workers and to address the department’s accounting needs. By 1969 approximately 140 machines were in use nationwide, none of which had electronic storage capacity but rather all relied on punch-cards and paper-tape (Beardon, 1985). Despite the computer’s short history its success is unquestionable: 99 percent of government organizations and 93 percent of businesses relied on computers in 2006 and 72 percent of New Zealand households owned at least one unit (Statistics New Zealand, 2007b).

Figure 4: New Zealand’s first computer
Source: Evening Post (cited in W. R. Williams & New Zealand Computer Society, 1985)
The internet’s history is even more short-lived and once it reached its (commercial) tipping point in the 1990s it spread like wildfire. Similar to the computer, the internet was conceived in relation to military/national security requirements: it was developed out of the need to enable a more stable form of communication which would withstand a nuclear attack. ARPANET went online in 1969 connecting four computers located in the United States. The 1980s saw ARPANET being governed by the American National Science Foundation (NSF). New Zealand established a connection to the NSFNET in 1989 (Moschovitis et al., 1999). During the early years (1980s) the predominant modes of internet use were communication and data exchange which were mainly restricted to universities and government agencies. Aotearoa’s early computer networks did not differ in this respect: KiwiNet connected Massey University with Victoria University in 1975 (Waikato Linux User Group, 2007). Only e-mail was publicly available through the (state-owned) Telecom Starnet in the mid 1980s (Watson, 2001). The first network connecting all universities went online in 1990 and was known by a Māori name: Kawaihiko – the electric net. Two years later Kawaihiko merged its network with CRINet (the Crown Research Institutes Network) and AgResearch to create the National Research and Educational Network more widely known as TuiaNet. The Māori word tuia means to stitch together (Wiggin, 1996, p. 20).

The 1990s were further marked by two significant developments. Firstly, “[i]n 1991, the Federal Networking Council made a decision to allow new companies, now known as internet service providers (ISPs), to interconnect with federally supported internets” (Roberts, 2006, p. 18). This important move in the United States allowed easier access for users who were not affiliated with any university or government department. Commercialization in Aotearoa began even earlier; the ISP Actrix provided e-mail and news services in 1989 (Waikato Linux User Group, 2007). Secondly, hypertext, along with the necessary programming language (html – Hypertext Mark-up Language), transfer protocol (http – Hypertext Transfer Protocol) and the WorldWideWeb, a Graphical User Interface browser, were developed by Tim

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51 ARPA stands for Advanced Research Projects Agency which is part of the United States Department of Defense, now known as DARPA (www.darpa.mil).
Berners-Lee (1989-1991). This allowed information and resources stored on different computer systems to be accessed more easily for the first time. The introduction of point-and-click browsers, of which *Mosaic* was most influential, followed shortly after (Moschovitis et al., 1999). Increased user-friendliness and versatility made the internet more attractive to a broader audience and the number of ISPs began to rise steadily within New Zealand during the early 1990s. In 1996 two of today’s biggest internet service providers *Ihug* and Telecom’s *Xtra* started their services, with Ihug later that year even providing the first residential broadband option (Waikato Linux User Group, 2007).

Deregulation of the telecommunication sector began in 1987. Telecom NZ was privatized in 1990 (Telecom NZ, 2008). These steps were in accord with the neo-liberal thinking of the time, but the market clearly failed New Zealand as the then Telecommunications Minister Maurice Williamson admitted in 2006 (*The New Zealand Herald*, 2006). The result is that the country continues to rank lower in international comparisons in many aspects relating to internet connectivity, especially in terms of broadband penetration (Statistics New Zealand, 2007b). Telecom’s small re-investments into the country’s network structure (Scherer, 2008) and its stronghold over 90 percent of the network hindered the necessary advancements which took place in similar countries (Twose, 2007). This began to change in December 2001 with the passing of the *Telecommunications Act* allowing the Telecommunications Minister and the newly created Telecommunications Commissioner to step in and regulate the market, creating greater equality, particularly in terms of line rental prices (Watson, 2002). The question of fair access to the local loop (the phone line leading to the individual household or business) by Telecom’s competitors, though, was not solved and continued to restrict competition in the phone and internet market. The 2001 act was amended in December 2006 preparing the ground for the separation of Telecom into three companies (wholesale, retail and network) and the ‘unbundling’ of the local loop.

A report commissioned by InternetNZ (Tichbon & Amos Aked Swift, 2008) discusses the latest developments surrounding the topic of ‘unbundling’. It comes to
the conclusion that the regulation of Telecom’s copper lines is a necessary and positive development. It further highlights potential difficulties arising out of the fact that the regulations were put in place rather late and they were not comprehensive enough. One main concern lies in the high level of uncertainty potential investors face, which could hinder the current competition on the ISP-market. The concern that discussions and plans were focusing on gaining access to the existing copper lines for too long and the expansion of the fiber-optic-network was pushed in the background is shared by other players in the information technology-industry (IT). Most agree that significant progress has been made, but that more effort will be necessary in the future to get New Zealand’s internet structure up to international standards (Scherer, 2008). Increased co-operation and competition between ISPs and substantially higher investments in infrastructure with stronger government involvement, not least regarding investments, are seen to be central for the future development of New Zealand’s internet (Twose, 2008). However, benefits to the user in terms of lower costs and faster speeds continue to be uncertain.

Māori internet access

An approximate 1.4 billion people make use of the internet worldwide, just below 22 percent of the world's population. For a long time North America contributed a great proportion (ca. 30% in 2000) of the overall number of surfers but this primacy has dropped to 17 percent (Internet World Stats, 2008b) with Asia increasingly adding to the internet population in recent times. In June 2008 it was announced that 253 million people in China alone are using the internet which, for the first time, saw the United States not having the lead in terms of internet connections (Barboza, 2008).

The number of users is clearly on the rise world-wide but variations between regions continue to exist as Figure 5 below highlights. The proportional contribution of Oceania to the world internet population is decreasing. In December 2000 the region

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made up 2.1 percent of users, June 2008 saw the proportion drop to 1.4 percent. Within the region two countries dominate the statistics: Australia contributes 81% of the region’s users, followed by New Zealand which makes up 16.6% (Internet World Stats, 2008a).

Statistics New Zealand (2007a) established that 64.5% of New Zealand’s households were connected to the internet in some form in December 2006, with broadband connections making up approximately one third. The most connected region is the country’s capital Wellington. Almost 73% of its households have internet access followed by Auckland with just under 69%. Auckland, though, has a slightly higher broadband penetration. The regions with the lowest household connectivity are Northland and Hawke’s Bay. These are two of the three regions within Aotearoa with the highest Māori population (Statistics New Zealand, 2007d).

The 2008 Social Report by the Ministry of Social Development (2008) has shown that Māori are not as well represented in positive social and economic indicators as Pākehā (European) New Zealanders and at times even as other ethnic groups. The proportion of Māori in paid employment is lower, so are hourly income and average life-expectancy. Socio-economic disadvantages closely relate to the notion of the
digital divide. Gender, age, skill, income and ethnicity all continue to contribute to this divide, though some, like gender, are becoming less prominent in New Zealand as Figure 6 below exemplifies.

![Figure 6: New Zealand internet use according to gender, age, area and income](image)

Adapted from: Bell et al. (2008, p. 26)

Figures on Māori access to the internet vary greatly depending on the location of connectivity – restricted to one’s own household or from any location. However, a general upwards trend can be noted over the last few years as various reports highlight.

Te Puni Kōkiri (2001) – Ministry of Māori Development, TPK – published a report on Māori Access to Information Technology based on a nationwide ACNielsen Netwatch survey undertaken in 2000. 1206 Māori individuals were included, of whom 65% had not previously accessed the internet (p. 20) and 46 percent could ‘potentially’ do so (p. 17). Due to the low numbers of computer ownership in Māori households the access rate from home at 16% was less than half that of Pākehā (chart 10). Frequent use of the internet was rather low, too; eight percent indicated that they connected on a daily basis, a further 10% on some days each week (chart 5).

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53 Not significant at 0.05 level (Bell et al., 2008, p. 26).

54 The question asked was not concerned with the participants’ actual use of the internet, but only if they could have internet access: “Do you personally have access to the Internet at any of the following locations? It doesn’t matter whether you’ve used it or not. Home; Work; School/Tech/Uni; At a friend/relative’s place; At a library; At an Internet Café; Other” (Te Puni Kōkiri, 2001, fn. 9).
The motivations to connect to the net were predominantly personal in nature (69%) but did not differ greatly from Pākehā, although the latter’s use of the internet for professional purposes was somewhat higher (chart 16).

As reflected in the 2001 Census 119,139 Māori individuals (25.3 percent) lived in a household with an internet connection. The overall penetration of the internet into New Zealand households stood at 37% (Statistics New Zealand, 2002b). Using the same data, Statistics New Zealand (2004a) established that ethnicity still continues to be an important factor when it comes to internet connectivity in New Zealand, even when income and qualification levels are standardized. Households with at least one Asian person had the highest internet penetration followed by European and then Māori households. Pacific Peoples households were least likely to have internet access in 2001:

Statistics New Zealand has yet to make similar information regarding the 2006 Census available. A report by Te Puni Kōkiri (2007a, p. 13) on Māori economic participation states an internet penetration rate of 45.4 percent. This figure is based on Census 2006 data and therefore relates to Māori individuals living in a household with internet access (H. Schulze, personal communication, 13.11.2007). The previously mentioned Social Report 2008 states a slightly higher number (46.7%)
which also refers to the 2006 Census. When comparing the last two censuses it becomes clear that Māori might not belong to the most connected groups, but they were able to increase their connectivity almost the most, only Pākehā had a stronger growth rate – 24.9 percent growth compared to 21.4 percent of Māori (Ministry of Social Development, 2008, table SC1.1).

Statistics New Zealand’s (2007b) *Information and Communication Technology in New Zealand* report goes into considerable detail regarding information and communication technologies (ICTs) use by individuals, businesses and government. It noted an overall internet penetration rate of 69 percent from any location in the last 12 months leading up to December 2006. A variety of tables also consider differences between ethnic groups. Table 3, Table 4 and Table 5 below represent extracts relevant to this thesis. As with most other findings, Māori come behind all ethnic groups except Pacific, with 58.7 percent being able to access the internet. It is interesting to note the frequency of internet use by Māori outlined in Table 3. Almost half access the internet at least once a day, a considerable increase compared to eight percent in 2000 (Te Puni Kōkiri, 2001). However, it is still common for Māori to make use of the internet less than once a month.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Users</th>
<th>Percent</th>
<th>Once a day</th>
<th>Once a week</th>
<th>Once a month</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>1,717,300</td>
<td>71.5</td>
<td>57.0</td>
<td>31.5</td>
<td>1.9</td>
<td>5.3</td>
</tr>
<tr>
<td>Māori</td>
<td>244,200</td>
<td>58.7</td>
<td>47.6</td>
<td>32.4</td>
<td>16.9</td>
<td>11.4</td>
</tr>
<tr>
<td>Pacific</td>
<td>92,100</td>
<td>50.6</td>
<td>47.0</td>
<td>36.0</td>
<td>32.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Other</td>
<td>275,500</td>
<td>74.9</td>
<td>72.1</td>
<td>21.5</td>
<td>11.7</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Table 3: Internet use and frequency in percent; by ethnicity
Extracted from: Statistics New Zealand (2007b, table 10)

Table 4 relates to the location of internet access points other than the individual’s own home. Interestingly Māori are leading in their access to the internet at work. Community and ‘other’ (including commercial) access points are used by Māori as well. When it comes to using a mobile phone for internet connectivity, Māori are on par with Pākehā and ‘others’ (all 7.8 percent). Wireless technology outside the home (hotspots or WiFi zones) is not well utilized by Māori (the lowest percentage of all ethnic groups with 1.8%). It has to be noted that this technology is generally not
widespread in Aotearoa with only four percent overall making use of it (Statistics New Zealand, 2007b, table 12).

Unfortunately the report does not account for the proportion of Māori users who do not have access from certain locations (like the home) or who fully rely on connectivity from one location. It would be particularly interesting to know how many Māori rely on public access points like libraries and internet cafés.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Work</th>
<th>Place of education</th>
<th>Others' home</th>
<th>Community</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>67.6</td>
<td>23.3</td>
<td>43.4</td>
<td>13.1</td>
<td>21.0</td>
</tr>
<tr>
<td>Māori</td>
<td>74.2</td>
<td>51.5</td>
<td>76.3</td>
<td>27.2</td>
<td>27.4</td>
</tr>
<tr>
<td>Pacific</td>
<td>61.6</td>
<td>58.7</td>
<td>52.6</td>
<td>35.4</td>
<td>38.0</td>
</tr>
<tr>
<td>Other</td>
<td>54.5</td>
<td>45.5</td>
<td>39.3</td>
<td>24.0</td>
<td>20.9</td>
</tr>
</tbody>
</table>

Table 4: Location of internet use in percent; by ethnicity
Extracted from: Statistics New Zealand (2007b, table 13)

The most common activity on the internet by the general New Zealand population is communication via e-mail. The report provides a fair amount of information on particular online activities; however these do not consider differences between ethnic groups or how much time is spent on the internet on these activities. A differentiation is made between ethnic groups regarding broader purpose categories: just under half of all Māori users in this report indicated that they made use of the net for personal purposes. This is very low compared to Pākehā and ‘others’ (both over 80 percent), and also if one considers a Nielsen//NetRatings (2005) announcement that Māori mainly use the internet for entertainment and educational reasons. Educational motivations to access the internet are also coming second in the Statistics New Zealand (2007b) report which might be due to the continuing high involvement of Māori in tertiary education (Ministry of Social Development, 2008, p. 41).
Recent research on internet use in Aotearoa was undertaken as part of the World Internet Project (WIPNZ) in late 2007 which established an internet penetration rate for New Zealand of 78 percent (Bell et al., 2008);\(^{55}\) the highest among the 30 countries partaking in the global project (Jaqueline Smith, 2008). Age, area and income continue to be of significance, so does ethnicity, but all are becoming less influential. ‘Asians’ are leading users in many aspects in this research as well. Table 6 shows, this wide-spanning category has the highest penetration rate, greater confidence in their skills and the biggest proportion of high use measured in hours.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Operating a home business</th>
<th>Working from home</th>
<th>Education or study</th>
<th>Community or voluntary work</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>11.4</td>
<td>17.1</td>
<td>24.4</td>
<td>7.9</td>
<td>82.2</td>
</tr>
<tr>
<td>Māori</td>
<td>6.3</td>
<td>10.4</td>
<td>26.1</td>
<td>4.7</td>
<td>49.6</td>
</tr>
<tr>
<td>Pacific</td>
<td>3.2</td>
<td>7.8</td>
<td>25.4</td>
<td>4.0</td>
<td>44.5</td>
</tr>
<tr>
<td>Other</td>
<td>8.2</td>
<td>11.0</td>
<td>39.9</td>
<td>5.7</td>
<td>84.5</td>
</tr>
</tbody>
</table>

Table 5: Purpose of recent internet use in percent; by ethnicity
Extracted from: Statistics New Zealand (2007b, table 11)

A further increase in the number of Māori users by 2007 is noticeable: 62 percent access the internet, but here they fall behind compared to all other ethnic groups, including Pacific Peoples. Further, fewer judge their skills to be ‘very good’. Significantly, though, a greater proportion of this group spends more than 20 hours per week online at home. Bell et al. (2008) do not consider the participants’ overall use of the internet. It is possible that because of occupational differences (Statistics New Zealand, n.d.-b) – Māori would fall behind Pākehā in the number of hours of overall internet use. One interesting point Bell and his colleagues (2008, p. 21)

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\(^{55}\) This project is referring to connectivity from any location: “Do you currently use the Internet? This means activities like using email or browsing the World Wide Web, from any location” (WIPNZ, 2007, p. 5).
observe is the fact that once Māori are able to access the internet “they [referring to both Māori and Pacific Peoples] tend to be more frequent users than Pakeha across most types of online activities”.

Figures relating to internet access have to be treated with caution in any case and attention to detail is most central. It always has to be considered whether the number in question relates to households or individuals. In case a figure in question reports on individuals the location from which the internet is accessed is very important as well. Māori access figures relating to households are lower than those of individuals’ access from any location, including surfing at friends’ houses or from public places like an internet café. Community access continues to be of importance for many Māori. It is nonetheless clear that the overall number of Māori with access to the internet is on the rise and local initiatives aiming to reduce ‘connection difficulties’ will contribute to a further narrowing of the digital divide in the future.

One such initiative was introduced in April 2007 in Auckland; local public libraries now provide free internet access which is funded by the Auckland City Council (The New Zealand Herald, 2007a). Another example focuses on the connection difficulties faced by rural communities. Tūhoe, an iwi (tribe) of the central North Island, have their own ISP (www.tuhoe.com) offering dial-up subscriptions for businesses and private individuals. It was further announced in August 2007 that the tribe aims to expand its existing broadband network which already connected four schools and 40 households. The planned wireless network will allow approximately 2000 homes to access the internet in the future (Greenwood, 2007).

**Historic Māori content**

We have seen that Māori were considerably less likely to be connected to the internet than Pākehā during the early days of the technology. The question remains, however, whether any content relating to Māoridom was available online during these times. Ross Himona’s site (http://maaori.com) was already mentioned in the Introduction.
Media reports on Māori internet utilization beginning in the later 1990s highlight that Māori organizations and individuals were quick to adopt this technology and they give us an indication of the content available. A focus on Treaty and land related matters as well as economically related news prevailed. News reports, particularly in mainstream media, quickly waned with increasing normalization of the internet over time. However, Māori media continue to report on such matters even in more recent times.

In 1995 a “Maori Lexical Computer Database” (introduced in Chapter One) developed by the Māori Research Unit within the New Zealand Council for Educational Research (NZCER) was made freely available online via the Department of Internal Affairs’ site (Dias, 1995). The launch of the online version of The Maori Law Review, which is still very active today, was proclaimed in the same year as well. Not only did McDonald’s (1995) article discuss the purpose of the website but also its host’s (Tom Bennion) views on the general advantages of the internet for Māori. Bennion’s experience in communicating with indigenous peoples overseas was mentioned as well, highlighting not only the information and communication potential of this relatively new technology to Māori locally but also on a global level.

Paul Rubens (1996) reported that TPK intended to set up “virtual iwi” in the form of newsgroups, allowing “ties within iwi [to be strengthened] without individuals having to move back to their homelands”. The article though does not go into more detail but rather informs on ongoing improvements of the existing intranet between the Ministry and regional offices. TPK continued to be active in supporting the creation of online content relevant to Māori, additionally to providing its own website. In 1997 it backed the development of an online database on Māori land information (The Evening Post, 1997).

Another database indexing the Māori Land Court (MLC) minute books made headlines. Māori objected to making these records accessible to the general public via the internet or through institutions like libraries and universities. Māori were alarmed about cultural and private information being too easily accessible to anyone,
a central concern raised by the authors discussed before. Consultation with iwi through a focus group saw the matter successfully resolved: records were to be made available at MLC regional offices only (Pullar-Strecker, 1999).

Māori made e-business related news as well. Paul Rubens (1997) reported on an ISP set up by Te Kōhanga Reo National Trust to increase its finances. The ISP (Swift) was set up as a “pilot project in Auckland for about three months”. Further information on this ISP is not available allowing the assumption that the pilot project was, unlike another Māori business’ utilization of this technology as reported on the Radio New Zealand’s Waatea News (Rerekura, 2009a), not successful. Indigenous Trails used the internet to market their tourist operation, along with educating visitors about sustainable tourism and Māori culture. The achievement of the site was acknowledged in 2009 when it received the Indigenous Tourism and Biodiversity Website Popular Count Award (Rerekura, 2009a).

News reports on Māori cyberspace are also broadcast on television. Te Karere had a segment on the above mentioned MLC records which became available world-wide (TVNZ, 2002). This story was also covered by the current affairs show Marae which allowed Māori representatives from the MLC focus group to discuss their views (Taurima & TVNZ, 2005). The 2004 launch of a governmental website on the Treaty of Waitangi saw three segments dedicated to this news including interviews with peoples’ views on it (TVNZ, 2004).

Māori Television Service (MTS) aimed to make the topic of ICT in general a regular aspect in their programming later on. Cyberworld is a half-hour television programme which began to be broadcast in May 2005. It presents viewers with new technological innovations, games, computer developments and issues relating to the net. The first episode, for example, interviewed an award winning Māori web-designer, Che Tamahori, and introduced internet banking (Māori Television, 2005). The show is produced by Adrenalin TV and has a total of 52 episodes (Adrenalin Group, n.d.).
Native Affairs, a current affairs show also on MTS, screened a segment entitled Cyberspace Whanau (Harawira & Wilcox, 2007). The audience was given a view on innovative applications of the internet by Māori for traditional purposes: a traditional healer offering online consultations and a project aiming to keep whānau (extended family) connected with their community were introduced in detail. The report showed that all of the providers are conscious of the different situations Māori find themselves in and are trying their best to use this technology to advance Māori values, identities and wellbeing. It also illustrated the hosts’ awareness of contentious issues and possible negative outcomes in a similar fashion as those academics discussed in Chapter One.

**The domain name system**

The domain name system (DNS) is a central aspect of the internet. It allows users to locate resources easily without having to remember IP-addresses. The existing domain name system allows easy navigation of the internet:

> The system of DNS servers distributed across the Internet invisibly converts the names–serving as signposts in cyberspace–into the numerical addresses required by network routers to reach the signposted locations (National Research Council, 2005, p. vii).

Figure 8 illustrates a simplified path of communication taking place between the user, DNS server and website – in this case the University of Auckland’s website. When surfing to an internet site one needs to know the IP-address, which is requested from the DNS server. This then allows the user to request and transfer the website from the host with the provided IP-address.

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56 Pivotal as these IP-addresses are, to most people they are a strange assortment of numbers such as 130.216.11.202 for the University of Auckland’s website.
This system was first implemented in 1984 but was not fully operational until 1987 (National Research Council, 2005, p. 47). Web-addresses are hierarchical in nature which is illustrated in Figure 9. The top-level can be generic (gTLD), examples would be .com, or .org, or country-specific (ccTLD), with some exceptions: .govt, .mil and .edu can be seen as gTLD, but are indeed restricted to U.S. registrants; similarly, some ccTLD function as international spaces like the renowned .tv for Tuvalu which appeals to the global television industry (National Research Council, 2005, p. 116).

Within country-specific domains second-levels can be implemented by the overseeing organization, though some ccTLD-spaces allow name registrations on the second-level. TuiaNet was first responsible to administer the .nz domain space until InternetNZ (then ISOCNZ – Internet Society New Zealand) was founded in mid 1995. According to Peter Wiggin (1996, p. 23), this can be seen as the turning point in New Zealand’s internet history with the focus shifting from an “educational and research-oriented TuiaNet to the more commercially oriented ISOCNZ”.

ISOCNZ delegated the University of Waikato to handle domain name registrations under most domains, with the exception of .govt.nz, .mil.nz and .iwi.nz which were done by Victoria University (Brown, 1996b). The Domain Name Commissioner (DNC) and New Zealand Registry Services (NZRS) were established (n.d.-a). NZRS manages actual registrations of domain names whereas the DNC oversees the

57 The Austrian domain space allows www.google.at, whereas www.google.nz is not possible.
registration market, disputes or complaints regarding names and it is responsible for the development of new policies. Ten second-level domains (2LD) were available in Aotearoa’s webspace when InternetNZ became responsible for it.\textsuperscript{58} The first addition was .maori.nz in 2001, .geek.nz was implemented the following year and recent newcomers are .parliament.nz and .health.nz (available since 2006 and 2009). The third-level (3LD) would be the actual name the registrant chooses.

\textbf{Indigenous domain names}

The traditional structure of the DNS to some degree restricts the possibilities for indigenous peoples and cultural minorities to find their own ‘spot’ on the World Wide Web. Indigenous ccTLDs are not possible because these two letter domain spaces are linked to the country codes used by the International Organization for Standardization (ISO).\textsuperscript{59} The suggestion that .aa could be used as Aotearoa’s ccTLD (Pullar-Strecker, 2001) on the internet would likely be unsuccessful if it was ever taken further, just as Catalonia’s attempt to establish .ct in 1996 was denied (Gerrand, 2006) simply because ISO does not list Catalonia or Aotearoa as a region or nation. If it ever will, Aotearoa would automatically have a ccTLD and arrangements would have to be made with the Internet Assigned Numbers Authority (IANA) regarding the responsibilities for the space.

\textsuperscript{58}.ac, .co, .cri, .gen, .govt, .iwi, .mil, .net, .org, .school

\textsuperscript{59} With the exception of the United Kingdom which is listed as GB and not UK as well as Channel Island and Ascension Island which are both not assigned an ISO code but do have a ccTLD (National Research Council, 2005, fn. 49).
Catalonia, or rather the “Catalan Linguistic and Cultural Community”, represented by Associació puntCAT, did not give up on the notion of a Catalan domain space which was finally achieved in September 2005 (Gerrand, 2006) in the form of a gTLD .cat. December 2007 saw a total of 26,361 .cat domain name registrations (Fundació puntCAT, 2007) which is substantially more than the total registrations of .iwi.nz and .maori.nz combined (DNC, 2009a). The establishment of .cat set a positive and very promising example for indigenous peoples and other cultural communities, but Māori are unlikely to be able to follow suit. The Catalan community has two great advantages compared to Māori in this regard. Firstly, it is estimated that worldwide 10 million people speak the Catalan language and secondly, a considerable amount of content on the internet is in Catalan. Research showed it to be between the nineteenth and twenty-third most common language on the web (Gerrand, 2006).

As a reference point, in the United States Native Sovereign Nations (NSN) have ‘one and a half’ domain spaces available to register their tribal names with. One is under the ccTLD (.nsn.us) and the ‘half’ is under the .gov top-level domain (TLD) which enables federally recognized tribes to register their name with a -nsn suffix (GSA, n.d.). 60 The suffix was announced on April 26th 2002 and aims to improve ‘government-to-government’ relationships and to provide information on tribal services and developments (Indian Country Today, 2002). Unfortunately, not a lot of information is available on either of these registration possibilities for Native Sovereign Nations, though a quick search with any search engine shows that both .nsn.us and –nsn.gov are used and many tribes provide a website in both domain name spaces.

It is not clear when the .nsn.us domain became first available as it was not included in the early structure of the United States’ DNS (Cooper & Postel, 1993). NeuStar’s Registry Help Desk explained that it was established in 2000 (Mutonyi from NeuStar,

60 A random example is www.tulaliptribes-nsn.gov.
personal communication, 04.06.2008), but the Internet Monthly Report mentions a registration under the .nsn.us domain as early as March 1995 (Cooper, 1995). Claims made by John Highfield and Sue Leader (both cited in Bradford, 2002) that .maori.nz is assumed to be the first indigenous domain space is clearly not true in a strict sense (even iwi.nz was created before it). Nonetheless, .maori.nz is the first indigenous domain space proposed and substantially influenced by indigenous peoples as the following highlights.

.iwi.nz

Aotearoa’s first indigenous domain was included as part of the country’s initial DNS on the initiative of Te Puni Kōkiri. This 2LD has been moderated from its beginnings, which means that a registrant is assessed regarding certain requirements before being allowed to proceed with the registration of a 3LD. The original criteria were set by TPK and InternetNZ without consultation and reflect the political understanding of iwi of the late 1980s influenced by Treaty settlements (see Chapter Two).

In Webster’s (2002, p. 349) words “the role of Māori iwi had been given new prominence” in the 1990s, and, as in the case of the early criteria applied to the .iwi domain the ‘prominence’ was rather exclusive: only traditional Māori tribes with a trust board were eligible for an .iwi.nz domain name. This excluded many tribes as the current moderator Karaitiana Taiuru highlighted in 2001: “A lot of Maori want to apply for a .iwi.nz domain, and we have to turn them down unless they’re a legal organisation representing a genuine iwi that existed before 1840” (cited in Gifford, 2001, n.p.), the year in which the Treaty was signed.

Moderation of the domain first lay with a member of InternetNZ. It was later handed over to TPK (Gifford, 2000) to be finally transferred to the New Zealand Māori

61 NeuStar (www.neustar.us) has been administering the .us domain space since 2001 when it took over responsibilities from the United States Department of Commerce (Stellin, 2001).
Internet Society (NZMIS), represented by Taiuru who is currently responsible for safeguarding the space. Freeparking is the only authorized registrar for this domain (DNC, 2007b). If a desired name is available for registration all required information on the registrant is collected by Freeparking. These are forwarded to the moderator who ascertains that all current criteria are met. These are more inclusive than when the domain was first implemented. Today, not only iwi but also hapū (sub-tribe) and taura here iwi groups (semi-formal groups of one iwi in the territory of another) are eligible to register, if they are a legal body. Urban Māori authorities, too, can apply for an .iwi.nz 3LD but are additionally required to have been in existence for at least one year, to have records of their constituency and they must stand for a “reasonable proportion of urban Maori in [their] area”. Any name in this domain space must be a “genuine Maori name” or an abbreviation by which the iwi is commonly referred to (register.iwi.nz, n.d.).

What constitutes a ‘genuine’ name, though, is not further discussed. The moderator of any domain carries a lot of responsibility (and power) particularly if the criteria have a tendency towards vagueness as in the case of this domain. Nonetheless, the current .iwi.nz moderator has been in this position for many years. If the registrants were to be unsatisfied with his work, be it because he might be too strict or too tolerant in his decisions, he presumably would not continue this important role as a gatekeeper.

The first registration under this domain was a mail-only connection in April 1995 (C. Jackson, 1995) and uptake continued to be slow in the following years. Table 27 in the Appendix shows a ‘jump’ to three registrations in 1997 and numbers continued to exhibit a steady upwards trend from then on with a stronger increase in the years 2001 and 2003 (DNC, 2009b). The discussions concerning the introduction of .maori.nz and the easing of the domain’s moderation criteria are likely to have contributed to this increase along with a general upsurge in the numbers of hosts and

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62 Registrars have to be authorized by the DNC to access the .nz register of domain names. Only through a registrar can a domain name be registered and upheld by individuals and organizations. Moderated 2LDs have only one registrar which is authorized to handle domain name registrations after meeting special criteria (DNC, 2007b).
users alike. Figure 10 below depicts in more detail the monthly registration numbers with often occurring fluctuations. The most current figures available for December 2008 show 64 registrations in the .iwi.nz domain (DNC, 2009a).

A request to further amend the criteria regarding what names should be allowed as 3LDs to meet the changing needs of iwi was submitted by Taiuru (2004). The bid was unsuccessful and the current criteria state clearly that names of iwi owned businesses and service providers may not be registered in this domain space (register.iwi.nz, n.d.). Within the Māori Hyperlink Network (MHN) 45 websites would be eligible for an .iwi.nz domain if the criteria were to be extended to also include iwi or hapū owned businesses and service providers. In 2005 20 MHN-sites were registered under .iwi.nz; three of which were no longer active at the time of writing (see Table 7).
A submission to change the policy to allow “non-commercial iwi group coalitions” to register under this domain was under consideration (DNC, 2006, n.p.), but no further news is available about the matter. It will be interesting to see whether Māori will be able to influence this domain space to more closely meet the social organization of contemporary Māori society in the future. At the same time, voices among Māori scrutinizing the appropriateness of widening the criteria of the .iwi.nz exist. Some are even questioning the inclusion of hapū as various submissions concerning the 2004 extension of the .iwi.nz criteria highlight (Chadwick, 2004; Heath, 2004; T. Nikora, 2004). The mode of governance of the DNS in New Zealand today might appear bureaucratic and slow, but it does agree with the Māori way of coming to an agreement – via discussions and consultation (Te Puni Kōkiri, 1992).
This domain went online on September 5th 2002 after a lengthy process and the personal initiative of a few influential individuals. Generally, anyone can apply for the creation of a new domain name. In New Zealand an application for the creation of a new 2LD has to be directed to the DNC and has to meet set criteria alongside an explanation of why the creation of this new space is deemed necessary. The New Zealand Māori Internet Society stated in their application:

New Zealand is a bicultural country with two official languages that may be spoken anywhere. As with any bicultural country, allowances should be made to accommodate both cultures.

Presently the New Zealand Internet domain name system has not addressed the bicultural needs of New Zealand nor it’s [sic] growing Māori Internet users […] A small effort was made in the past with the creation of .iwi.nz but this only caters to 30-40 groups in New Zealand, many of which are either not on the web or are not structured enough to apply (NZMIS, 2001, n.p.).

Māori individuals and organizations not meeting the criteria of the .iwi.nz domain have to register elsewhere within the DNS. The above quote is sourced from the second attempt to create a Māori specific domain. The first took place in 1997 when Te Kōhanga Reo National Trust (Te Kōhanga), represented by Ross Himona for this purpose, wanted to register a 3LD but clearly did not meet the iwi.nz criteria. It was also denied registration under both the .school and the .ac domains (Computerworld, 1997).63 Neither the trust nor the individual kōhanga reo (language nest) it represents are considered schools or universities. Tertiary providers in New Zealand are also referred to as whare wānanga (Te Whare Wānanga o Tāmaki Makaurau stands for the University of Auckland) meaning ‘school of learning’. The term does apply to all kōhanga reo and is in no case restricted to tertiary institutions. The trust was nonetheless denied the .ac.nz name space. The application for a specific Māori

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63 It is interesting to note that Te Kōhanga’s website can be found under the very domain space it was denied in 1997: kohanga.ac.nz which was first registered in March 1998. Te Kōhanga also registered kohanga.co.nz in June 2008 and kohanga.maori.nz in September 2002 but neither domain is actively providing a website.
domain space was lodged but not granted because the trust is a non-commercial organization and was, it was argued, therefore accommodated by the .org.nz domain. An additional reason the proposal was declined lies in the nature of DNS governance – InternetNZ or any other organization does not have the mandate to make a decision on such matters but rather support from the wider internet community is required. The 1997 application did not have this backing. Nonetheless, this ‘defeat’ had a positive side effect – Ross Himona together with Karaitiana Taiuru and others formed the New Zealand Māori Internet Society (NZMIS, 2006).

Between the first attempt to implement .maori.nz and the 2001 application NZMIS was able to increase membership numbers, become more influential and considerable time was spent on consultation throughout Māoridom (NZMIS, 2006). The proposal was accepted by the DNC and advertised for discussion. In March 2002 a vote saw not only a record number of voters partake but also a high level of support: 91.7% of the 1623 votes were for the creation of .maori.nz. This poll was followed by an official call for comments. All submissions were supportive which led the DNC to announce their interim decision regarding the date and planned procedure of the domain’s implementation. A final call for comments regarding the launch preceded the domain’s introduction in September 2002 (InternetNZ, n.d.-b).

The existence of this 2LD is not “an avenue for authentic Maori information to be easily recognized” as Sally Pewhairangi (2002, p. 142) suggests. Although the community of interest are “Māori people, groups, and organisations” (DNC, 2008, p. 10) there is no specific body to monitor the content of websites registered in this domain space nor is registration restricted to ‘Māori people, groups, and organisations’ only. Anyone can register a domain name under .maori.nz. Surfers to these internet sites, as to any other site, have to use their own information assessment skills to decide the validity and authenticity of the information presented to them.
Adam Gifford (2002, n.p.) reported the domain’s initial success: “More than 200 names were registered in the .maori.nz space in the first 24 hours of operation, with many people taking the opportunity to buy their family name”. Registrations reached over 400 in the first year of the domain’s existence. Figure 11 shows a substantial drop in the second year; the first year anniversary, September 2003, saw a net-decrease of 120 registrations and the following month another reduction of six. The number of .maori.nz domains registered continues to be on the rise ever since reaching 534 registrations by December 2008 with slight downward trends usually, but not only, occurring in September when many annual registrations come to their end (DNC, 2009a). The uptake though did not meet NZMIS’s expectations. This might be because many Māori organizations had already settled within other New Zealand domain spaces or even within TLDs; examples of this are www.maori.org.nz and www.maorimusic.com.

Table 8 below lists the six websites within the MHN registered under the .maori.nz domain at the time the hyperlink network was researched in 2005. In April 2008 two more network members can be added to this list because their domain name changed. The ‘original’ 2005 URL (Uniform Resource Locator; web-address) redirects in the
case of Aotearoa Café to the new .maori.nz address and in the case of NZ Reo (Kōrero Māori) is substituted with the new domain name once a site-internal link is clicked. Aotearoa Café is still active, but it does not provide any content and two more websites were no longer active at the time of writing.

<table>
<thead>
<tr>
<th>Website host</th>
<th>Web-address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Te Ohu Kaimoana</td>
<td><a href="http://teohu.maori.nz">http://teohu.maori.nz</a></td>
</tr>
<tr>
<td>Te Arawa Waka ki Ōtautahi</td>
<td><a href="http://www.arawa-otautahi.maori.nz">www.arawa-otautahi.maori.nz</a></td>
</tr>
<tr>
<td>Karaitiana Tāiuru</td>
<td><a href="http://www.taiuru.maori.nz">www.taiuru.maori.nz</a></td>
</tr>
<tr>
<td>Kōrero Māori</td>
<td><a href="http://www.korero.maori.nz">www.korero.maori.nz</a></td>
</tr>
<tr>
<td>Wellington Maori Business Network</td>
<td><a href="http://www.teawe.maori.nz">www.teawe.maori.nz</a></td>
</tr>
</tbody>
</table>

**Active, but no content**

<table>
<thead>
<tr>
<th>Website host</th>
<th>Web-address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aotearoa Café</td>
<td><a href="http://www.aotearoa.maori.nz">www.aotearoa.maori.nz</a></td>
</tr>
</tbody>
</table>

**Website no longer active**

<table>
<thead>
<tr>
<th>Website host</th>
<th>Web-address</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIO</td>
<td><a href="http://www.amio.maori.nz">www.amio.maori.nz</a></td>
</tr>
<tr>
<td>Ngāti Rangi Development Society</td>
<td><a href="http://www.ngati-rangi.maori.nz">www.ngati-rangi.maori.nz</a></td>
</tr>
</tbody>
</table>

Table 8: List of Māori Hyperlink Network members with .maori.nz domain

Last visited 14.07.2010

**Problems**

Domain names similar to personal and place names are associated with value – cultural and economic. In an economic sense, domain name trading is a booming profession with high returns possible. But, the DNS is vulnerable to certain risks if not moderated and particularly if working on a first-come-first-served principle which is both the case with .maori.nz. ‘Cyber-squatting’ and inappropriate or even racist 3LDs are two major problems .maori.nz faces. One prominent case of cyber-squatting featured in *The New Zealand Herald* just two days after the domain went online: two businessmen registered 58 3LDs including several iwi and hapū names. Ngapuhi.maori.nz was initially offered for NZ$ 1000 plus tax but inclusive of transfer costs (Gifford, 2002), which occur when ownership details change. When registering a domain most registrars charge between NZ$ 40 and NZ$ 60 for a 12 month subscription. These particular ‘squatters’ agreed, in the end, to return tribal names to their rightful owners upon request without making any profit. The cultural value of domain names in this case triumphed over economic interests.
A number of registrants utilize the .maori.nz domain to create thoughtful web-addresses. Examples are www.iam.maori.nz – a website where according to the webmaster “everything is free and you get nothing”;\(^\text{64}\) its content is mainly made up by a list of hyperlinks to websites ranging from computer related matters to TVNZ On-demand. Another example is www.mohio.maori.nz; its motivation and content are reflected in the domain name:

**Why the URL www.mohio.maori.nz?**
Well here's a short definition of the Maori word:

<table>
<thead>
<tr>
<th>mohio</th>
<th>-tia</th>
<th>+</th>
<th>ki = know, clever, intelligent, conscious of</th>
</tr>
</thead>
<tbody>
<tr>
<td>it's closely related to this word:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mohiotanga = information, knowledge.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Basically the idea with it is that over time as I learn cool new things about Te Reo Maori and Computer Stuff and other things of interest I'll share them here and hopefully they'll be of interest to others.

(mohio.maori.nz, 2008)

Unfortunately, in some cases 3LDs are also used to create derogatory statements like the no longer active domain ‘getoffmybeachyou.maori.nz’ (AMIO, 2004a). The Aotearoa Māori Internet Organisation’s (AMIO) forum has posts informing the community regarding such issues. One post states:

> We have been sucessful [sic] in stopping several inappropriate uses of .maori.nz addresses that degraded Maori […] Our latest success story is a racist .maori.nz name [which] was pointed at a government web site making it look as though the government department was racist.

(AMIO, 2004b)

The reasons for the removal of these domains does not lie in their derogatory nature *per se* but rather in a breach of regulations by the registrants who used false names for the registration (Taiuru, 2006). Second-level domains are not allowed to “bring the .nz domain name space into disrepute” (DNC, 2008, p. 3), unfortunately there are no restrictions or regulations regarding these aspects when it comes to 3LDs.

\(^\text{64}\) [www.iam.maori.nz](http://www.iam.maori.nz); last visited 04.06.2008.
Recent developments

Both .iwi.nz and .maori.nz are in the Māori language. With language being such an important aspect of identity, one central concern of the Māori renaissance is the retention of the Māori language and its use in all spheres of (modern) life. The absolute number of Māori speakers continues to be on the rise and therefore it is not surprising that calls for a bilingual cyberspace become more frequent as well as to facilitate the use of macrons (like the ‘ā’ in Māori to indicate a stretched vowel). Non-roman language scripts, in this context referred to as internationalized domain names (IDNs), are supported in a number of ccTLDs and gTLDs. The DNC (2007a) called for submissions on whether the currently available character set for domain names should be extended to include ā, ē, ī, ō and ū. In April 2010 the DNC (2010) at long last announced the availability of IDNs within the .nz domain space. A sunrise-period between April 6th and July 6th sees registrants of existing 3LD in Māori being able to “request the versions of their names with macrons” (ibid.). The official launch of Māori IDN registrations coincides with the 2010 Māori Language Week (26 July – 1 August). Māori domain names will not automatically be registered with both the macron and without and will take place on a first-come-first-serve basis after the launch.

Further, NZMIS also opened discussions concerning the possibility of a truly bilingual DNS in New Zealand by making 2LDs available equally in Māori and English. Table 9 provides an overview of suggested translations. The bilingual 2LDs would exist simultaneously and a 3LD would be registered in both domain spaces by default. InternetNZ announced to take the suggestion under consideration (The Dominion Post, 2007).

<table>
<thead>
<tr>
<th>Existing 2LD</th>
<th>Proposed Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>co.nz</td>
<td>mahi.nz</td>
</tr>
<tr>
<td>net.nz</td>
<td>ipu.nz</td>
</tr>
<tr>
<td>org.nz</td>
<td>ropu.nz</td>
</tr>
<tr>
<td>school.nz</td>
<td>kura.nz</td>
</tr>
</tbody>
</table>

Table 9: Proposed translations of second-level domains
The .cat domain name space supports special characters used in Catalan (à, ç, è, é, í, ï, ò, ó, ú and ü). Any domain name with these characters is, similar to NZMIS’s suggestion, automatically registered and available both with and without the special characters (Fundació puntCAT, 2005). This allows users not able to easily type the special characters with their keyboard to access the website as well. The Catalan example shows that there are no technological limits when it comes to bilingual domain names.

In June 2008 ICANN (Internet Corporation for Assigned Names and Numbers) agreed to change the rules concerning TLDs. In the future it will be easier for industries and minority groups to propose new domain spaces. The aim of these changes is mainly to speed up the process of approval and to increase the possibilities to register a domain name particularly as alternatives to already overcrowded gTLDs like .com. These changes are also very promising to indigenous peoples. Aotearoa could in the near future have its own gTLD as previously proposed (Pullar-Strecker, 2001) or even .maori would be possible. The details of the procedures of proposal and veto of new TLDs, though, still need to be developed (The New Zealand Herald, 2008).

*Chapter summary*

Māori were indeed active in providing content on the internet from its very beginnings in New Zealand. Some of these resources were considered newsworthy as they became available online. The technology was seen as important enough by Māori Television for it to create a regular show to follow innovative developments and make them accessible to a wide audience. However, Māori for a long time were much lower represented in terms of access numbers of individuals. The digital divide continues to be of concern in Aotearoa but changes in this regard have been mostly positive in recent years. Developments in the telecommunications sector and initiatives from within Māoridom both contribute to this trend.
The discussions concerning the structure of the internet highlighted that, similar to developments surrounding radio and television discussed in Chapter One, the wider socio-political context impacted on the country’s DNS. The implementation of .iwi.nz took place at a time when bicultural considerations were prominent in the political and public discourse. However, the governmental view of iwi, or rather their trust boards, directly influenced the domain’s early registration criteria. The relatively fixed understanding of iwi, with little room for social change, did not fare well with Māori individuals and organizations who voiced their concerns regarding the existing structures.

Not only did Māori influence what was instigated and provided by government (.iwi.nz) to better meet the needs of Māori tribal organizations in their many modern forms, they also actively created a whole new space. The early New Zealand cyberspace might have been more bicultural than that of many other countries, but it did not allow for all Māori to find a fitting place within it. It is however of great importance to stress that change did not come about because of Pākehā or the government, but because of the persistence of Māori individuals and organizations following the traditional way of consulting and discussing with all concerned communities. This led to a webspace carrying the name and identity of its people.
This chapter has two main parts. To begin with, I shall discuss methodological reflections concerning cross-cultural research and kaupapa Māori (Māori understandings, practices) theory as well as the tensions and difficulties which arose in light of the fact that I am an overseas non-Māori PhD student undertaking research on a topic relating to Māoridom.

The next part of this chapter introduces the methods used to inform this research. Greater emphasis is allowed on matters relating to (hyperlink) network analysis due to the method’s relative novelty to me and possibly to many other readers as well. Key concepts of network analysis are introduced and necessary adaptations to their application to hyperlinks elaborated. This chapter further investigates how the results from this analysis were used for sampling purposes along with details on how these sample-sites were examined in order to develop a better understanding of Māori cyberspace. The later sections inspect the engagement with the providers of Māori sites by means of online questionnaires. Users of such sites contributed to this research through their participation in semi-structured interviews. The aim of this part of the thesis is to provide background information for the following chapters which present results and findings of these empirical research steps.
Cross-cultural research can, as Paul Spoonley (2003, p. 60) incisively phrased it, “be fraught with difficulties”. However, cross-cultural research relating to indigenous peoples can be even more ‘problematic’. For a long time this kind of research was exploitative, ignorant, purpose-driven (usually not with the best interests of the ‘objects’ in mind), and, more often than not, highlighted problems or negative statistics but ignored to provide workable solutions or useful explanations. For these reasons many indigenous peoples and communities take an apprehensive stance towards research and researchers generally, but more so if ‘outsiders’ are involved (L. T. Smith, 1998; Stokes, 1985; Teariki, Spoonley, & Tomoana, 1992).

Therefore, the most central question before engaging in any cross-cultural research is whether one should actually take on such a task or if it is best left to others. Mason Durie in a private communication with Spoonley (2003, p. 60) notes that research into traditional Māori knowledge should only be undertaken by Māori. A standpoint which resonates with others and which is comprehensible if one is familiar with mātauranga Māori (Māori knowledge):

Knowledge was and is highly valued, specialised and hierarchical. While knowledge and skills necessary for day-to-day community living were acquired by everyone, not all knowledge was universally available. In this instance, rights to knowledge such as tribal lore, tribal custom and etiquette, and whakapapa [genealogy], all of which are associated with mana [prestige], were entrusted to only a few selected members of the whānau [extended family] by tribal minders – the kuia and kaumātua [female and male elders] (Jahnke & Taiapa, 2003, p. 42).

Some mātauranga requires protection and therefore access is limited to a few individuals and guarded even within the community. Academia on the other hand is criticized as having a contradictory understanding of knowledge whereby all knowledge should be publicly available and shared widely (Stokes, 1985). Chapter Two already noted that many aspects of Māori society are regulated by the concept of tapu (restriction, sacred). This is also the case with knowledge. To safeguard the tapu
and therefore mana the tenor of most writers regarding research relating to Māori issues is very clear: if at all possible the researcher(s) should be Māori. But more so, Māori should “design, plan, gather data, analyse, and write up the research” (S. Walker, Eketone, & Gibbs, 2006, p. 333). This type of research which challenges Western paradigms and hegemony within the New Zealand context is called kaupapa Māori research.

S. Walker et al. (2006, p. 332) and Jahnke & Taiapa (2003, p. 44) note the importance of the socio-political and global context contributing to the development of kaupapa Māori methodologies: global indigenous movements with increased focus on self-determination and empowerment; renewed commitment to the Treaty of Waitangi (particularly the emphasis on ‘partnership’); and the flaxroot educational and health initiatives focusing on the requirements of Māori communities. Graham Smith (2003, p. 2) further observes the importance of “a shift in mindset of large numbers of Maori people – a shift away from waiting for things to be done to them, to doing things for themselves”. Therefore, kaupapa Māori research is often praxis orientated, focuses on self-determination as well as control of the research process and is embedded in Māori values and cultural practices.

Such can be achieved if the research process considers three central principles as first introduced by Mason Durie as part of a presentation in 1996 (Kingi, 2005). The following three principles were developed relating to health research but are applicable to other research areas as well. Whakapiki tāngata (enhancing people) highlights that all research should directly affect individuals be it by positive outcomes or through an increase of control and power over their own affairs. Whakatuia or Whakaurunga (integration) refers to the linking of various aspects ranging from culture, socio-economic factors, political and historic influences to the spiritual sphere to achieve a complete understanding. Mana Māori (Māori control) emphasizes the question of control throughout the research process including matters relating to the outcomes of any study (Jahnke & Taiapa, 2003; Kingi, 2005).
Research itself should be responsive to Māori needs expressed from within the community. It is central then that the knowledge gained from research directly benefits the community. Evelyn Stokes (1985, p. 6) remarks:

The purpose of Maori research should be to identify and make available knowledge of the Maori world, Maori perspectives and perceptions, Maori cultural values and attitudes in areas which are seen as significant in Maori terms.

Hence it is emphasized that those involved have a connection to and understanding of the community. In any case, the researchers are not viewed as the ‘experts’ but rather the participants hold the information and knowledge the researchers must learn. It is therefore of great importance that they have the right qualifications, but not only in an academic sense. The participants in the end decide if “the researcher is right for them” (Walsh-Tapiata, 2003, as cited in S. Walker et al., 2006, p. 336). However, most writers ultimately note that a large portion of research will be undertaken by research teams involving both Māori and non-Māori. One such instance is described by Marge Wong (2006). She details her experience as part of a Ministry of Education project in the role of a ‘cultural advisor’ in collaboration with a Pākehā (European) senior researcher. An actuality which will continue to be a necessity for many such research projects as the demand for Māori researchers continues to supersede the number of Māori graduates, particularly from postgraduate level.

Returning to the fundamental question introduced earlier in this section, am I the right person to do this research? I am not Māori nor am I part of a Māori-led research team and the research topic was not instigated from within Māoridom. Therefore I might not be the most suitable person to undertake this research, but I am certain that I am ‘a’ right person to do so. This is not kaupapa Māori research but it is very much influenced by many of the principles that writers on this methodological approach emphasize. Engaging with the literature on indigenous methodology and kaupapa Māori research (mostly not relating to the topic of this thesis at all) shaped not so much the methodological approach of my research per se, but more my personal
relationship to my thesis and the participants, even those whom I have never met personally. The evenings I spent at my Māori language classes, particularly the tea breaks, were also very influential in shaping my self-awareness and understanding.

Tensions and priorities: The PhD and its responsibilities

One issue that finds mention by almost all authors addressing cross-cultural research on topics relating to Māoridom is the fact that it is usually undertaken out of “self-interest” (Teariki et al., 1992, p. 4). This thesis research clearly is ‘guilty’ of this accusation. After all, one of the motivations of this undertaking is to be granted a Doctorate degree. A PhD is a unique aspect of academia, a luxury endeavor into existing knowledge and the chance to contribute to new understandings. However, before it even gets near the stage of fulfillment of an academic degree it needs to pass a different form of examination and defense, of the people contributing to the research. My intentions were questioned by many (Māori and non-Māori alike) to whom I have spoken about my research. Most were apprehensive in the beginning, but all conversations ended in the approval and kind words of support and encouragement.

I was also under critical inspections by the participants of my research. This was particularly apparent with those involved with the online questionnaire. Questionnaires are not a preferred research method for most Māori and participation is often low and the use of ‘booster samples’ to achieve a more representative picture is common, see for example the earlier discussed World Internet Project New Zealand survey (Bell et al., 2008). Nonetheless, I decided to give it a try but to keep the questionnaire very short and provide opportunity to add comments where appropriate (details below). The invitation to participate was sent out via e-mail or letter; a rather impersonal approach. I certainly expected to receive questions regarding the research via e-mail but also provided a phone number to allow a more personal contact if participants wished. And indeed this eventuated. I remember two conversations in particular. Both wanted to find out more about the research, the context of the questionnaire, my supervisors and about all the other support I receive.
just as much as they wanted to find out more about me personally. At the end both callers expressed that this conversation was very important to them and that they only now were satisfied with the integrity of my research and were willing to participate.

One ‘requirement’ bestowed by the University of Auckland’s Human Participants Ethics Committee was that all information and consent documents provided to participants, as well as the questionnaire used, were available both in Māori (te reo Māori) and English. The first translation was done via an agency specializing in internet- and multi-media related services. The work was done promptly and looked great to the eye of a learner of the language. However a native speaker pointed out that the translations were in fact of poor quality. I was put in contact with a new translator to whom I spoke on the phone for quite a while. It was important to her to find out as much as possible about myself and my research before she agreed to take on the job. The translator’s commitment allowed me to provide documents which used appropriate language to the participants enabling them to relate and understand my research more favorably.

However, this did not change the fact that some participants found the participant information sheet and more so the consent form disconcerting. I can fully understand this sentiment having not been familiar with the procedure from any research I undertook previously. They make the research seem more impersonal and daunting. Overall they seem very unnatural to me personally and it was crucial to establish good communication with the interview participants before I handed over these documents. With two individuals this was done via e-mail, but with others I met over coffee or had an informal chat. To me as a researcher this approach is more effective in providing information to the potential participants and to discuss the matters covered in the consent form, particularly if it is kanohi-ki-te-kanohi (face-to-face). The real consent, however, is only given during the actual interview by the sharing of the participants’ experiences and views with the researcher.
A central point of critique when it comes to cross-cultural research in Aotearoa/New Zealand as previously noted relates to the fact that the outcomes often only continue to highlight negative statistics without providing workable and appropriate solutions. They therefore “sustain one group and disempower another” (Teariki et al., 1992, p. 2). This is the case in this thesis to a limited extent as well. Chapter Three discussed matters of the digital divide in Aotearoa where a slightly negative picture continues to exist. However, positive developments in this regard are highlighted and Māori-led initiatives discussed. Similarly, Chapter Seven notes the low utilization of the Māori language within the sample-sites compared to previous research and discusses possible reasons for this. Then again, whatever the results are, in this case it very much depends on the users of these internet sites and whether this should be seen as a ‘negative’ development. Would a high use of te reo Māori be more beneficial? Or would this in fact be a linguistic form of gate keeping? The analyses undertaken as part of this research always attempt to consider the wider social and historic context. By doing so, seemingly ‘negative’ facts might actually be just right for the contemporary situation.

**Mixed methods**

During the very early development phase of this thesis I decided not to engage in classic in-depth ethnographic research. It would certainly have been interesting to me personally, but it would not have been of much value to Māori. Instead of starting out on a path determined by my thinking and existing knowledge this thesis was instead led by findings and existing literature. A good example for this openness of the research process is the inclusion of the linguistic analysis of the sample-site. This was not part of the initial ‘research plan’ because previous research had looked into this matter. However, the results from the analysis of the use of languages within the index-pages were in such stark contrast to these previous findings that it was deemed necessary to investigate this in more detail.
The research process of this thesis is strongly interconnected, with each step being informed by the preceding. The quantitative beginnings contributed to an understanding of the cyber-research field. The results were also used to select sample-sites for more in-depth engagement with the online environment instead of selecting specific and subjective internet sites or completely random ones. Rather, the ‘creators’ of this Māori cyberspace influenced the research by their linking behavior. The content and linguistic analyses as well as the engagement with existing literature (particularly by Māori writers) in turn affected the questionnaire and interviews.

Methodological considerations regarding these research steps will be discussed in the following pages along with detailed descriptions of the actual research process and experiences. These discussions will also consider less than optimal aspects of the research process and how the process or specific methods have been adapted to be more suitable and effective for this research project.

**Social network analysis**

People around us and their actions are very influential in our everyday life even when surfing the internet which, in its very nature, only exists through connections. Webmasters decide, for different reasons, to relate their own documents to outside information available. Without these hyperlinks the World Wide Web (WWW) simply could not exist and they very much prescribe what the internet ‘looks’ like. Internet sites and the links between them are the structure of the WWW along which users travel in the search for information or entertainment. *Interrelatedness* has been the subject of interest within many disciplines and saw the development of social network analysis (SNA).

Linton Freeman (2004) takes his readers on a historic journey of the development of this versatile and useful analytical approach highlighting the many disciplines that contributed to social network analysis. As for the social sciences, John Scott (2000) stresses the importance of Jacob Moreno’s *Sociometry* which had its beginnings in
the 1930s. The 1960s and 1970s were the high-point of SNA when communication within groups and organizations were studied. The interaction patterns of individuals and the diffusion of ideas and innovations were detailed and concepts like centrality, influence and homophily arose and mathematical models were developed (Freeman, 2004). However SNA’s prominence waned after this spurt of developments until the 1990s when networks gained renewed popularity in both academia and entertainment.

John Guare’s (1990) theatre play *Six Degrees of Separation* was such a success on stage that it was turned into a movie starring Will Smith (Schepisi, 1993) and four years later *The Oracle of Bacon* ([http://oracleofbacon.org](http://oracleofbacon.org))


**Hyperlink analysis**

Stanley Brunn and Martin Dodge (2001, p. 1718) provide an excellent statement on how we can understand hyperlinks beyond definitions from a strict computer programming or technological point of view:

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65 Last accessed 14.07.2010
Hyperlinks are connections between pages; that is, they tie the Web together. This enables users to traverse from one page to another simply by clicking on the hyperlink. Hyperlinks are socially designed information structures created by Web authors and can be thought of as a virtual citation.

The most important attribute of hyperlinks is to be seen in their potential to offer help to users in their search for information, entertainment and communication on the internet. Search engines, like renowned Google, now play a vital role in this process. Mike Thelwall (2001, p. 1159), referring to Jon Kleinberg (the developer of the HITS search algorithm), \(^{66}\) makes clear that hyperlinks are essential in the computerized search for ‘authoritative’ information on the internet:

Indeed, Kleinberg points out that much general information on the Web is only available to automated processes via the link structure, particularly information about which sources of information are most authoritative for a given information need.

Further, the 10th WWW User Survey by the Graphic, Visualization and Usability Center (GVU, 1998) showed that surfers often simply follow hyperlinks provided by webmasters when searching for new online resources. Hyperlinks, hence, represent vital channels of communication between webmasters and the visitors, letting the latter know what else out there relates to the information or services provided on a linker’s site. Another communication channel is opened between the organizations or persons providing internet sites. The two hosts might actually be in contact with each other offline, but not necessarily. They might not have heard of the others’ existence before one found the others’ website on the internet.

Considering the great influence hyperlinks have on the kind of information visible within the tangle of the WWW it is surprising that studies specifically concerned with the question of why hyperlinks are set are scarce. One example is Han Woo Park (2002) who attempted to illuminate the factors influencing Korean webmasters.

\(^{66}\) HITS stands for Hyperlink-induced Topic Search. It is a text- and hyperlink-based search algorithm which identifies different thematic groups when searching a keyword (Steele, 1998).
in their decision as to which internet site(s) they direct a hyperlink to. Although Park points out that the findings should not be generalized, due to the fact that only Korean webmasters were questioned and the sample was somewhat small (n=64), they do fall in line with the above notions surrounding hyperlinks. The main benefits webmasters see in the act of linking fall into two categories. Firstly, navigational: hyperlinks allow the exchange of content between sites and also extend the scope of information provided on their own site. Secondly, business oriented: hyperlinks as advertising allow a host to gain important funding, but less obviously, a good hyperlinked site can increase its own traffic by functioning as a starting point for frequent users.

Further, connections to and from credible and trustworthy hosts are likely to confer credibility on a website. Park (2002, n.p.) addressed webmasters with, amongst others, the following question: “Overall, how much do you think your Website’s credibility increased when linking with other sites perceived highly credible?” The answer was to be rated on a fraction scale with 50 representing ‘average’. A mean of 77.58 showed that webmasters indeed perceive their own credibility to be influenced by the credibility of sites they are linked to. This notion of hyperlinks as facilitators of credibility was further supported by Park and his colleagues (Park, Barnett, & Nam, 2002) who confirmed that credibility increases for an internet site when associated with a highly respected site. That is to say, if a new host or internet site is linked to by a well established website the surfer is more likely to perceive the unknown site as credible and worth perusing.

Three main disciplines are involved in hyperlink analysis: Computer Science, Information Science and Social Science. This threefold distinction should not be considered a strict ontological separation. Co-operation and crossover are both common and advantageous to research. Nonetheless, each group has its own specific focus of research. The main aim of those Computer Scientists concerned with hyperlink analysis is to improve the retrieval of information by means of search engines (selected examples include: Kleinberg, 1999; Lempel & Moran, 2002; Meghabghab, 2001; Menczer, 2004; Nomura, Oyama, Hayamizu, & Ishida, 2004).
Some Computer Scientists are also interested in enhancing the usability and effectiveness of hyperlinks *per se* for users (Pitkow & Jones, 1996; Weinreich & Lamersdorf, 2000).

Within Information Science a specific branch developed called *Webometrics*. This term was introduced by Peter Ingwersen and Thomas Almind in 1997 (Thelwall & Vaughan, 2004, p. 1213). Webometricians analyze hyperlinks in order to gain as much information as possible about science communication through quantitative research (selected examples include: Faba-Pérez, Zapico-Alonso, Guerrero-Bote, & Moya-Anegón, 2005; Payne & Thelwall, 2004; Rousseau, 1997; Thelwall, 2001; Vaughan & Thelwall, 2005). One of the most utilized and discussed concepts is Ingwersen’s (1998) *web impact factor* which finds application in this research and therefore will be discussed in more detail further on.

The Social Sciences tend to be concerned with specific sectors of society or defined issues. In this context hyperlinks are thought to represent relationships between individuals (Adamic & Adar, 2003) and between groups or organizations (Burris, Smith, & Strahm, 2000; Gerstenfeld, Grant, & Chiang, 2003; van den Bos, 2006). Hyperlinks are also understood as communication structures and facilitator of credibility (Park et al., 2002; Park & Thelwall, 2005). This thesis was particularly influenced by the works of Richard Rogers and Noortje Marres around *Issue Networks* (govcom.org Foundation, n.d.; Marres & Rogers, 2000; Rogers, 2002; Rogers & Marres, 2000) as well as Anne Beaulieu’s (2005) *Sociable Hyperlinks*.

**Stacking out a research field**

The aim of the hyperlink network analysis in this thesis is threefold. Firstly, to develop a broad understanding of which websites are available online and therefore to ‘map’ Māori cyberspace. Secondly, to demarcate the (online) research field and thirdly, to utilize the results of this analysis for the selection of a more restricted sample. This was achieved by a process of iterative co-citation analysis which began
by selecting three starting points. The following three internet sites were chosen after an extensive engagement with several search engines.

*Maori.org.nz* (www.maori.org.nz; Figure 12)

This internet site (MOrg) ranks number one at major search engines. It offers broad access to anything concerned with Māori society and culture. Services that are useful for everyday life e.g. event calendar, bulletin board and e-cards are provided as well. This website is part of the sample and is explored in more detail later on.

![Figure 12: Screenshot of www.maori.org.nz](Taken on 22.07.2009)
Māori Language Commission (www.tetaurawhiri.govt.nz; Figure 13)

This is a bilingual government-site, which offers broad information about many aspects concerning te reo Māori: where to learn it, its history, statistics, download of a keyboard macronizer and many informative booklets on how the Māori language can be integrated in different aspects of everyday life. This small program allows any keyboard to be reconfigured to easily support macrons.

Figure 13: Screenshot of www.tetaurawhiri.govt.nz
Taken on 22.07.2009

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67 This small program allows any keyboard to be reconfigured to easily support macrons.
Tūhono (www.maori.org; Figure 14)

Tūhono works as a connector between Māori and their iwi (tribes) and other Māori organizations. Furthermore it facilitates up-to-date information for iwi about their registered members based on the electoral roll. Tūhono’s site is no longer available under this domain name, it has moved to www.tuhono.net.

The next step saw links collected from either specifically designated link-pages or scanned for within the full structure of the site. The ‘sitations’ were compared for co-links. If an internet site was linked to by at least two of the starting points it qualified for the second iteration. In this step hyperlinks were again searched and the results compared. If a site received a minimum of two links from either the second iteration or the starting points it became a member of the network. A third iteration analyzed member-sites regarding whether any hyperlinks were set to other websites of the network – the starting points and sites derived through the first two iterations –

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68 In Situations: An Exploratory Study Ronald Rousseau (1997) appears to be the first author to have adapted the word citation to ‘sitation’ when referring to hyperlinks.
but no new members were generated as a result of this step. Figure 15 below illustrates the process:

![Hyperlink Network Analysis Process](image)

Figure 15: Illustration of hyperlink network analysis process

This process of demarcating a hyperlink network is essentially modeled after Rogers and Marres’ Issue Networks which base the membership on two criteria. Firstly on hyperlinks and secondly the discussion of a specific issue determines whether a page is part of the network. The word page is highlighted because in the case of Issue Networks one is “looking for the most relevant material on the web per issue” (Rogers, 2002, p. 8) which is often specific to pages, not necessarily to an internet site as a whole. Since the broader aim of this research is not to find out about a specific issue debated on the internet, the membership rules for the Māori Hyperlink Network (MHN) thus differ slightly. The two-link principle is still of great importance, but if the targets of the hyperlinks are not the same, the membership depends on whether it is possible to find the referred pages within the website easily. Navigation, therefore, becomes increasingly significant, as does the internet site as a whole.

Two examples of how navigation influenced whether a website became part of the network or not are [www.bay-of-islands.co.nz](http://www.bay-of-islands.co.nz) and [www.minedu.govt.nz](http://www.minedu.govt.nz). Tūhono set
a hyperlink to www.bay-of-islands.co.nz/Maori.html. MOrg on the other hand linked to www.bay-of-islands.co.nz/books/ipipiri.html. It was easy to find the ipipiri.html page from the sub-page Tūhono referred to, but there was no connection back from the ipipiri.html page to either Maori.html or to the index-page. The site therefore did not qualify for the second iteration. The Ministry of Education’s website however did, as its index-page was linked to by the Māori Language Commission and a sub-page received an in-link from MOrg. The sub-pages on Māori and Special Education were easily accessible from the index-page, which in turn could be retrieved from sub-pages with a single click.

The influence of directories or portals (websites whose main purpose is to offer a collection of web-addresses with no or very little additional information) was reduced by introducing the rule that a potential member had to receive at least one in-link from a starting point or an internet site derived through the first iteration which is not a directory. In other words, if a website is hyperlinked by two directories only it will not be part of the network. It is also important to point out that the network does not contain any search engines or sites not directly related to the overall topic of the research. A good example is Adobe’s website. Many members link to Adobe’s Acrobat Reader which allows PDFs (portable document files) to be viewed.

It is important to note that even though the starting points were selected by the researcher after a surf expedition and visits to several search engines they nonetheless had to meet the terms outlined above just like the members obtained via the first and second iteration. If this was not the case they would not have been suitable starting points to begin with.

As with any research method, the membership rules for the demarcation of a hyperlink network have to be adapted to the specific requirements of a new research project. It will also be necessary to decide how the hyperlinks will be gathered. In this case the sitations were collected and compared manually unlike other projects (see for example govcom.org Foundation, n.d.; VOSON, n.d.) which use web-crawlers. This choice was made for two significant reasons. Firstly, crawlers or
robots are not allowed to enter all internet sites. It would have been necessary to check which sites were crawled for hyperlinks and which ones were not. A comprehensive generation of a small-sized network relies on as many links as possible to be registered and compared. If a site was not to be crawled for hyperlinks this potentially would have resulted in considerable alterations in the network. Certainly, when analyzing the ‘whole’ WWW as Albert, Jeong and Barabási (1999) undertook, reliance on crawlers is crucial as it would not be possible to analyze millions of hyperlinks manually. Nonetheless, variances within such large numbers of connections and nodes would not greatly influence the network as it would in the case of a small network. Secondly, it is important that different pages have to be found easily within the structure of a site. The manual collection of the network’s connections allows one to become familiar with the available websites. The size of the MHN made this approach viable and possibly even saved precious time as van den Bos (2006) noted for his work on the Dutch-Iranian cyberspace as well.

The MHN was generated between March 7th and April 4th 2005. A few sites were revisited later on as they were either not working or they were works-in-progress. The network consists of 215 members which are distributed as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
<th>No. of sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iwi</td>
<td>Iwi, hapū or whānau (tribe, sub-tribe, extended family)</td>
<td>47</td>
</tr>
<tr>
<td>Government</td>
<td>Government departments and services</td>
<td>24</td>
</tr>
<tr>
<td>Entertainment</td>
<td>Radio, TV, music and publications</td>
<td>23</td>
</tr>
<tr>
<td>Pan-tribal</td>
<td>Māori services and interest groups</td>
<td>22</td>
</tr>
<tr>
<td>Information</td>
<td>Sites with general information</td>
<td>20</td>
</tr>
<tr>
<td>Art</td>
<td>Anything relating to art</td>
<td>20</td>
</tr>
<tr>
<td>Education</td>
<td>Universities, Teachers Unions</td>
<td>18</td>
</tr>
<tr>
<td>Language</td>
<td>Funding, learning, software</td>
<td>14</td>
</tr>
<tr>
<td>Directories</td>
<td>Libraries, archives and portals</td>
<td>13</td>
</tr>
<tr>
<td>Business</td>
<td>Business advancement and support</td>
<td>9</td>
</tr>
<tr>
<td>Internet</td>
<td>Māori and internet</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 10: Number of MHN-members according to groups and group description

The groups are discussed in more detail in Chapter Five along with the results of the network analysis for which the following section provides some background information on central network analytical concepts.
Key concepts

The two most rudimentary concepts in social network analysis are the building blocks of networks – nodes and the connections between them. Nodes (commonly also referred to as actors or vertices) can be just about anything from individuals, brain cells to routers (gateways to the internet). Without connections a network would not exist as the nodes would merely be a collection of isolates. Depending on the nature of the relation(s) between the nodes a network is considered a graph or a directed graph or digraph. In the first instance the direction of the connection is of no importance. In the latter directionality, as the name suggests, is of significance.

Another distinguishing characteristic of networks is their mode. A one-mode network consists of one collection of nodes. An important property of this type of network is that all nodes can potentially be connected to each other and when turned into a matrix it will result in a square case-by-case matrix. The connections within a two-mode network do not relate to just one collection of actors, but two. Connections can only exist between these two sets of actors, not within. A simple example of this is to look at individuals and whether or not they take part in a social event.

The MHN represents a one-mode digraph. The hyperlinks between the network’s members (all websites) are registered. The hyperlinks allow a user to surf from one website (linker) to a new site (linked), but a reverse navigation will not be possible unless a reciprocal link exists. Hence, the direction of each link needs to be considered.

The degree of a node informs how many direct relations a particular actor has to others within the network. When discussing digraphs it is important to distinguish between in- and out-degree, since these can differ quite dramatically. For websites it is crucial to receive hyperlinks in order to become “visible” (Bray, 1996, p. 998). If a

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69 The following section is mostly informed by handbooks and introductory texts (Burt & Minor, 1983; Freeman, 2004; Nooy, Mrvar, & Batagelj, 2005; Scott, 2000; Wasserman & Faust, 1994) and will introduce additional authors where necessary. This especially applies when the concept in discussion is removed from its original setting that being social network analysis and adapted to the special case of hyperlink network analysis.
website does not have at least some incoming references, it is unlikely that it will be found by users, be it via a search engine or by clicking through links.

The density of a network gives an indication of a network’s tendency towards being complete – it reveals how many of the potential connections in fact exist. Scott (2000, p. 74) remarks that the density of a network is strongly dependent on its size – with bigger graphs being less likely to be dense compared to smaller ones. Barabási (2001, n.p.) ascertained for the WWW that “[…] there is an abundance of nodes with only a few links, and a small – but significant – minority that have a very large number of links”. Clearly not every website receives a sitation from all others on the internet. And if the density was to be very high it could hinder the communication process between the webmaster and the visitors. A high number of hyperlinks must be organized and described well by the host in order to be of any help in the search for information. Very high density might therefore not necessarily be a good characteristic for a hyperlink network. The other extreme, very low density, would also affect the ability of surfers to navigate the network or internet.

The concept of paths is of great relevance. A “sequence of lines in a graph [is] a ‘walk’, and a walk in which each point and each line are distinct is called a path” (Scott, 2000, p. 68). The diameter of a network is associated with the longest path. The MHN has a diameter of six. Many members, e.g. 7 and 165 are not directly connected but require five intermediates and therefore are separated by a path (illustrated in Figure 16) with the length of six links.
As pointed out before, the MHN is a digraph. Hence, when considering the length of paths, it is of importance to bear the direction of the connection in mind. In many cases therefore only one path will be possible. The shortest path between two nodes is termed geodesic path. The longer a path between two nodes is, the longer it will take for information to be passed on or, as for the WWW, to navigate between sites or possibly to never reach them. For analytical purposes, the geodesic path is used for the calculation of some centrality measures. Such is the case for the closeness-centrality. The sum of geodesic distances from an actor to all others in the network is used for its calculation indicating how close or distanced network members are to all others.

Another type of centrality measure is degree-based. A node with a high degree is involved in many relations making it a “focal point” (Freeman, 1979, p. 76) of the network, whereas a low degree indicates involvement at a minor level causing an actor to be “peripheral” (ibid.). The web impact factor (WIF) is a relative degree-

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Based centrality measure which was first introduced by Ingwersen in 1998. Earlier, a similar notion of internet information impact was applied by Josep Manuel Rodriguez Gairín (1997), but this measure did not become widely known (Noruzi, 2006, p. 1). Ingwersen’s WIF on the other hand was picked up by many researchers, often adapted or extended to the needs of their specific problem in question (Faba-Pérez et al., 2005). The WIF can be understood as “a measure of the extension of the attractiveness of a given site” (Ingwersen, 1998, p. 237).

Ingwersen calculates the WIF by dividing the sum of all self-links and external incoming links by the number of pages. This original form of the WIF makes most sense when applied to country domains. Alireza Noruzi’s (2006, p. 2) review of the WIF focuses on the impact of specific websites and differentiates three types: “overall WIF, inlink (revised) WIF, and self-link WIF”. The first variety considers both hyperlinks within the structure of a site and incoming references from other internet sites. The revised WIF just takes incoming hyperlinks into account. The last type only (navigational) links within the site structure. Generally, the inlink WIF will be most significant when dealing with the attractiveness or impact of a website compared to Ingwersen’s country domain approach.

For the MHN finding out the extent to which the members of the network are acknowledged from outside the network was deemed to be irrelevant. Instead attractiveness within the network was seen as the major point of interest. Hence, the WIF was slightly adapted. The number of received hyperlinks was divided by the number of possible links. Internal links were not considered, neither were multiple references. Therefore, the number of incoming hyperlinks a member-site could potentially receive is 214. This variation of the WIF does not recognize the full impact a site may actually have, since only one link to the site as a whole is counted and multiple hyperlinks with the same path are discarded. Ingwersen limits his WIF

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71 Björneborn and Ingwersen (2001) are one of few authors mentioning Rodríguez Gairín specifically in their text. The majority, e.g. Faba-Pérez and colleagues (2005) and Thelwall (2006) reference the article in question only as one amongst other relevant resources. None of these authors provide details of the underlying notion of the concept. Unfortunately, a translation of the text is not available to the author. Hence, the degree of divergence between internet information impact and WIF cannot be established at this point.
in a similar way by only counting pages that set a hyperlink, while not considering the “intensity” (Ingwersen, 1998, p. 237), the number of links going from a web-page to the receiving page or site.

Noruzi (2006, p. 7) points out that the WIF can easily be mistaken as an indicator for the quality of a website, which it is not in any case. The WIF only reveals whether a site appealed, for manifold reasons, to other hosts and therefore allows comparison of how well an internet site was able to use its potential in attracting hyperlinks in contrast to its competitors.

**Sampling**

The hyperlink network analysis is useful in developing some understanding of the online environment. We are able to find out what sites are available, which ones are ‘approved’ by others and which ones are central or peripheral players. The results (discussed in *Chapter Five*) of this type of analysis are informative in their own right but can also be used for sampling purposes. The sample-sites used for further research steps were, to a great extent, selected based on outcomes from the hyperlink network analysis.

The majority of the sample-sites were determined by the two centrality measures – WIF and closeness-centrality. Three sites each with high, medium and low values were selected from both measures. In case a member was already included in the sample, the next runner-up was selected. The same approach was followed in the event that a site to be added was a portal or directory. The medium sites were chosen randomly from a range of centrality values surrounding the WIF and closeness’ mean. Both centrality measures do not rate non-linkers *per se*. Therefore three sites from this category were selected randomly as well.

Further, criteria not directly related to the network analysis were utilized for the selection of sample-sites. A basic content analysis of all MHN-member-sites was undertaken regarding the provider’s location, the language use within the index-page
and contact possibilities. The sampling process therefore also saw sites with a high level of Māori on the index-page included. Two sites contribute to the total number of the sample. It was also decided that at least one overseas site should be part of the selection. Māori in OZ has a high closeness centrality measure and was therefore part of the sample at any rate.

The last criterion applied to the selection of sample-sites relates to their distribution according to groups. The sample should include representatives from all groups with the exception of directories. Table 11 below shows the sites’ dispersion:

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>2</td>
</tr>
<tr>
<td>Business</td>
<td>1</td>
</tr>
<tr>
<td>Directories</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
</tr>
<tr>
<td>Entertainment</td>
<td>2</td>
</tr>
<tr>
<td>Government</td>
<td>2</td>
</tr>
<tr>
<td>Information</td>
<td>5</td>
</tr>
<tr>
<td>Internet</td>
<td>1</td>
</tr>
<tr>
<td>Iwi</td>
<td>5</td>
</tr>
<tr>
<td>Language</td>
<td>2</td>
</tr>
<tr>
<td>Pan-tribal</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 11: Number of sample-sites according to groups

Analysis of sample-sites

The sample-sites were downloaded in June and July 2006, most by using MetaProducts’ Offline Explorer, others were saved manually. This was done for two main reasons. Firstly, the fluidity of the internet means that pages can change at any moment. Taking a snapshot allows working with a stable set of pages which all carry a similar timestamp (Moes, 2000, para. 12). Secondly, hosts – especially if they are a small organization or business – might use a web-service allowing only a certain amount of data transfer per month. Using downloaded files on one’s own computer avoids unnecessary traffic when repeatedly revisiting sites during analysis. In most instances the website in its full extent was downloaded with three exceptions which were archived in parts only. Learning Media and Flagspot provide sections specific
to New Zealand as well as overseas. In the case of the Ministry of Education (MOE) parts with a designated Māori focus are available. Due to the fact that all three sites are extensive in size a more selective approach was necessary to make the analysis feasible. Hence only sections either relating to Aotearoa or Māoridom specifically were collected and analyzed.

Two sites – Pūkana and Whale Watch also had to be ‘saved manually’ since they have implemented the use of Adobe Flash animation plug-in. After the pages were saved the text in most cases had to be copied and pasted into a Word-document in order to be ready for analysis. On rare occasions this was not possible as the text appeared similar to a picture instead. As these textual inserts were usually very short they were typed up. The website of NZMIS (New Zealand Māori Internet Society) could only be downloaded and considered for analysis later on. This was necessary because during the time when the sample-sites were saved this particular site was not up and running but rather re-directed to the forum of Aotearoa Māori Internet Organisation. The web-address was checked repeatedly and once the re-designed NZMIS-site was back online it was archived. This took place in August 2007.

**Content analysis**

The actual content certainly requires investigation. This began by engaging with various literatures on this matter (some examples are Arnold & Plymire, 2004; Bucy, Lang, Potter, & Grabe, 1999; Carney, 1972; Gerstenfeld et al., 2003; Maynard & Tian, 2004; McMillan, 2000; Moes, 2000; Weare & Lin, 2000). Many of them used coding books; hence, work was directed towards the development of one to be used with the sample-sites. This task was approached with great ambitions and an eye for meticulous detail. But after the first three sections regarding structure, navigation and advertising were completed I began to question the value of this task for this research.

Traditional content analysis of print media focusing on the choice of font, its size and the position of a text within the broader context are often given great importance
The analysis of these aspects regarding internet sites presents a great challenge due to a variety of factors. The display or appearance of websites will differ slightly between users depending on the screen being used, the monitor’s settings, the graphics card, the choice of browser, its version, or whether a browser applies personalized settings. Most authors engaged in online content analysis recommend that the same computer hardware, software and settings be used throughout the whole process of analysis (as well as within a group of researchers involved) to avoid deviations (Weare & Lin, 2000). The great possibility for variation between what the researcher sees and what indeed appears on the screens of users, additionally to the actual irrelevance of many aspects the initial coding book included in the context of this research led to the decision to discontinue this task.

The investigation of the “packaging of information”, as Bucy et al. (1999, p. 1247) put it, however, was not abandoned altogether. Instead it was much more focused in scope. The analysis was still directed towards the sites’ structure, the use of navigational support like sitemaps or search possibilities, whether pictures and multimedia were used or if interaction with the host and/or other surfers to the site is supported. The appearance of the website however was only considered in a very general sense. The analysis of Māori symbolism represented in depictions of carvings, colors, logos and similar usages was limited in scope. I am not an expert in this area in general and only hold very basic knowledge about Māori symbols. The possibility for misinterpretation or misunderstandings would be too great hence the mentioning of these matters is kept to a minimum.

The aspect of the website examination with greater importance to the research was the analysis of the actual content. The investigation of the sample-sites was twofold. Firstly, to gain a better in-depth understanding of Māori cyberspace and secondly to contribute towards shaping the following research steps. The analysis focused on themes and topics, information on the provider and the overall representation of Māoridom. The research question of this thesis, the purpose of the investigation of the sample-sites and previous engagement with literature on Māori identity guided the approach to the materials. Categories were developed inductively and aimed to be
informed by the texts themselves as much as possible using an adapted form of Philipp Mayring’s (2000) qualitative content analysis.

The analysis was supported by *Nvivo7* and aimed to reduce the material and to develop a manageable corpus of data all the while retaining the central content. This was achieved by a reiterative step-by-step approach to the textual material. The first step saw all pages read and coded or sorted according to broad categories. If during the course of this activity a new category was created, all previously coded pages were revisited. Once all pages or text passages were sorted into categories a second step dramatically reduced the material by paraphrasing sections into a short form capturing the central content/meaning. Each website was summarized following this process allowing a well-based understanding of each site’s content to develop. The categories were utilized for the development of the interview structure.

**Word- and word frequency analysis**

Linguistic analyses such as John Macalister’s (1999) comparison of the use of te reo Māori in the *School Journal* between the 1960s and 1990s can be very interesting and informative. The ‘comprehensive’ analysis of te reo online was not part of the initially proposed research plan due to the existing research (T. T. Keegan et al., 2003; 2004). However, a basic assessment of the languages used within the index-pages of the MHN-sites indicated a strong contradiction of these previous findings. I therefore thought it paramount to investigate the language use within the sample-sites to provide a comprehensive and consistent picture of Māori cyberspace at the time of this research. Hence I embarked on an empirical path I had never envisioned myself taking; a linguistic analysis.

The analyses of the word- and word frequency of te reo Māori online focused on the actual websites and not additional documents or files. PDFs, *Word*-documents and other similar files were excluded, as were entries in guestbooks and forums. The websites were transformed to basic text documents and prepared for analysis: numbers, abbreviations (like ph, fax, GST) and symbols (e.g. ©, ™) were deleted. A
word count using the function inherent in *Word* established the overall number of words on a particular internet site. The Māori text or words were then separated from the main corpus. Spell-checking was used to find ‘hidden’ Māori words within those texts which were predominantly in English.

*TextStat*\(^{72}\) was used for the actual word- and word frequency counts. This software allows us to ignore differences in upper or lower cased words. Moreover, *TextStat* handles special characters like macrons (ā) and umlaut (ä) that many other programs encounter difficulties with. The Māori word lists created by *TextStat* allowed a re-checking if all words included were indeed in te reo Māori and words mistakenly included were removed. A speaker of te reo was asked to assess a list of all Māori words used within all sample-sites to assure that no words from languages other than Māori were included.

*TextStat* also establishes the number of distinct word forms used within a body of text. This gives an *indication* of the range of a site’s vocabulary but it is important to consider several issues when comparing such figures. Firstly, sites might just add rather than replace existing text. This may result in a variety of forms of spelling of the same word, particularly regarding the indication of the vowel length as common practice and technological possibilities change over time. The following example of the word Māori which appeared 18,569 times within the corpus of all sample-sites illustrates this point. Table 12 below shows the most prominent forms of spelling the word Māori within all the sample-sites is with a macron to indicate the stretched vowel followed by no indication. Other forms of spelling, even incorrect ones, however, can be encountered as well. As for the number of word forms, each way of spelling is counted as a distinct word.

\(^{72}\) *TextStat* is a small and basic program used for linguistic analyses. A screenshot of a frequency list created with *TextStat* is included in the Appendix.
<table>
<thead>
<tr>
<th>Word form</th>
<th>Number of appearances</th>
</tr>
</thead>
<tbody>
<tr>
<td>māori</td>
<td>7358</td>
</tr>
<tr>
<td>maori</td>
<td>7032</td>
</tr>
<tr>
<td>māori</td>
<td>4139</td>
</tr>
<tr>
<td>màori</td>
<td>26</td>
</tr>
<tr>
<td>maaori</td>
<td>8</td>
</tr>
<tr>
<td>màori</td>
<td>3</td>
</tr>
<tr>
<td>māori</td>
<td>2</td>
</tr>
<tr>
<td>màöri</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 12: Word form counts: Example of ‘Māori’

Secondly, the variety of vocabulary also relates to the range of topics covered. The site of Whale Watch, as expected, focuses on issues relating to whales and the tourism operation whereas MOrg tries to cover a breadth of subject matters which to some extent use special sets of words. Thirdly, the number of different word forms used also relates to the overall size of a website. An internet site with only a small number of pages or with very little content uses fewer words and the number of different word forms therefore also tends to be lower.

At this stage it is of importance to highlight that the results of this analysis of Māori language utilization discussed in Chapter Seven have to be treated with care due to my limited experience with linguistics and my restricted command of the Māori language. However, these weaknesses were considered in both the preparation of the analysis and when approaching the results. The awareness that I am not able to interpret an extensive linguistic investigation of the textual body in Māori led to the decision to only engage in a very basic word count to establish the ratio between Māori and non-Māori languages standardized according to the size of an internet site measured in overall words used.

Māori content words, similarly to English, are often a combination of several words, unlike for example German which creates new words through compounding. Māori examples are the World Wide Web – tukutuku ao whānui (web world wide) or the already discussed whare nui (house great) – the meeting house. Counting each word as a separate token, the case with the analysis undertaken here, does not allow a
detailed engagement with the text bodies regarding the use of actual content words. Therefore, the discussion regarding the use of token words can only be limited in scope.

**Questionnaire for hosts of Māori-sites**

A central point of difference of this research was to cover all three aspects of cyberspace – the websites and the perspectives of both providers and users. The method of online-survey was decided upon to engage with the hosts of all MHN-sites. The questionnaire was deliberately kept short as longer questionnaires are more likely to be discouraging to begin with or might contribute to participants becoming disinterested and a higher number of aborted surveys might be noticed. I decided to focus on information not easily accessible from the websites themselves like the motivations that led to the launch of the site, planned developments regarding te reo Māori and the providers’ opinions regarding the effects of internet use for Māori communities. Other areas of interest were the date of the website launch and the monthly number of visitors. All but two questions provided possibilities to write more detailed commentary.

The questionnaire was bilingual except for the consent formalities. These were too complex and too long to fit both languages on one screen-page. The issue was solved by asking the participants for their language preference first and then to direct them either to the Māori or English Consent Form section. Consent was given by answering that the participant was over 16 years. If this was not the case the survey would not proceed but rather skipped forward to the ‘Thank you’-page. After these formalities the participants were free to skip any question and they were able to move back to previously answered questions. The ‘Thank you’ page provided the e-mail address of my supervisor. Participants were invited to contact him (for reasons of anonymity) if they wanted to receive an electronic copy of the thesis upon completion of the degree.
The contact possibilities of all MHN-member-sites were re-checked in August 2008. Of the original 215 network members 144 provided an e-mail address, 21 were contactable via online forms and four were not reachable online but rather provided postal addresses. Forty-six providers were not contacted because either their site was no longer available (28 cases), they did not provide any contact possibility (13 instances) or for other reasons like the requirement of a password to access the site. Therefore it was decided to not just use e-mail as previously planned but to also include those sites contactable via post and online forms.

The e-mail invitations were distributed by Survey Monkey which allows tracking whether participants completed the questionnaire or opted out and consequently are excluded when sending reminder invitations. The filtering out of participants was not possible if they were contacted via post or online form. In these instances it was necessary to explain that they would receive a reminder in any case. Since a letter is a much more personal contact than e-mail I thought it necessary and polite to include a cover letter. All these changes however had to be approved by the Ethics Committee which saw the questionnaire slightly postponed.

The invitations were sent out in November 2008. 11 e-mails were undeliverable and the contacts re-checked but not all of these new e-mail addresses worked either. One provider contacted via their online form replied and expressed their wish to opt-out of the questionnaire. Their wish was certainly respected and they were therefore excluded when the ‘reminders’ were sent out in December 2008. Table 13 illustrates that in the end a total of 165 MHN-sites were contacted:

<table>
<thead>
<tr>
<th>Contact mode</th>
<th>Number of cases</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First attempt</td>
<td>After bounces</td>
<td>Reminder</td>
</tr>
<tr>
<td>E-mail</td>
<td>144</td>
<td>136</td>
<td>132</td>
</tr>
<tr>
<td>Online form</td>
<td>21</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Postal address</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>165</td>
<td>160</td>
</tr>
</tbody>
</table>

Table 13: Number of invitations to online questionnaire
Altogether 54 surveys were ‘started’, many in fact have just been skipped through to inspect the questionnaire but no answers were given. Overall, the average answer rate of 29 completed responses is very low. This is a response rate of 18 percent and results certainly cannot be generalized but rather have to be treated with caution.

One factor possibly contributing to the low participation might have been that for some providers it might actually be rather hard to find a person suitable to answer the questions of the survey. The current webmaster might not have been responsible for a particular site from its beginnings and therefore is unlikely to know when or why it was launched. Similarly they might also not be informed about the future plans the organization behind a site might hold for it. In hindsight, an in-depth engagement with only a few providers (possible of the sample-sites) in the form of face-to-face interviews is likely to have allowed better insights in the motivations and opinions of the participants. The interactive aspect of interviews and the fact that they allow the participants to be asked to explain their answer further or to go into more detail if uncertainties remain make them much more effective.

**Semi-structured interviews with users of Māori-sites**

The interview form used to engage with users of Māori internet sites can be described as semi-structured and problem centered. The problem-centered interview is greatly influenced by grounded theory. It attempts to find the middle ground between pre-conceptualized areas the research is focusing on while allowing participants to express what they deem important (Witzel, 2000). Narrative or unstructured interviews require the interviewer to possess very high communication skills and to be able to concentrate for usually long periods at a time noting down where the narrative is going and where further questions have to follow up. Her/his role is to stimulate the flow of the narrative without interrupting it. A similar skill level is also required of the participants who have to formulate their answers freely without guidance or support from the researcher (Lamnek, 1995, p. 66).
Problem-centered interviews, however, are more focused. This focus requires the researcher to engage in-depth with the subject matters central to the research to allow the development of pre-conceptualized areas of interest and to create an interview outline. The use of such a pre-determined structure allows the researcher to ensure that no area of significance is accidentally excluded from the dialogue. This is not to mean that the interviewer will direct conversations away from topics or aspects which are not part of the interview outline. On the contrary, such ‘divergences’ are to be supported by the researcher. The structure of the interview outline in no case should be understood to be static and has to be adapted in varying degrees to each specific interview situation (Diekmann, 1999; Mayring, 2002).

The structure of the interviews used for this thesis was informed by knowledge gained through the engagement with literature on Māori identity and on Māori cyberspace as well as from previous research steps, particularly the hyperlink network analysis and content analysis. Topics covered during the interviews ranged from demographic information, personal views on Māori identity, from general to Māori specific internet use and opinions relating to Māori language use online, tribal websites and the domain name space. The majority of questions were open ended with the exception of one section which queried whether the interviewee had previously looked for information according to a pre-developed list of topics. However, if any of the topics were covered at an earlier stage of the interview the participants were asked to go into more detail then.

All interviewees were self-recruited. They responded to flyers and cards in te reo Māori and English placed at various places throughout the city campus of the University of Auckland. This focus on tertiary students was not planned at the beginning but the response rate within the university was surprisingly high so that it was decided not to look for further participants elsewhere or to follow through on contacts offered by various individuals. This decision was influenced by the fact that the Māori population in New Zealand is very young, the median age at the 2006 Census was 22.7 years (Statistics New Zealand, 2007d), younger cohorts are also

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73 The detailed interview schedule is included in the Appendix.
more likely to be internet users and access to the internet from a place of education appears to be an important point of connection for many Māori (see Chapter Three).

Despite the commonality of being a university student at the time of the interview the participants come from varied backgrounds and therefore allow an understanding of varied experiences and opinions of different internet users. Table 14 illustrates their ages ranged from 18 to 33, four were female and one male and one participant has a child. All interviewees know their tribal affiliation(s) and are involved with their tribe(s) to varying extents and on different levels with whānau being most central in their lives. This is also the case regarding Māori culture, tikanga (custom) and te reo Māori, however, knowledge of these varies between the participants.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Tribal involvement</th>
<th>Te reo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tahi</td>
<td>F</td>
<td>18</td>
<td>Whānau, hapū</td>
</tr>
<tr>
<td>Rua</td>
<td>M</td>
<td>23</td>
<td>Whānau, church</td>
</tr>
<tr>
<td>Toru</td>
<td>F</td>
<td>24</td>
<td>Whānau, hapū</td>
</tr>
<tr>
<td>Wha</td>
<td>F</td>
<td>24</td>
<td>Whānau</td>
</tr>
<tr>
<td>Rima</td>
<td>F</td>
<td>33</td>
<td>Whānau</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14: Overview of interview participants

All participants were invited to choose the time and place that would suit them best and where they would feel comfortable. Since all were university students the option to do the interview on campus was offered as well. This option was selected by all interviewees therefore meetings were arranged in my office within the Department of Sociology. The interview eased the conversation in by beginning to talk about the participants themselves. It is important that the participants start to feel comfortable with the interview situation, the researcher and with the audio recorder, all the while getting to know the participants before the central aspects of interest for the research are discussed (Rubin & Rubin, 1995). The next section of the interview allowed an understanding of the interviewees’ personal views on what it means to them to be Māori. This was an important section because it contextualizes the rest of the

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74 The gender of the researcher is likely to have contributed to this gender imbalance, as well as the fact that Māori women have a higher participation rate in tertiary education (Te Puni Kōkiri, 2006).
interview and their experiences with Māori cyberspace. The participants then were asked about their general internet use allowing an understanding of their skills and how important this technology is in their life generally to develop.

The larger part of the interview however concentrated on the participants’ experience with Māori internet sites. In most cases a general opening question allowed a narrative directed by the interests and intentions of the interviewee to develop. Only after the initial flow came to a halt were follow-up questions asked. These addressed aspects that were either unclear from the narrative or issues which were part of the interview structure because they were deemed of importance to the research but were not yet touched upon. The interviews closed by asking the participant whether they were missing anything online – regarding content, services or particular organizations. At this end stage participants were invited to talk about anything they felt important but was not yet covered. The conversation came to an official end once the interviewee had nothing further to add.

All interviews were audio-recorded and then transcribed in preparation for analysis. The process of qualitative analysis of interviews is a long in-depth engagement with each interviewee but also across all of them based on individual topics and themes. The analysis is, as Herbert and Irene Rubin (1995, p. 226) write, “the final stage of listening to hear the meaning of what is said.” The ‘listening’ then began by an informal reading of each transcript, followed by the first close reading for the purpose of coding. At this point the narratives were separated according to the pre-established topic areas of the interview outline. The structure of the interview outline was used as a starting point for the thematic analysis of the data. A second reading paid closer attention towards matters addressed by the interviewees which were not part of the outline. The responses of all participants on individual topics were then grouped together and the interview sections were read and re-read to discover common themes and concepts within the topics. The individual narratives were compared and commonalities and differences drawn out. The topics of the interview outline and the developed themes within the narratives structure the presentation of
the results in Chapter Eight. Aspects relating to the Māori language online were extracted and included in Chapter Seven.

Chapter summary

Research by Pākehā relating to Māoridom is a contentious issue. Cross-cultural research is faced with difficulties and boundaries yet ultimately it can prove to be very rewarding both for the researcher and the communities or individual part of the research. The concerns and experiences voiced by Māori researchers regarding cross-cultural research are acknowledged and greatly influenced the empirical aspects of this thesis. A broad exploration of the issues surrounding Māori cyberspace is the aim of this thesis. Being non-Māori and not coming from New Zealand limit any in-depth investigation. Five very different methods were introduced in this chapter. As with any research they had to be adapted to suit the specific demands of this thesis. By doing so and by using the results of preceding research steps to inform and shape later ones it is hoped that some of the difficulties of cross-cultural research are overcome. Any methodological constraints are explicitly revisited in the presentation of the results which are the subject of the following four chapters.
This chapter presents details on the Māori Hyperlink Network (MHN) which represents the wider field of this research. The preceding methodology chapter introduced central aspects of Social Network Analysis and focused on particularities of this methodological approach in a hyperlinked environment. It additionally outlined the process involved in demarcating the MHN; this chapter therefore turns its focus to the network itself. It discusses what sort of Māori-sites are available online, how they are interconnected and who is particularly ‘central’ in the network. The earlier introduced key concepts, particularly closeness centrality and web impact factor (WIF), are utilized here. The connections of two member-sites, www.tpk.govt.nz (Te Puni Kōkiri – TPK) and www.maori.org.nz (MOrg) are explored in more detail.

In order to gain a more complete picture of the network, non-network analytical aspects are considered as well. These include the investigation of the providers’ offline locations and contact possibilities. Some results from the questionnaire with the hosts will provide additional details on Māori cyberspace. These focus on information regarding the websites themselves, when they were launched, the number of monthly visits they attract and how regularly they are updated. The chapter closes by looking at the reasons hosts’ stated for the development of their online representation.
**Introduction to the network**

The network consists of 215 websites which can be categorized into different groups. As with any categorization the allocation of sites into one specific group is not always unambiguous as some sites can fall into several groupings, especially if their content is very broad. Overall content and the host of the site both contributed to the determining of the grouping. Table 15 below provides an overview of the categories and the number of sites encompassed by each.

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
<th>Nr. of sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iwi</td>
<td>Iwi, hapū or whānau (tribe, sub-tribe, extended family)</td>
<td>47</td>
</tr>
<tr>
<td>Government</td>
<td>Government departments and services</td>
<td>24</td>
</tr>
<tr>
<td>Entertainment</td>
<td>Radio, TV, music and publications</td>
<td>23</td>
</tr>
<tr>
<td>Pan-tribal</td>
<td>Māori services and interest groups</td>
<td>22</td>
</tr>
<tr>
<td>Information</td>
<td>Sites with general information</td>
<td>20</td>
</tr>
<tr>
<td>Art</td>
<td>Anything relating to art</td>
<td>20</td>
</tr>
<tr>
<td>Education</td>
<td>Universities, Teachers Unions</td>
<td>18</td>
</tr>
<tr>
<td>Language</td>
<td>Funding, learning, software</td>
<td>14</td>
</tr>
<tr>
<td>Directories</td>
<td>Libraries, archives and portals</td>
<td>13</td>
</tr>
<tr>
<td>Business</td>
<td>Business advancement and support</td>
<td>9</td>
</tr>
<tr>
<td>Internet</td>
<td>Māori and internet</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 15: Number of MHN-members according to groups

Most members of the network fall into the *Iwi*-group\textsuperscript{75} of which the majority are websites of tribal groups, iwi and hapū, usually provided by tribal trusts or boards. Several internet sites are from tribal social and health service providers and three tribal business enterprises are included in this group. One whānau-site is part of the network which was categorized as *Iwi* as well. An additional 16 websites provided by iwi radio stations are part of the *entertainment* category. Therefore, altogether 63 member-sites can be considered as sites with an iwi-focus as they are commonly provided by a tribal organization or are directed towards an iwi-specific audience.

The *government*-group includes ministries, like Te Puni Kōkiri (Ministry of Māori Development) and the Ministry of Education, government departments like Statistics

\textsuperscript{75} Italics will be used when referring to MHN-categories throughout the rest of this thesis.
New Zealand as well as services and informational sites. Two government-linked sites are included in other groups: one in *language* and the other in *information*. This was done because of the sites’ purpose and content, one is a funding agency for Māori language projects (Mā te Reo) and the other provides a wealth of knowledge relating to the Treaty of Waitangi (Waitangi Tribunal). Both these sites are part of the sample and are subject of *Chapter Six*.

The next group, *entertainment*, also has a strong tribal link as the majority of the websites included are tribal radio stations. Of these all but one are part of the tribal radio network ([www.irirangi.net](http://www.irirangi.net)) mentioned in *Chapter One*. Other sites include television related ones – Māori Television and the children’s TV-show Pūkana – as well as print publications. Publishers with a Māori and Pacific focus fall into this category too.

The following two groups are similar as they are both addressing a pan-tribal audience. Whereas *pan-tribal* comprises of sites provided by Māori interest groups and service providers (in contrast to *iwi*-sites), the websites in the *information* category provide either general information or focused on a specific topic. The areas of concern within both groups are very broad ranging from youth, sports and history, the spiritual realm to political matters and cultural traditions and practices. As art-related sites were very common, these were separated into a distinct group – *art* – which encompasses a broad range of sites: databases on Māori artists, waiata (songs), performing arts, tattooing, art businesses and online shops.

*Education* includes tertiary institutions, both ‘mainstream’ and Māori immersion, support for (Māori) teachers and general knowledge on education in New Zealand. Local education programs focusing on vocational training for Māori youth and training courses for traditional skills like carving are part of this group. Sites concerned with the learning of the Māori language however are excluded here as a separate category – *language* – which consists of websites dealing with matters relating to te reo Māori, the Māori language exists. Besides ‘learning’ it includes
software projects, online dictionaries and ‘pride’ or support sites for learners and speakers alike to encourage the use of the language in everyday life.

The directory category includes databases and archives covering topics ranging from community groups, funding opportunities for individuals, organizations, businesses and educational scholarships to an index of Māori names. A number of web-directories and portals are part of this group. These are general hyperlink collections on te ao Māori (the Māori world). Some of these portals just list links rather randomly, others organize them under headings and some provide basic information on the target-site as well.

The two groups with the smallest number of sites are business and internet. The first can be explained by the fact that actual businesses are included elsewhere if they fit in existing categories, for example art. Therefore, business mostly includes websites dedicated to the advancement of (Māori) entrepreneurship and business advice. The latter group – internet – is small because of the small number of websites in the network concerned with the technology itself. It includes information and communication technologies (ICT) societies, a forum, a personal website and an information technology related business.

The majority of the sites within MHN are provided by ‘Māori’ hosts; approximately 70 percent. This statement, or rather the percentage, has to be considered with great care. Many hosts do not describe themselves as ‘Māori’. The complexities and difficulties regarding Māori ethnicity in statistics discussed in Chapter Two resonate here. Some providers would agree with being categorized as ‘Māori’ and others might not at all. Additionally, in some cases the question regarding the host’s ‘identity’ could not be easily answered either because the information on themselves was minimal or because the identity was not straightforward. This is particularly the case with government associated Māori internet sites. Te Puni Kōkiri for example was considered to be a Māori host. However if such a site only had a ‘Māori’ section the host was deemed ‘Pākehā’ (non-Māori New Zealanders). Overall, a great
proportion of the MHN-sites are provided by hosts who can be considered as ‘Māori’ in the broadest sense.

**Network analytical description**

The 215 network members are connected by 1,694 hyperlinks. Figure 17 below was generated with *NetDraw* and illustrates the network and its connections. The two square nodes represent MOrg on the left and TPK on the right respectively. The connections of these two members will be discussed in more detail further down. However it is worth directing our attention to how these two nodes and their closer connections form a small, but dense, center of the network. Additionally, it can be noticed how other governmental sites (dark green nodes) tend to be found on the right side of the illustration and the yellow *iwi* nodes are more scattered on the left side.

![Visualization of the Māori Hyperlink Network](image)

*Figure 17: Visualization of the Māori Hyperlink Network*
The connections between the network members are set by 142 different internet sites. 
Table 16 below shows how the number of members are scattered across groups of 
out-links. Those sites setting many references (more than 20) make up a very small 
proportion – under ten percent of the network – with only three members each in the 
last two (41-50 and 100+) groups. Despite the heavy linking of a few sites, almost 
half of the network-sites (46 percent) set between one and ten hyperlinks to other 
members.

<table>
<thead>
<tr>
<th>Out-links</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100+</td>
<td>1.40</td>
</tr>
<tr>
<td>41 – 50</td>
<td>1.40</td>
</tr>
<tr>
<td>31 – 40</td>
<td>1.86</td>
</tr>
<tr>
<td>21 – 30</td>
<td>5.12</td>
</tr>
<tr>
<td>11 – 20</td>
<td>10.23</td>
</tr>
<tr>
<td>1 – 10</td>
<td>46.05</td>
</tr>
<tr>
<td>0</td>
<td>33.95</td>
</tr>
</tbody>
</table>

Table 16: Number of out-links in percent of all MHN-members (N=215)

The most “luminous” (Bray, 1996, p. 1004) or very heavy linking internet sites are 
MOr with 179 hyperlinks set and two directories –
http://webdirectory.natlib.govt.nz with a total of 160 references along with
http://library.christchurch.org.nz/Resources/maori which linked 116 times to the
network.

Almost 34 percent of all member-sites do not set any hyperlink to other internet sites 
within the network. These sites are not necessarily marginal sites as 10 ‘non-linkers’ 
receive between 10 and 20 sitations. On average this type of member-site receives 
just over five references. A strong iwi-influence can be noted here, as 22 ‘non-
linkers’ come from the iwi-group and ten more are tribal radio-sites. Almost half of 
all ‘non-linkers’ come from these two groups as four additional ‘non-linking’ sites besides the tribal stations are entertainment-sites. All other groups are represented as 
well with the exception of the government category. The fact that two directories are 
‘non-linkers’ explains why they are in inverted commas here. Just because these sites 
do not link to the network is not to say that they do not set any references at all. They
might set references to the rest of the World Wide Web (WWW) but outside connections were not considered here.

On the receiving end of the hyperlink (Table 17 below), the picture looks slightly different. Only one site – TPK – is very “visible” (Bray, 1996, p. 998) by means of receiving 48 incoming links. Another governmental site was well recognized by other members of the network; www.govt.nz took delivery of 38 sitations followed by the starting point MOrg with 37 hyperlinks. www.govt.nz is not a Māori-site in the strictest sense but rather a portal to all government departments, agencies and to websites receiving government funding. As it has a separate Māori-specific section it allows fast access to Māori focused resources as well as links to general government agencies relevant to Māori as citizens of New Zealand. Most of this particular internet site’s in-links are set by other government associated sites. However a number of general information-sites – particularly history sites and Ross Himona’s http://maaori.com and http://maorinews.com – an iwi-site and a website for Māori in Australia (www.maori-in-oz.com; MOZ) all see this government portal potentially relevant to their own visitors.

<table>
<thead>
<tr>
<th>In-links</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>0.47</td>
</tr>
<tr>
<td>31 – 40</td>
<td>2.79</td>
</tr>
<tr>
<td>21 – 30</td>
<td>2.79</td>
</tr>
<tr>
<td>11 – 20</td>
<td>16.74</td>
</tr>
<tr>
<td>4 – 10</td>
<td>48.84</td>
</tr>
<tr>
<td>3</td>
<td>19.53</td>
</tr>
<tr>
<td>2</td>
<td>8.84</td>
</tr>
</tbody>
</table>

Table 17: Number of in-links in percent of all MHN-members (N=215)

Table 17 shows that only a small proportion of the MHN (just over six percent) receives more than 20 in-links compared to ten percent of the member-sites setting more than 20 references. The greater part, which accounts for almost 49 percent of all members, receives between four and ten incoming sitations. Those internet sites

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76 The purpose of this particular portal clearly restricts its linking potential in respect of the Māori Hyperlink Network unlike other directories within the network.
receiving the bare minimum of two hyperlinks to become part of the network make up 8.8 percent.

Another aspect when it comes to hyperlinks is whether they are reciprocal in nature or just one-way referrals. Unfortunately the links themselves do not inform which one was set first and what site’s webmaster then responded. What is more, it leaves the question open if the response-sitation only was programmed because the website was linked to in the first instance, or if recognition of the other member was in the planning in any case. The data from the MHN does not answer these questions; it is nonetheless worth noting that close to 15% of all sitations within the network were reciprocally set.

<table>
<thead>
<tr>
<th>Percent of member’s links are reciprocal</th>
<th>Percent of linking members</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>13.04</td>
</tr>
<tr>
<td>55 – 80</td>
<td>10.87</td>
</tr>
<tr>
<td>50</td>
<td>10.87</td>
</tr>
<tr>
<td>26 – 45</td>
<td>14.13</td>
</tr>
<tr>
<td>3 – 25</td>
<td>51.09</td>
</tr>
</tbody>
</table>

Table 18: Reciprocal hyperlinks between linking MHN-members only (n=142)

Table 18 shows that the majority of reciprocally linked members receive a back-link for up to one quarter of all their outgoing connections and that 13% even get all of their reference towards a member answered. Of those 13% four sites stand out as they each set between five and eight links, whereas the rest of this group does not set more than two. The peculiar fact about the four highlighted members is that they are all government sites concerned with education.

Considering that a network of 215 member-sites has the possibility of 46,014 sitations, the network overall uses close to 3.7 percent of its linking potential. On average almost 12 references are set by all linking members (142 network-sites). Of course it would be unrealistic and quite pointless if everyone would link to everyone else. The number of recommendations would be incomprehensible to users and would create distraction, confusion and frustration, rather than enhance the search for
information. At the other extreme, no links at all or too few, would limit the possibility to navigate and search cyberspace as well as visibility on the internet requires acknowledgement by others. Close to half of all network members receive between four and ten references from other network members and considering the overall level of interconnectivity it can be concluded that the MHN is well connected.

**Closeness-centrality**

This centrality measure is calculated based on the shortest paths between a member to all others in the network which indicates how close or distanced the members are. None of the internet sites within the Māori Hyperlink Network set sitations to all other members. Therefore, no one has a connectedness value equal to one. ‘Non-linkers’ have to be considered as *not connected* in this context. Consequently those linking members who only refer to ‘non-linkers’ are merely connected partially. This is the case with four sites. Additionally, in one instance the member-site links to a linker, but this site in turn does not set any sitations.

![Figure 18: Closeness-index of ‘fully connected’ members; in percent (n=137)](image)
In Figure 18 the closeness-index of those linking members who do not link to dead ends is illustrated. The majority of these (almost 50 percent) require more than two connections in order to reach all other network members, whereas more than 25% need to use more than three relations. Overall, the network is well connected, considering that from 18% of all sites the visitors are potentially able to reach all other members with less than two mouse clicks and from just eight sites users will need more than four clicks to get around the network. Merely a single site requires an average of 5.52 links to be connected to all others.

The most central member in this respect is MOrg. A large part of this member’s connections (illustrated in Figure 19 below) are one-way outgoing connections. MOrg as discussed in Chapter Six in more detail is a very broad informational website allowing for interactivity between the visitors in the form of forums and by way of suggesting hyperlinks users found useful themselves or by other providers suggesting their own internet site. The references are well organized in several categories with sub-headings and accompanied by descriptions of the target-page which are variously detailed. Further, one is informed on the date the link was added to the collection and how ‘popular’ a link is by counts of hits. Users are able to rate each link which is then visible to others. References which are no longer active can be reported. Each topic-specific subsection of MOrg has an internal hyperlink directing the visitors to areas tantamount within the link collection.

As illustrated in Figure 19, this member-site receives links scattered over all groups with a great proportion of in-links also being reciprocated. Only two sites set hyperlinks to MOrg which are not returned. These are the New Zealand Council for Educational Research and the Community Network Aotearoa. The three categories more likely to view MOrg potentially useful or interesting to their own users are information with eight links directed towards the site and īwi as well as directories each setting five citations. This central member is considered relevant by sites attracting both a general and a Māori audience.
The ratio of MOrg’s incoming and outgoing connections is almost one to five which is ascribable to three possible reasons: Firstly, MOrg’s link collection does function as a directory in a way with the difference that new additions are suggested by users and likely providers of other websites as noted before. Secondly, MOrg is ‘the’ Māori-site online and webmasters possibly think that many people are already familiar with the site and because it usually ranks very high up or even first in search engines when ‘googling’ matters related to Māoridom. Thirdly, due to the vast range of topics covered by MOrg it usually provides access to general and introductory knowledge. The site might not be perceived to be very useful to users of sites which themselves provide more in-depth content regarding a specific topic.

Having said this, the number of connections and the fact that the site is acknowledged by such a broad variety of internet sites nonetheless underscores the relevance and central place this particular member takes in Māori cyberspace.
Web impact factor

The web impact factor here represents the percentage of all possible references a member-site was able to attract. Almost 55% of all member-sites are not able to draw more than 2.4% of potential hyperlinks towards their direction; just below 80 percent of the network have a WIF less than five. Table 19 lists all members of the network with a WIF greater than ten.

<table>
<thead>
<tr>
<th>Internet site</th>
<th>Group</th>
<th>WIF</th>
<th>In-links</th>
<th>% from outside group</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.tpk.govt.nz">www.tpk.govt.nz</a></td>
<td>Govt</td>
<td>22.43</td>
<td>48</td>
<td>79</td>
</tr>
<tr>
<td><a href="http://www.govt.nz">www.govt.nz</a></td>
<td>Govt</td>
<td>17.76</td>
<td>38</td>
<td>61</td>
</tr>
<tr>
<td><a href="http://www.maori.org.nz">www.maori.org.nz</a></td>
<td>Info</td>
<td>17.29</td>
<td>37</td>
<td>78</td>
</tr>
<tr>
<td><a href="http://www.waitangi-tribunal.govt.nz">www.waitangi-tribunal.govt.nz</a></td>
<td>Info</td>
<td>15.42</td>
<td>33</td>
<td>76</td>
</tr>
<tr>
<td><a href="http://www.minedu.govt.nz">www.minedu.govt.nz</a></td>
<td>Govt</td>
<td>14.95</td>
<td>32</td>
<td>59</td>
</tr>
<tr>
<td>www-ngaitahu.iwi.nz</td>
<td>Iwi</td>
<td>14.49</td>
<td>31</td>
<td>84</td>
</tr>
<tr>
<td><a href="http://www.learningmedia.co.nz">www.learningmedia.co.nz</a></td>
<td>Lang</td>
<td>14.49</td>
<td>31</td>
<td>87</td>
</tr>
<tr>
<td><a href="http://www.tetaurawhiri.govt.nz">www.tetaurawhiri.govt.nz</a></td>
<td>Govt</td>
<td>12.62</td>
<td>27</td>
<td>89</td>
</tr>
<tr>
<td><a href="http://maorinews.com">http://maorinews.com</a></td>
<td>Info</td>
<td>11.21</td>
<td>24</td>
<td>71</td>
</tr>
<tr>
<td><a href="http://maaori.com">http://maaori.com</a></td>
<td>Info</td>
<td>10.75</td>
<td>23</td>
<td>78</td>
</tr>
<tr>
<td><a href="http://www.terarawa.co.nz">www.terarawa.co.nz</a></td>
<td>Iwi</td>
<td>10.28</td>
<td>22</td>
<td>82</td>
</tr>
<tr>
<td><a href="http://aotearoa.wellington.net.nz">http://aotearoa.wellington.net.nz</a></td>
<td>Info</td>
<td>10.28</td>
<td>22</td>
<td>73</td>
</tr>
</tbody>
</table>

Table 19: Member-sites with web impact factor greater than ten

The website with the highest WIF is Te Puni Kōkiri. The government-group as a whole sets more than 55% of their hyper-references within the group itself. The network average percentage of groups out-links which are directed towards their fellow group-members is 23%; Te Puni Kōkiri’s group links to a far greater extent within itself than other categories. Out of 48 hyperlinks received by TPK, ten originated from other governmental-sites; this means that 79 percent of its in-links were coming from external group-members. This is just below the network average of incoming links originating from outside the group. Hence it is of interest to look where TPK attracts its connections from.
Figure 20 illustrates Te Puni Kōkiri’s connections. This member does not receive any references from art or internet related sites. Only one radio station (entertainment) deemed the site potentially appealing to its listeners. The business and language-groups each set three hyperlinks, whereas the sites offering general information put up four signs directing the visitors towards TPK. Five members of the education-group did the same. The three categories that directed their visitors’ attention towards TPK the most are pan-tribal (eight times) and īwi as well as directories with seven links respectively. This gives the impression that Te Puni Kōkiri is considered an important web-resource especially by those members whose internet sites are to a greater degree directed towards a Māori audience.
**Locality**

The locations mentioned here are based on actual statements provided by the host anywhere within the body of the members’ website. These were mostly found under ‘contacts’ or in specific sections telling the user about the organization or person behind the site. This does not necessarily mean that the server from which the actual site is provided is in fact situated at this particular location. The following example illustrates this point: http://www.geocities.com/SouthBeach/Port/2470/maori is a personal website providing knowledge about the Māori language. The webmaster lives, according to statements on the site, in Christchurch; the company hosting the site (www.geocities.com) is located in California. It is likely that the servers hosting the contents are located in California as well but this cannot be ascertained here.  

The MHN is overwhelmingly home-grown with 174 members (81%) stating a New Zealand location on their site. This number is very likely to be higher, since it can be assumed that of the 34 websites not specifying any location many indeed would be operating within New Zealand. Two more network members can be considered to fall into the ‘no location’ category as they were not up and running when this data was collected (third week of June 2005).  

Five members are located overseas; two in the United States of America, one each in Australia and France and one (www.flagspot.com) is ‘international’. The latter site is not provided by an individual organization, but rather a global community of flag-enthusiasts with different regions overseen by designated individuals. One of the US sites offers dictionary services (www.yourdictionary.com), the second internet site provides a collection of images ranging from landscape photos to Māori cultural artifacts and a map of New Zealand representing early Māori settlement (www.humboldt.edu/~rwj1/mauri.html). The ‘French’ site (www.history-nz.org) is hosted by a New Zealand expatriate and informs the visitor about the history of the country, whereas www.maori-in-oz.com is a site hosted by an Australian Māori whānau providing a broad range of

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77 *GeoCities* was shutdown by its owner *Yahoo* on October 26th 2009 (Milian, 2009).  
78 [www.simplysaid.co.nz](http://www.simplysaid.co.nz), [www.ngatitama.iwi.nz](http://www.ngatitama.iwi.nz)
Figure 21 and Figure 22 show that most locations of organizations providing a MHN-site are in the North Island. No websites ‘originate’ from Great Barrier Island north-east of Auckland or from Stewart Island south of the South Island. The largest of the New Zealand’s islands, the South Island or te Wai Pounamou, contributes websites from six locations, including Christchurch, which is host to a greater number of South Island-sites. The most common locations within New Zealand coincide with the bigger centers of the country, with the exception of Dunedin which only hosts one MHN-site. Aotearoa’s capital Wellington is host to the most – 54 – sites within the network, which is not surprising when one considers that 24 network members are government departments and agencies. This figure is likely to be higher in view of the fact that not all websites of this group specified a location and are not considered here. Of all the regions Northland (far-north end of Aotearoa), while not being home to the most websites (only 12), does host them from the greatest number of locations. This region has the second highest Māori population – 29 percent – only surpassed by the Gisborne region – 44 percent (Statistics New Zealand, 2007c).
Figure 21: Map of North Island MHN-site locations
Created with Google Maps http://maps.google.co.nz/maps
Figure 22: Map of South Island MHN-site locations
Created with Google Maps http://maps.google.co.nz/maps
The ‘international’ sites have a bias on informational sites. A statement which of course has to be qualified as the number of international hosts is very low. The comparison between the busy urban centers and the localities with fewer numbers of sites is more telling. The four centers (Wellington, Auckland, Christchurch and Hamilton) are home to 47 percent of the sites within the network. Due to Wellington – one third of the capital’s sites are government departments and agencies – a strong emphasis on governmental-sites is noticeable. The next most common categories of internet sites are pan-tribal and art. Table 20 illustrates that these cities provide between 64 and 77 percent of MHN’s pan-tribal, art, language, government and directories-sites (indicated in italics). Further, almost all internet-related sites are located in these centers (indicated in bold).

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of sites</th>
<th>Percent of category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>18</td>
<td>75</td>
</tr>
<tr>
<td>Pan-tribal</td>
<td>14</td>
<td>64</td>
</tr>
<tr>
<td>Art</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>Directory</td>
<td>10</td>
<td>77</td>
</tr>
<tr>
<td>Language</td>
<td>10</td>
<td>71</td>
</tr>
<tr>
<td>Education</td>
<td>9</td>
<td>50</td>
</tr>
<tr>
<td>Entertainment</td>
<td>9</td>
<td>39</td>
</tr>
<tr>
<td>Iwi</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Business</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Information</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Internet</td>
<td>4</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 20: Host located in main urban centers
Number of sites per group and percent of category; according to category

Such locations stated by one to five websites are not home to any sites from the governmental, directory and internet-groups. Table 21 illustrates that it is more likely within this range of members that the site is targeting an iwi-specific audience. 74 percent of all iwi sites are provided from locations with few other sites and half of these originate from a location which does not host any other site. However, this iwi-focus is not only restricted to this category but also applicable to entertainment-sites, all of which are tribal radio stations. And again, these locations with sparse site-density host a high proportion of this category’s sites (61 percent).
<table>
<thead>
<tr>
<th>Category</th>
<th>Number of sites</th>
<th>Percent of category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iwi</td>
<td>35</td>
<td>74</td>
</tr>
<tr>
<td>Entertainment</td>
<td>14</td>
<td>61</td>
</tr>
<tr>
<td>Education</td>
<td>7</td>
<td>39</td>
</tr>
<tr>
<td>Pan-tribal</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>Art</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Business</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>Information</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Language</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 21: Locations with low site-density (between one and five sites)
Number of sites per group and percent of category; according to category

This leads to the concluding thought that if a location does not host many sites it is less likely that a non-Māori or even pan-tribal demographic is the main audience. This is related to the nature of tribalism which is of course location specific as the mana (authority) of a tribe is linked to its rohe (territory). The internet extends the mana of a tribe to address and communicate from the rohe to the world. Communication clearly is an important aspect of the internet. The next section will investigate the MHN’s sites regarding this matter.
**Interactivity**

Figure 23 shows that almost all network-sites provide some sort of contact possibility. Only in six instances is it impossible to acquire information on how to contact the host. Twenty-nine members provide one mode of contact though it is most common to provide several.
Figure 24 above indicates the frequency of each individual contact mode within the MHN. Almost all (working) sites maintain an e-mail address and it is not uncommon for postal-, street addresses or phone numbers to be available, too. Contact numbers to mobile phones were least common; nonetheless, 11 percent did offer their visitors this rather personal form of contact. Online forms are a less frequent occurrence. These can be convenient to the users as they allow a message to be typed right there, without having to open another program or logging into one’s e-mail account. In many cases the e-mail address is formatted as regular text and not as an active link automatically opening up a new message with the users’ default e-mail program. This requires it to be copied and pasted or otherwise manually transferred. Online forms minimize the possibility for typing- or other mistakes and therefore increase the likelihood for the message to be sent without problems. They are also an increasingly popular form of electronic communication with hosts. The 2005 analysis showed that nine of the 47 sites with an online form did not provide an email address. By August 2008 21 hosts had no e-mail address and offered online forms instead. This shift might be explained because they can help reduce the number of automated spam-mails received as many such forms have a mandatory field in which a ‘security code’ has to be typed by the user.

Other possibilities for interactivity are illustrated in Figure 25 below. The most common of all allows the visitor to interact with the site, more specifically its content, by means of local search engines. The user is able to circumvent the intended structure of engaging with the information and focus only on aspects of interest. However, as with any search engine, the success of the search depends on the level of sophistication of the search engine and the skill of the visitor. Knowledge of what one is looking for and the use of good search terms are both paramount in receiving useful search results. Most MHN-sites provide a very basic and limited search service with no advanced search options available.

Newsletters are an additional mode for the provider to interact with the visitor. The specific form and frequency of these newsletters and their actual content were not analyzed here. Newsletters can vary greatly in these respects. Suffice it to say here
that they can achieve two very different aims. Firstly, they keep the surfer up to date and secondly keep the user ‘connected’ to the site. Some newsletters are sent to the readers via e-mail others are only available on the site itself, often also in archived form. Regular readers are, in any case, reminded of the existence of the website and in the latter instance particularly, drawn back to the site therefore increasing the traffic to the site.

![Figure 25: Other forms of interactivity in percent of working MHN-sites (n=213)](image)

The last mode of interactivity discussed here refers to forums. Three forms of interaction are possible in forums: Firstly between the host and visitors; secondly, a communication-flow in the opposite direction; both cases are regular occurrences at www.amio.maori.nz. And thirdly, the asynchronous interaction between visitors as is the case at MOrg. This particular technology has great potential for the sharing of information and the increase in knowledge at an interpersonal level. This may revolve around mundane matters like the announcement or organization of events or to inquire into other people’s opinion on an issue. Knowledge in this form can be shared and accessed by many and mistakes or misinformation can be addressed by more well-informed individuals. Further, this technology allows for the restriction of data. Tribal organizations for example are able to develop forums which can only be

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79 Some posts from this forum on defamatory uses of the .maori.nz domain name space were discussed in Chapter Three hence contributing to a greater familiarity with this particular forum.
accessed by their registered members. The in-depth analyses of the current use of forums and newsletters however surpass the scope of this thesis and instead deserve research projects in their own rights.

**Details from hosts of Māori Hyperlink Network-sites**

Before moving on to some findings of the survey of MHN-hosts it is necessary to reiterate the caution expressed in *Chapter Four* regarding the limitations of this data. One such weakness of this method is well illustrated by the first aspect discussed below – the launch date of the internet sites. In addition to the 33 responses illustrated in Figure 26 four more participants gave a ‘response’. All four entered ‘0’ for the year and three gave the same response for the month. This indicates a willingness to answer in contrast to those who just skipped through the question. This practice underscores that the individuals contacted, or to whom the invitation to participate was forwarded internally, might not know about matters like the launch date of the site. The responsibility to develop and maintain the internet site may have been shared between different people over time. It is therefore important that the discussions here are approached with this in mind. Further, it needs to be restated that the information can certainly not be generalized because of the low numbers of responses. Nonetheless the participants’ answers do provide supplementary facts and contribute to a better understanding of Māori cyberspace.

The (self-proclaimed) first Māori website – [http://maaori.com](http://maaori.com) – was, as previously mentioned, launched in 1995. The questionnaire response stating the earliest launch notes the same year.°° Two more sites can be considered to have started out during this very early period of New Zealand’s internet. They launched their online presence in 1996. The remaining responses grouped into the first column in Figure 26 were introduced in 1998 (half of all sites in this column) and 1999. The second column (2000-2004) saw sites launched in all years, with a slight ‘peak’ of five sites in 2001,

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°° It is unknown whether this respondent’s site and [http://maaori.com](http://maaori.com) are indeed the same because the questionnaires are anonymous. Details on any respondent, even if the information is part of their answer, will not be included here.
compared to between one and three during the other years. This might be related to an increased awareness and the discussions regarding the internet in Māoridom as the application for the second level domain .maori.nz was filed in early 2001.

The last column (2005-2007) in the above figure is a slight curiosity as the actual question in the questionnaire enquired when the site in question was first launched. All sites considered for the survey were already in existence in early 2005 as the MHN was investigated between March and April 2005. Three respondents stated this year; two of these provided a launch date after April 2005, the third respondent did not state a month. It can only be assumed that they (with the possible exception of the third 2005 sites which did not state a month) were referring to the launch date of perhaps an overhauled version of the original site. This is supported by the comment one respondent made: *The answer to [the last] question was the date the website was redeveloped with its current look and feel, structure and functionality.*

Māoridom’s early interest in and use of the WWW was already noted in earlier chapters. The responses presented here further support this point. However just because an internet site is online, even if it has been available for many years, does
not necessarily mean that it is indeed visited; a matter addressed by Figure 27. Seven respondents were not able to give an approximate number of monthly visits. This might be because statistics regarding the site’s traffic are not tracked, or possibly because the person answering the questionnaire does not hold this knowledge. The variation in the number of visits sites are attracting each month is very wide, ranging from 100 to 500,000.\(^8\)

![Figure 27: Questionnaire-responses to: How many visits does the website attract per month? In percent (n=31); * in thousand](image)

Figure 27 shows a greater number of sites have up to 40,000 visitors and considerably fewer have a very high share of visitors. All but one site with 90,000 and more visits per month update the content of the site on a daily basis. The one exception states weekly updates. Hosts of sites on the lower end of the traffic spectrum gave more non-specific answers to this question regarding the frequency of their updates. Some of the replies were: on a needs basis, randomly, or Normally, ongoing (say weekly). But site has had major technical overhaul and no updates over last year. The more frequent updates might be one reason for the heavier traffic noted before compared to others. It is also likely that ‘high traffic’ sites are more

\(^8\) Certainly, it needs to be noted that even if we know the number of visitors to a site we do not hold any information about the length of the stay, what pages were looked at, whether the content was actually read and so forth.
extensive in scope and provide a broader range of data (perhaps even non-Māori related content) and are able to attract more attention. They are probably provided by a ‘larger’ host with more means to provide up-to-date information more frequently.

Figure 28: Questionnaire-responses to: How often is the website updated? In percent (n=32)

![Graph showing website update frequency](image)

Figure 28 illustrates that half of the respondents indicated that the content was updated very frequently (meaning daily or several times a week) or frequently (weekly or several times a month). A small proportion of the respondents stated to rarely change the content of their website, or to be the host of a static site.

The research participants were further asked to share why their website was developed. This question was answered by 31 respondents most of whom identified more than one reason. Communication was most commonly stated, communication which is *cost effective, timely and up to date*, as one respondent wrote, and aims to keep people informed regarding news, events, ongoing developments and success stories. This appears to be a strong motivation for tribal-sites to launch a website, particularly with the aim in mind to keep their tribal members connected with happenings in the tribal area when living away. Whanaungatanga (lived relationship and care between whānau members) not only extends to families or tribes but also to new forms of social organizations such as professional associations and interest
groups as noted in *Chapter Two*. The internet is seen as a possibility to uphold the connection between people, even over great distances as several responses like the following noted:

> To provide information and news to the hapū of [name of hapū] who live anywhere in the world. It was envisaged that as the web became more popular that this would especially cater for younger people.

Belinda Borell’s (2005a; 2005b) and Toon van Meijl’s (2002; 2006) respective research highlighted that urban youth in particular are often disconnected from their tribal identity because of the distance to their home marae (meeting grounds) and the lack of opportunities to become involved at a young age. The above quote is interesting in this respect because this host was the only one who stated that their online presence hoped to make communication of tribal events and developments accessible to youth.

The second most common reason for the launch of a website was to provide trustworthy and authoritative facts. In contrast to news and announcements which change or are replaced on a regular basis, this sort of content is more permanent. A number of respondents mentioned this in connection with the aim to educate others, to counter misunderstandings or to create awareness and understanding. Increasing appeal regarding certain knowledge was mentioned as an influence in some hosts’ decision to provide information online. Three respondents stated that their website developed out of self-interest in a subject and that the content gathered for themselves was then made available to others online. It was also mentioned that the internet presence was developed because it allowed in-depth materials to be made available of which its dissemination would have been limited otherwise. Fewer noted the reason for their website’s launch to lie in their aim to locate and provide access to high-quality information on the internet. These respondents are functioning as a portal or directory rather than hosting the data themselves. Awareness regarding (cultural) appropriateness of provided details finds consideration by many of these hosts. There has been much written about this issue by various Māori authors (see *Chapter One*) and *Chapter Eight* will return to this matter in more detail.
Closely related to the provision of information in developing an online presence is the possibility to promote oneself – as an organization, association, club, tribal rūnanga (council), or business – and one’s services or products. These services are in some cases replications of those already provided offline (for example support, resources like publications or brochures and radio programs) but some noted that their internet site was developed to provide services complementing those available offline. In this context it was mentioned twice that online technology was better suited, effective or efficient in offering some services which contributed to the decision to create an internet presence. The promotion of a specific issue was given as grounds to develop a website. This last point and the promotion of services were mentioned more frequently than the marketing of products.

One of the least common reasons for the launch of a website given by the respondents relates to communication between visitors and the provider as well as between visitors. Two respondents pointed out that offering alternative means to be contactable was a motivating reason to go online and one respondent specifically noted the internet presence was developed with the aim of supporting the networking of people.

**Chapter summary**

The Māori Hyperlink Network certainly does not encompass all Māori-sites available on the WWW. Rather it represents those sites acknowledged by others and so it can be considered to be authoritative to varying degrees. The MHN is well connected with only a small proportion of marginalized sites. The network has two members which stand out more than other websites: TPK and MOrg. The selection of New Zealand internet sites as starting points for the demarcation process led to a network with a high degree of locally created content as most sites are presented by New Zealand organizations or individuals. An urban/rural division can be noted with almost half of the hosts located in four metropolitan centers. ‘Pākehā’ and more so overseas hosts are overall less common than sites provided by ‘Māori’.
The responses from the survey support the statement that Māoridom is an early adopter of the WWW. Māori cyberspace can be considered ‘old’ in this respect but the great proportion of hosts confirmed very frequent or frequent updates and very few stated rarely or never renewing the content of their sites says otherwise; many Māori-sites are dynamic and ever changing. This is likely to add to the fairly substantial traffic the hosts reported on average. The hosts’ responses showed that a variety of motivations contributed to the launch of websites. Hosts most commonly stated the desire to communicate news, events and other developments as reasons for going online. The provision of information and the use of the internet site for promotional purposes were common grounds for developing a website, too.

The following chapter investigates what information, services and resources are made available by the providers in more depth by shifting our focus towards the content of the sample-sites.
Ngā Tātaritanga: Content Analysis

The preceding chapter investigated the Māori Hyperlink Network (MHN) in network analytical terms to allow a broad understanding of Māori cyberspace to develop. Not much attention was directed to the actual content of websites. This chapter aims to address this. It starts out by developing a brief overview of the sample and explores who the hosts behind the websites are. This is followed by the analysis of the ‘packaging’ of the content in terms of their design, navigational support and use of images and multimedia files. Together, this provides some background information when the main purpose of the chapter is approached: the actual content of the sample-sites.

Due to the vast amount of information provided in the sample-sites, not all aspects will be discussed in full detail here. The website categories previously introduced are utilized to structure the main body of this chapter. Where possible, a comparative discussion within categories follows the delineation of each individual site. Four website categories within the sample only contain one site each: business, education, internet and pan-tribal. The chapter closes by exploring the content of the sample as a whole focusing on aspects of Māori identity discussed in Chapter Two.
Sample overview

The selection of the sample-sites, as noted in Chapter Four, was to a great extent determined by network analytical criteria. Table 22 below provides an overview of the sample, including the sites’ size (measured in their overall word-count), hyperlink connections (in- and out-links – IL, OL), their web impact factor (WIF) and the closeness centrality measure. We can see that the sample includes a variety of internet sites, according to categories, in terms of their visibility and centrality within the MHN and their size.

<table>
<thead>
<tr>
<th>Category</th>
<th>Label</th>
<th>Site</th>
<th>Words</th>
<th>IL</th>
<th>OL</th>
<th>WIF</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>MMU</td>
<td><a href="http://www.maorimusic.com">www.maorimusic.com</a></td>
<td>9,133</td>
<td>9</td>
<td>1</td>
<td>4.21</td>
<td>3.92</td>
</tr>
<tr>
<td>Art</td>
<td>MAT</td>
<td><a href="http://www.tematatini.org.nz">www.tematatini.org.nz</a></td>
<td>2,184</td>
<td>5</td>
<td>0</td>
<td>2.34</td>
<td>0.00</td>
</tr>
<tr>
<td>Bus</td>
<td>TAI</td>
<td><a href="http://www.taitokerau.co.nz">www.taitokerau.co.nz</a></td>
<td>43,152</td>
<td>4</td>
<td>1</td>
<td>1.87</td>
<td>4.01</td>
</tr>
<tr>
<td>Edu</td>
<td>MAS</td>
<td><a href="http://maori.massey.ac.nz">http://maori.massey.ac.nz</a></td>
<td>62,594</td>
<td>4</td>
<td>1</td>
<td>1.87</td>
<td>4.55</td>
</tr>
<tr>
<td>Enter</td>
<td>AWA</td>
<td>www.awa_irirangi.net</td>
<td>3,550</td>
<td>4</td>
<td>1</td>
<td>1.87</td>
<td>4.01</td>
</tr>
<tr>
<td>Enter</td>
<td>PUK</td>
<td><a href="http://www.pukana.co.nz">www.pukana.co.nz</a></td>
<td>1,556</td>
<td>8</td>
<td>0</td>
<td>3.74</td>
<td>0.00</td>
</tr>
<tr>
<td>Govt</td>
<td>MOE</td>
<td><a href="http://www.minedu.govt.nz">www.minedu.govt.nz</a></td>
<td>397,287</td>
<td>32</td>
<td>8</td>
<td>14.95</td>
<td>2.81</td>
</tr>
<tr>
<td>Govt</td>
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<td><a href="http://www.tpk.govt.nz">www.tpk.govt.nz</a></td>
<td>124,313</td>
<td>48</td>
<td>22</td>
<td>22.43</td>
<td>2.04</td>
</tr>
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<td>Info</td>
<td>FLA</td>
<td><a href="http://flagspot.net/flags/nz_mao.html">http://flagspot.net/flags/nz_mao.html</a></td>
<td>8,662</td>
<td>2</td>
<td>0</td>
<td>0.93</td>
<td>0.00</td>
</tr>
<tr>
<td>Info</td>
<td>GEO</td>
<td><a href="http://www.geocities.com/Heartland/Park/7572">www.geocities.com/Heartland/Park/7572</a></td>
<td>7,639</td>
<td>3</td>
<td>0</td>
<td>1.40</td>
<td>0.00</td>
</tr>
<tr>
<td>Info</td>
<td>MOrg</td>
<td><a href="http://www.maori.org.nz">www.maori.org.nz</a></td>
<td>111,335</td>
<td>37</td>
<td>179</td>
<td>17.29</td>
<td>1.16</td>
</tr>
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<td>Info</td>
<td>MOZ</td>
<td><a href="http://www.maori-in-oz.com">www.maori-in-oz.com</a></td>
<td>141,441</td>
<td>3</td>
<td>48</td>
<td>1.40</td>
<td>1.80</td>
</tr>
<tr>
<td>Info</td>
<td>ToWT</td>
<td><a href="http://www.waitangi-tribunal.govt.nz">www.waitangi-tribunal.govt.nz</a></td>
<td>126,685</td>
<td>33</td>
<td>3</td>
<td>15.42</td>
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</tr>
<tr>
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<td><a href="http://www.nzmis.org.nz">www.nzmis.org.nz</a></td>
<td>1,704</td>
<td>14</td>
<td>49</td>
<td>6.54</td>
<td>1.78</td>
</tr>
<tr>
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<td>TRoNT</td>
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<td>69,469</td>
<td>31</td>
<td>9</td>
<td>14.49</td>
<td>2.79</td>
</tr>
<tr>
<td>Iwi</td>
<td>APA</td>
<td><a href="http://www.ngatiapa.iwi.nz">www.ngatiapa.iwi.nz</a></td>
<td>5,062</td>
<td>5</td>
<td>0</td>
<td>2.34</td>
<td>0.00</td>
</tr>
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<td>HIN</td>
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<td>3</td>
<td>9</td>
<td>1.40</td>
<td>2.79</td>
</tr>
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<td>10,752</td>
<td>3</td>
<td>0</td>
<td>1.40</td>
<td>0.00</td>
</tr>
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<td>14,628</td>
<td>8</td>
<td>1</td>
<td>3.74</td>
<td>3.79</td>
</tr>
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<td>LME</td>
<td><a href="http://www.learningmedia.co.nz">www.learningmedia.co.nz</a></td>
<td>38,652</td>
<td>31</td>
<td>2</td>
<td>14.49</td>
<td>3.56</td>
</tr>
<tr>
<td>Lang</td>
<td>MTR</td>
<td><a href="http://www.ma-tereo.co.nz">www.ma-tereo.co.nz</a></td>
<td>35,506</td>
<td>4</td>
<td>4</td>
<td>1.87</td>
<td>2.85</td>
</tr>
<tr>
<td>Pan</td>
<td>TRW</td>
<td><a href="http://www.trw.org.nz">www.trw.org.nz</a></td>
<td>22,816</td>
<td>7</td>
<td>5</td>
<td>3.27</td>
<td>2.86</td>
</tr>
</tbody>
</table>

Table 22: Sample overview: Category, site, links, WIF and closeness centrality
Sorted according to categories; N=22

Most of the sample-sites’ providers state a location within the North Island of Aotearoa/New Zealand. The ‘Wellingtonian’ stronghold noted for the MHN in the previous chapter is also evident within the sample. The two South Island hosts are located in Christchurch (Ngāi Tahu) and Kaikoura (Whale Watch).
**The hosts**

Most sample-sites provide some information about the host usually located in ‘About Us’ pages. Only one provider, Pūkana (PUK), leaves it up to the visitor to discover who they are while reading through the pages. But it is probably fair to assume that most who visit it will know that the site relates to a Māori-language television show for children. Two hosts do not provide any indication about who is behind the site: Māori Music (MMU) and Maori.org.nz (MOrg). 82 One site, Geocities (GEO), provides us with the name of the host. This is the only personal homepage within the sample. Two more sites are provided by private individuals who provide the websites in their own free time out of interest.83 Flagspot (FLA) and Māori-in-Oz (MOZ). FLA is a site dedicated to vexillology, the study of flags. It started as a homepage of one individual but developed into a site which has contributors all over the globe and is maintained by a number of volunteer editors. MOZ on the other hand is hosted by a Māori whānau (family) in Australia. They provide a lot of information about their tribal connections, their journey to Australia and what is going on in their lives. All other sites are provided by ‘organizations’ ranging from rūnanga (tribal authorities) to Ministries.

Two sample-sites are provided by rūnanga, Ngāi Tahu (TRoNT) and Ngāti Apa (APA), both of whom provide detailed information about the iwi (tribe) as well as the rūnanga. Ngāti Hine (HIN) state that they have kinship-links to Ngāpuhi, an iwi north of Auckland, but also stress that they are an independent iwi. Te Hikutu (HIK) and Awa FM (AWA) underscore their identity as tāngata whenua (people of the land) by highlighting their connection to their tribal land. Whale Watch (WWK) is a very successful and acclaimed tourism venture operated by Kāti Kuri (sub-tribe of Ngāi Tahu) which developed out of the need for employment for Māori in this area during the late 1980s.

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82 Sally Pewhairangi (2002, p. 140) notes that the MOrg’s host is Kamera Raharaha which is supported by the fact that she is also the kaitiaki (guardian) of the Raharaha whānau-site part of MOrg (see [http://raharaha.maori.org.nz](http://raharaha.maori.org.nz)).

83 This is not to say that other hosts might not rely on volunteer time in the provision of their content.
Four societies or associations are part of the sample, three of which are more strongly oriented towards the professional advancement of Māori in the areas of tourism – Tai Tokerau (TAI); librarianship and information management – Te Rōpū Whakahau (TRW); and information and communication technologies (ICT) – Te Whānau Ipurangi (NZMIS). The fourth one, Te Matatini (MAT), in contrast aims to support the expansion of Māori performing arts. All of these have the commonality that they provide some information not only about the history of the society, their objects and goals, but also name some of the important people involved. This is similarly the case with the only education provider in the sample: Massey University’s School of Māori Studies (MAS). This host provides the visitor with an understanding of the history of the school, its position within the university, its mission as a teaching and research facility as well as their collaborations with iwi and the wider Māori community.

The last large group of hosts are all government affiliated. Learning Media (LME) is a State Owned Enterprise in the area of educational publishing. They not only provide publications and educational materials for a New Zealand context, but also service global customers. LME is a significant publisher of resources in te reo Māori (Māori language). Mā te Reo (MTR) was established by the Minister of Māori Affairs in 2001 to provide funding to local language initiatives which contribute to te reo Māori becoming an everyday means of communication within communities. The website of the Treaty of Waitangi Tribunal (ToWT) informs the visitors in detail about how the Tribunal came into existence, what its responsibilities are and how the 16 members are appointed. The last two hosts of the sample-sites are the Ministry of Education (MOE) and the Ministry of Māori Development (TPK). MOE is the lead-advisor to the government on the country’s education system. The website provides information about the role and responsibilities of the Ministry. The Deputy Secretary Group Māori is introduced in detail, letting the visitor not only know about the person’s professional and educational background, but also provides the tribal affiliations. TPK is introduced in terms of its role as a government ministry and in its role in supporting Māori to succeed as Māori. Therefore, not only is the structure of the Ministry explained, as with other governmental hosts as well, but also the
Regional Development Offices are listed and introduced. All government sites provide information relating to their Statement of Intent, Strategic Direction, Annual Reports and similarly official documents to provide more in-depth information on the organization behind the names.

Overall, the majority of the websites can be considered to be provided by a Māori host. The most unambiguous exception is FLA. As no information is available about MMU it can only be speculated that the host of the site is Māori. Other doubtful cases are MOE and LME, however the commitment of all government agencies to the principles of the Treaty of Waitangi (ToW) allows the speculation of Māori involvement in Māori-specific departments or groups, which is supported by MOE’s introduction of the Deputy Secretary Group Māori.

**The packaging**

Most websites within the sample are characterized by complexity. Some because of sheer size (i.e. MOE), some because of the wide range of topics covered (i.e. TRoNT), others yet again because they cater for very distinct audiences (i.e. TAI). Complexity however is not necessarily negative as long as users are able to find their way through it. James Kalbach (2007, p. 10) stesses that “[n]avigation isn’t just about getting from one page to another; it’s also about orientation.” Users’ needs in this respect can vary, even between an individual’s repeated visits to a site (Brinck, Gergle, & Wood, 2002, p. 121). The availability of navigational support can therefore be effective aspects to any website.

Figure 29 illustrates common forms of navigational support within the sample. Almost all sample-sites make use of navigational menus (NM). A noteworthy exception is GEO which provides an overview of what sections are available but once a link is selected this disappears and the visitor has to use the browser’s back-button to return to it. Everyone else uses clickable menus and many keep these stable or ever present. A much smaller proportion highlights the NM in some way.
indicating to visitors where they are. This practice can also assist to contextualize the information. A “breadcrumb trail” (Kalbach, 2007) has a similar function but displays the actual ‘trail’ through the sub-sections to the current page’s location. Sitemaps allow users to see the website’s structure at a glance. Both these support options are less common. Site search allows a more targeted engagement with the sites’ content if the user knows more precisely what they are looking for. This is part of half of the sample-sites. The fact that many of the sample-sites are rather complex is in most cases mitigated by these navigational supports. Should a visitor get lost despite them, in most cases a link to the index-page takes them right back to the beginning. However, it is very rare to see them called ‘home’ (see for example MOrg). Instead, it is frequent practice to hide the link behind the logo.

Figure 29: Navigational support in sample-sites; in percent (N=22)

The content of websites is mostly intended to be engaged with directly on-screen. Impressive presentations with attention grabbing features can be effective for some types of sites but might be less suited when the emphasis is on the provision of information in text-form (Brinck et al., 2002). Two websites within the sample (PUK and WWK) use Flash-animation which requires the user to engage with the content in a more playful manner. All others rely mostly on ‘traditional’ text. MOZ and MOrg have a tendency to create a somewhat cluttered atmosphere. This is mainly
limited to their index-pages. However, this first impression will not last long once the index-page is left behind and the rest of the sites explored.

The use of wallpapers as a backdrop of the website was not a common practice within sample-sites. MOrg is noteworthy in this respect, as this site has a light colored weaving pattern as its background. Most others use a monochrome background with white or other light colors dominating. The utilization of a lot of ‘white’ space gives most sample-sites a very professional or almost corporate “āhua” (appearance), to use an expression of one of Konrad Peszynski’s (2001, p. 30) participants. Very few use a combination of more than three (usually complimentary) colors, vary the font type or size frequently or overcrowd the screen.

The īwi-category shall be used to illustrate these points. Ngāi Tahu and Ngāti Apa both have an āhua similar to sites from institutions or government departments. They look formal, are well structured and simple to navigate. Along with their use of light colors, this makes them easy to engage with on-screen, particularly considering the wealth of information provided. The āhua of HIN and HIK on the other hand is very different. Both use dark background colors (red and black) and display the text in yellow and a combination of green and white respectively. While this makes the text harder to read, the dominance of symbolic colors such as back, red and white is likely to create a familiar environment to Māori. Additionally, the relatively small size of both of these sites does not require visitors to read too much text and hence their design is unlikely to deter visitors from engaging with the content.

All sample-sites use pictures and/or multimedia files. Five sites make sound files available, which includes AWA’s live radio shows, MMU allowing its customers to get a taste of the music on offer, WWK playing the sound of whales and MOrg has several sound-clips in Māori under Pronunciation of vowels, special characters used in te reo such as ng and wh, of colors and of numbers. Further, two MP3-files of waiata (songs) and a video of a kapa haka (posture dance) performance are included.

84 Throughout this chapter the use of actual notations from the websites’ sub-pages, navigational menus and headlines is highlighted by underlining the term(s).
MOrg also allows visitors to enter a Virtual Whare, an animated marae (meeting ground) accompanied by a karanga (call of welcome). Other multimedia files consist of a very short video clip of one of PUK’s TV-segments called Niti Rāua Ko Nati (Niti and Nati), MAS presenting Māori art as a small virtual tour through an art gallery and WWK showing parts of an animation of Kaikoura’s ocean ground screened during their tours.

The utilization of images is much more widespread within the sample. Depictions of wildlife are least common. Photos of birds are shown by MOrg as part of a slideshow selection whereas TAI and WWK have prominent shots of whales and dolphins. APA, AWA, HIK, MOZ, TAI, ToWT, TRoNT and WWK all show photographs of scenery. Commonly they are presented in a cultural, spiritual or historic context, at other times they are ‘just’ snapshots of the country’s beauty. Images depicting various cultural artifacts, Māori body language or other Māori-specific representations are frequently used but great differences between the individual sample-sites exist. MAT for example only has six photos; one is a crowd-shot from the 2005 Te Matatini Festival and the remaining are focused on one or two performers. This allows detailed views of facial expressions such as whētero (protruding of the tongue) and pūkana (contortion of the eyes), of garments, feather adornments, moko (tattoo) and of different kinds of pendants. MOrg provides many representations of all of these aspects as well and in addition to the above mentioned bird slideshow other such shows are available: clothing, weapons, instruments, plants, hunting traps and tukutuku (traditional woven wall panels).

Māoridom is not only represented in its traditional form however. TPK for example uses small photomontages which merge traditional with modern images. WWK similarly shows Māori both in traditional contexts of the marae and inside the whare nui (meeting house) as well as on their modern vessels. The use of pictures to introduce staff-members is widespread within the sample. Peszynski’s (2001)

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85 In order to experience this virtual encounter users have to install a Flatland Rover plug-in which only is available for Internet Explorer and Netscape browsers.

86 All sample-sites but AWA, GEO, MOE, NZMIS and TRW provide such images.
research highlighted that pictures of the people behind a website, in his case of online shops, greatly increases the trust that Māori surfers have in it.

The content

This section looks at what content each website provides and where a category includes more than one site, a comparison within the category is undertaken to draw out similarities and differences. This is followed by a more general exploration of the sample’s content.

Business

Tai Tokerau Tourism Association hosts a website which brings the northern region of Aotearoa to the world and equally importantly, supports local tourism operators. The site is hence structured in three main parts: tourist information, general matters relating to the website and the association and a members area. Networking and maximizing the potential of the internet to advance local Māori economic development are important aims of TAI. Sub-sections like Become a Member focus on information for tourist operators, explaining the objectives of the association and listing membership benefits. These include support in marketing, researching tourism trends, training and mentoring. Both the Members Area and Executive Area are password protected therefore restricting information about their content. The respective login-pages state to offer information and resources to members, such as Post a Job or Business Resources.

Throughout the website information on Māori worldviews, mythology and culture can be found. Our Brand Story for example retells the separation of Papatuanuku (Earth mother) and Ranginui (Sky father) by Tane Mahuta (God of the Forest) and notes the central position of whānau in Māori society and to economic development. The region of Tai Tokerau is of great relevance within Māoridom in political terms – the Treaty was signed in this region – and spiritually as it is the home of a kauri tree
named after Tane Mahuta and of a pohutakawa tree which leads the wairua (spirit) of the deceased to the underworld. All of these important aspects are briefly explained to visitors.

One objective of the association is the promotion of the socio-economic development of Tai Tokerau through Māori and cultural tourism. The content throughout TAI makes clear that Māori tourism is not limited to Māori cultural performances but includes a broad variety of activities and ventures embedded in Māoritanga (Māori culture). At the same time, it is emphasized that economic advancement not necessarily negates Māori tikanga (customs) and values.  

**Internet**

The website of the New Zealand Māori Internet Society welcomes the visitors by briefly introducing themselves. This is further extended in About Us where visitors are also informed about NZMIS’s main objectives and goals which focus on strengthening Māori online presence and to give Māori a voice in national and international ICT forums. The maori.nz-subpage primarily recounts the development of the domain. This is highlighted as NZMIS’s greatest achievement and as the reason for the society’s formation. A separate section on their Achievements lists, amongst others, a letter campaign to promote .maori.nz amongst Māori organizations and submissions to and consultation with various ICT bodies. NZMIS also supported a project by Ngāi Tahu called Computers in Homes. A Discussion Group links to the AMIO-forum and an invitation to Join Our Mailing List is extended as well.

NZMIS’s focus on the society and its achievements does not leave any doubt, it has been a driving force behind Aotearoa’s cyberspace and has been an advocating voice

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87 At the time of finalizing this thesis in June 2010, this website does not exhibit great changes in design or content.
for Māori. This website underscores, similarly to TAI, that Māoritanga is very much of relevance even in modern contexts.88

Pan-tribal

Te Rōpū Whakahau is a complex, but accessible website. It becomes very apparent that TRW has many functions: networking and support of Māori librarians; research into Māori use of libraries; improvement of information retrieval in te reo; protection of Māori knowledge and taonga (treasures) held in libraries and archives; Partnerships with national and international associations. The Strategic plan and Position statements most notably highlight these functions. The Treaty and te reo Māori are mentioned to be aspects TRW advocates to be recognized and valued in all areas of information management. Publications to support their implementation are provided as well as other Resources. These include material on relevant tertiary courses. Very personal Tips on How to Succeed at Academic Study further encourage the pursuit of education in TRW’s area of expertise.

TRW fosters unity as a pan-tribal organization by embedding their work in te ao Māori (the Māori world). In this sense, te reo Māori is used to welcome the visitors, a whakatauki (proverb) represents their vision, annual hui (gathering) are organized within marae settings (Events) and the website shares waiata and karakia (prayer) used during hui. Join us provides information on how to become a member, benefits of doing so as well as the costs involved. This page not only provides information on TRW and the society’s history, but more importantly about their achievements in the

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88 NZMIS is no longer available, neither is AMIO’s forum. NZMIS however can now be found on Facebook. Two websites linked to Te Whānau Ipurangi Ō te Au available under www.nzmis.maori.nz and www.maoiri.com are very limited in their functionality as many pages continue to be ‘under development’ since 2007. It is uncertain whether they are officially linked to NZMIS as both mention different executive members with no overlap.
past and their ongoing commitment to Māori librarianship and information management.\textsuperscript{89}

**Education**

The Mission Statement on the website of Massey University’s School of Māori Studies stresses its role not only as an education provider but also as a center of research and to liaison with Māori communities. Nonetheless, the emphasis of the overall content is directed towards the provision of information on the four Teaching Programmes: Māori Language, Māori Visual Arts, Museum Studies and Policy and Development. Each of these sub-sections explains the core of the programme, possible pathways to different levels of qualification and who leading staff-members are in the respective areas. Additionally to this, the various Academic Qualifications from undergraduate to post-graduate level are explained and how Māori Studies can best feature in them. An important aspect throughout the website is the possibility to conduct one’s studies externally through Extramural Study. Visitors to MAS are also presented with Research Programmes staff-members are involved in, Publications and Art Collections linked to the school and with students’ artworks. Information on student Exhibitions showcasing contemporary Māori art is also provided.

The website highlights that Māori Studies is not limited to culture, tradition or the past. Rather, contemporary Māori society in all its facets is explored, both in research and the academic programmes, embedded in te reo and tikanga Māori. MAS’s practice to be well structured and to explain important facets of tertiary education in detail makes tertiary education approachable. The acknowledgement of Māori values

\textsuperscript{89} The current version of TRW changed in its design without its accessibility being diminished. Only a few changes in content occurred, seeing Values such as ‘whanaungatanga’, ‘manaakitanga’ and ‘kaitiakitanga’ specifically included and the possibility to sign up for TRW-membership online is now provided as well.
and practices throughout the courses along with appropriate support are likely to contribute to this even more for Māori students. ⁹⁰

**Art**

Te Matatini focuses on providing information on the bi-annual *Te Matatini National Festival* celebrating Māori performing arts. The structure of the website is not complex and surfers are likely to develop a good overview quickly. The About Us and Festival sub-pages hold most of the informational content focusing on the host and the people behind the society. The meaning of the logo, a huia (extinct bird) representing *Beauty, leadership, excellence and prestige* and the motto are explained. Both stress the most central aim of the festival, to promote excellence in Māori performing arts. The other purpose of the festival is to bring people together, a fact mirrored in the name Te Matatini which stands for *The Many Faces*. This goal is supported by the website as it provides information on competitions on both the Regional and national level (Festival) noting the names of competing groups as well as the dates and competition venues. No information regarding the meaning of kapa haka is provided though.

Māori Music is Māoridom’s very own *Amazon.com* offering a broad range of products including language resources and Māori gifts, but as the web-address suggests, the site’s focus is Māori music. Their motto *from haka to hip hop – mai i te haka ki te kori* highlights that Māori music is not only concerned with traditional waiata. The structure of the site is not overly complex and focuses on three aspects: the products, the shopping process and additional music related information under Articles. Products can be accessed in multiple ways; amongst others, according to Categories, by Artists, by What’s New and by using Quick Find or Advanced Search options. Specialty stores usually provide quality products accompanied with expertise in the field. This is certainly the case with MMU.

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⁹⁰ MAS is greatly reduced in its content. The information now focuses on its role as an education provider only, it is more formal and less explanatory. All the information on students’ and staff-members’ works is removed. One interesting addition is a News-section, which shares achievements of staff and students alike.
The content of both MAT and MMU addresses individuals with pre-existing knowledge about traditional and contemporary performing arts and music. Neither website will be able to greatly extend visitors’ knowledge on Māori music or dance if they do not have any familiarity with the subject matter. Both sites however facilitate the incorporation of Māoritanga offline.\(^{91}\)

**Entertainment**

Awa FM brings the offline world of iwi-radio to listeners who are otherwise outside the broadcast area. The structure follows a template used by many tribal radios part of the irirangi-network at the time of analysis, including some aspects which appear not to be utilized (Competitions, Artist Profiles and Events). The index-page is concurrently the Station Profile, greeting visitors with a whakatauki which highlights the cultural and spiritual importance of the Whanganui river for the local tribes. The link to the live-streaming can be found here as well. Further, the station’s history is shared, noting government support (see Chapter One) in the early days. It also becomes apparent that personal dedication of the then Station Manager was instrumental. Being an iwi-station, AWA’s identity is closely linked to tribal identity. This information is provided at the end of the index-page. The Shows are outlined, along with the scheduled times and the presenters. The variety of programming is great, ranging from music and sports shows, programs with a focus on learning te reo Māori, others on local tikanga and mātauranga (knowledge) and a program bringing local news from the rūnanga and other iwi organizations to the people or to discuss general news from the tribe’s perspective.

Pūkana is a small website focusing on the show and its hosts. Before entering the main body of the website which then requires a Flash-player, it is succinctly stated where and when Pūkana is broadcast. Upon entering brief outlines of the show’s segments are provided. From these, the importance of Māoritanga as part of the TV-

\(^{91}\) MAT grew extensively and now includes additional information on the competition (i.e. on rules) as well as explanations of what kapa haka is. More pictures, a movie and a magazine are now part of the site, too. MMU on the other hand did not undergo any changes since the analysis except for new additions to its catalogue and articles.
program becomes apparent. One of these segments is Kapahaka. Its description notes not only performances of Te Matatini competitions that are to be showcased, but also from secondary school competitions. Visitors are encouraged to contact the show if they would like to see their own group’s performance screened. Te reo Māori is of course a central aspect of the program. Therefore, Tiare Kīwaha mentions that each week one of the presenters (Tiare) teaches the viewers a new kīwaha (saying), explaining what it means and when to use it. Another educational segment I mōhio rā nei koe? (Did you know) sees two fairies share special knowledge with the children.

Whereas AWA and PUK differ in the accessibility of the actual programming (PUK does not make the program available online) and in their target audience, they also have commonalities. Both sites focus on the introduction of their programs and the presenters. Being an iwi-radio, AWA does not mention the presenters’ tribal affiliation prominently, unlike PUK which states them explicitly. AWA instead focuses on its staff-members’ contribution to the station. Both though also provide personal and informal information about the presenters, like their favorite foods, drinks, colors, sayings and music.92

**Language**

As noted earlier Mā te Reo and Learning Media are government affiliated hosts. Both play an important role in the advancement of the Māori language. When only considering the New Zealand relevant pages of LME, the websites are similarly in size, their purpose and content are however very different.

MTR’s role is to help achieve three particular goals of *The Māori Language Strategy* introduced in *Chapter Two*: to increase Māori language use, skill levels and to build local leadership. Hence, initiatives by iwi, hapū, whānau and individuals addressing

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92 Both websites changed in their appearance, but the kind of content they provide stayed greatly unchanged. AWA is now available from [www.awafm.co.nz](http://www.awafm.co.nz). A new and interesting addition to PUK’s site is a forum where (registered) visitors can post comments and questions and which are also used for announcements of competitions and similar matters.
these goals find financial support. MTR’s website informs visitors about this funding program, the people behind it, the supported Funding Categories and the overall process involved. A quarterly Pānui (news, newsletter) is additionally made available. Their purpose is to extend the general content of the website and to provide in-depth information. These newsletters provide information on how many applications were received, how many were incomplete and therefore not considered and what the success rate was. Throughout tips on how to increase the chances of securing funding are shared.

The ‘official’ information on the application process is kept relatively brief. Instead the interested applicant is encouraged to contact staff via e-mail or free-phone and individual assistance with the application process is offered. The pānui and Project Profiles possibly are more relevant in providing applicants with useful and practical information. The latter not only give visitors an indication of what initiatives were previously funded, but also the experiences and personal advise of some of the individuals leading these projects are shared. The narratives of these individuals convey not only the success of their application, but also the pride and enjoyment of their projects and in some cases also the impact the initiatives have on their communities.93

Learning Media on the other hand has a very different purpose; namely to develop and distribute educational material. The website can be considered to have three (possibly overlapping) audiences: educators, writers and speakers/learners of te reo Māori. This hence leads to a very complex, but nonetheless well structured, website. Educators are able to keep up-to-date with new reading and teaching resources and can search the current catalogues. Information is provided on the various publication series and how to go about ordering them. Content for Authors and artists is very extensive stressing that material not only needs to be appropriate for specific

93 The current website did not change in its appearance, but somewhat regarding its content. The more formal information on MTR itself and the application process were further reduced and is now very brief. New additions are a section with further information on Language Planning for communities, Evaluation/Research Reports and an area with information on how to obtain language Resources developed with the support of MTR-funding.
educational levels, but also to meet diverse cultural and linguistic needs. Hence, material in te reo Māori is preferred not to be merely translated, but specifically developed.

Table 22 above shows LME having a much higher WIF than MTR (and than many other sample-sites). This is because of one particular section of LME attracting special interest: the Ngata Dictionary. This dictionary was, the visitor is informed, first published in 1993 after Hori M. Ngata began working on it in the late 1950s. The dictionary reflects his tribal dialect (Ngāti Porou) and his vision not only to provide translations, but illustrative examples and explanations. It can be ordered through LME and it can be used online for free. The main aspect of this dictionary is the searchable database, allowing visitors to look-up the meaning of Māori words in English and vice versa. In addition to this supporting pages that form part of the print copy such as He Whakatau, Preface, He Mihi, Introduction and the Appendices are included as well. Together they provide background information on the development of the dictionary itself, on some specificities of the Ngāti Porou dialect and on some aspects concerning the Māori language not accessible from the dictionary entries. The usability of this dictionary is further improved by a small plug-in for Mozilla’s Firefox browser which can be downloaded from LME. This allows surfers to any website to instantly look up words they are unfamiliar with. Therefore, LME not only supports the use of te reo offline by making it relevant in class rooms and the home of children, but also when individuals venture into Māori cyberspace.94

**Government**

A host closely linked to the preceding sample-site is the Ministry of Education. This government-site is the largest of those analyzed here, even when focusing on Maori Education. This section is located under a heading called General and hosts a wealth of information for educators, researchers and policy analysts as well as for local/iwi

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94 LMR’s contemporary website changed in its design and content. The most important change is that a very visible link to the Ngata dictionary is now placed at the very top of the page close to the search field. Also, a special Māori Education-section is now available as part of the new ‘Our focus areas’-navigation bar.
communities. Communication between the Ministry and education stakeholders is the central purpose of this website, much of which is facilitated through research, annual reports and archived newsletters. These Kaiwhakaatu Newsletters are specifically targeted at iwi and Maori groups and introduce new staff-members, outline publications with relevance to Māori, announce upcoming events such as hui and Māori educational success stories are shared. These newsletters give voice to parents, researchers, postgraduate students, teachers and principals alike.

Most of the rest of the website focuses on providing documents and resources to inform visitors on partnership relationships the Ministry has with iwi and Māori educational organizations such as Te Kōhanga Reo National Trust (Collaborative Relationships) and on initiatives, research and education strategies. From these pages it becomes clear that MOE aims to increase Māori achievements in education but also to develop more effective teaching practices and learning environments. Community interest, involvement and support are moved to the center and Māoritanga acknowledged as being significant in this process.

Te Puni Kōkiri appears much smaller compared to MOE. This however is not necessarily the case as TPK opts to provide its extensive collection of publications and newsletters as PDF or Word-documents which are excluded from analysis. The website can be divided into three large areas. Firstly, information on Using this Site which also includes a report on the use of macrons in web-documents and referrals to online tutorials to learn more about effective and safe internet use. A second area focuses on the Ministry itself; its vision, values, the organizational structure and who the Minister is. Thirdly, sections such as Community, Business and Māori in New Zealand hold informational content on Māori development and TPK’s services.

This third area provides information on Māoridom mostly based on Census and other survey data and content specifically for Māori. Whereas the first aspect draws a predominantly negative picture of contemporary Māori reality in terms of health, education, employment and te reo Māori, the second aspect focuses on TPK’s motto: Realising Māori Potential through the support of flaxroot initiatives. Pages on
**Capacity Building** concentrate on existing skills and resources of Māori communities, businesses, tribal organizations as well as whānau and how these can be fostered. Assistance is especially offered to projects during early stages with the aim to support communities to assess their current situation, where they as a community want to head and how best to achieve this. Direct financial assistance is limited, but it is stressed throughout that the Regional Development-offices can direct communities to possible funding agencies.

The content of both of these Ministries is directed at communities and organizations with an interest in Māori advancement. Māori involvement and leadership in education, community or economic development are highlighted as paramount within both websites. MOE does so through its emphasis on partnerships and consultation with Māori education stakeholders and TPK by fostering of Māori capacity. The information available on their respective websites, particularly the many reports and the wealth of statistical data, are likely to be valuable resources for these audiences. Similarly, (tertiary) students interested in Māori education or other aspects of te ao Māori can turn to these two governmental-sites. Information of interest to everyday individuals however is possibly more limited.95

**Information**

This category is characterized by great variety in terms of the sites’ hosts, content and size. But they share the commonality of purpose: to provide information on a variety of subjects.

GEO’s focus is on whakapapa (genealogy) research. It is in fact larger than Table 22 above indicates as it provides a number of resources as text-files (including a list of

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95 Both MOE and TPK received complete overhauls. MOE’s design now creates a plainer and calmer appearance. The structure has changed and now provides separate sections of interest to five audience-groups, including parents and students. Two further main sections are about The Ministry and NZ Education where the Māori Education-section is now located. TPK’s content changed greatly in some areas. An interesting addition is the use of pictures showing native plants along with brief explanations. The site also improved in terms of its bilingual content provision. This is subject of Chapter Seven.
Māori soldiers of the Maori Pioneer Battalion. Other features not contributing towards the word-count above are the archives of Maori Queries and Maori Surnames Research. The first allows whakapapa researchers to post questions and requests for assistance. The latter is a list of Māori ancestors’ names, birth regions and when they lived, created by visitors. Both are frequently used functions of the website. Throughout GEO it is stressed that the best starting point for whakapapa research is always the immediate family and marae, but Non-traditional Resources are introduced and explained in detail nonetheless. Resources such as lists of pre-Treaty tribes and waka (canoe) with which Aotearoa was settled based on Te Rangi Hiroa’s book The Coming of the Māori are made available. Besides this knowledge on whakapapa research, GEO also provides information on Aotearoa’s very early history, especially regarding pre-European times and on Māori society.96

Flagspot is a global network of flag-enthusiasts, who collate personal observations of flags shown in the media, museums and at events. FLA’s main pages on New Zealand and Māori flags take the visitor on an historic journey. Beginning with the early days of the country as a nation and the selection of the first flag, the development of New Zealand’s current flag is traced (Historical flags of New Zealand). Several flags linked to Māori social movements, religions and tribes are discussed as well (New Zealand – Maori Flags). The flag-designs are described in detail. Additionally, references to Māori leaders, Te Kooti for instance, to tribes and events such as the signing of the Treaty and its annual commemoration and background on movements like the Kingitanga are provided where relevant. The symbolism of some flags (especially the Tino Rangatiratanga flag and the Māori Party’s) is explored. Whereas details are relatively limited, the information contextualizes the flags within broader historic developments allowing an understanding of the flags’ relevance to Māoridom then and today. It is apparent that the contributors are not experts in Māoritanga but the information is well researched. Utilized resources however are less commonly acknowledged.

96 GEO was archived by Reocities (www.reocities.com/Heartland/Park/7572) before GeoCities was shut down. The preserved content only differs in one aspect: the surname and queries archives were further extended between being downloaded for analysis and the time it was archived by Reocities.
The Treaty of Waitangi Tribunal’s website is another sample-site whose size is not fully represented in Table 22 above as a lot of information is contained in one of the many reports published. View Reports briefly summarizes them but the full reports can only be accessed as PDF-files. They not only hold background information on claims and the Tribunal’s findings but also knowledge (re-)discovered during the claims processes. A password protected ‘extranet’ holding documents used during claims processes can be accessed by individuals upon request. ToWT has the purpose of informing visitors About the Tribunal, regarding claims and research processes, the people involved as well as on the Treaty of Waitangi itself. The two versions (Māori and English) are not only made available, but their differences, the reasons for that and their meaning explained. A News-section hosting Media Statements, information on Recently Released Reports and Te Manutukutuku (quarterly newsletter) keep visitors informed on the Tribunal’s ongoing involvements and achievements.

An extensive section brings the two kinds of Inquiries the Tribunal oversees to the attention of visitors. Most claims fall into District Inquiries, seeing Aotearoa divided into 37 sections. ToWT introduces nine such district inquiries, noting the area they cover, the central concerns of the claims and, if available, information on the progress of claims. A second kind is Generic Inquiries. At the time of analysis the Flora and Fauna (WAI 262) claim concerned with intellectual property rights was subject of this section. The information made available here though is primarily concerned with the announcement of upcoming hearings. The Tribunal’s general hearing-schedule is published under Events. As these hui are public advanced notice allows interested individuals to attend.97

Maori.org.nz prides itself to be the Main Maori Site on the Net. Not only is it a broad informational website, it also is a hub for Māori to interact online. Papa Panui/Notice Board allows registered visitors to post information on upcoming events and news, to

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97 The content of ToWT changed very little. Most of the general information about the Tribunal and the Treaty remained the same. New reports were added and as more claims proceeded, progressed or were settled, relevant information was adapted.
ask questions about whakapapa or about tribes and marae and to engage in general discussions. Other ‘services’ provided include an extensive online shop-database where information on Māori products is gathered and the visitors are directed to the actual online shop. Visitors can also send Māori e-cards or add their details to one of the site’s databases (People, Marae, Kapa Haka and Organisations). These databases also include international entries and can be searched and accessed by anyone.

Informational sub-sections are Whakairo (carving), Customs, Language, Performing Arts, Genealogy and Stories. The information provided on each topic introduces the visitor to aspects of te ao Māori, such as what mana (authority, prestige) is, who kaumātua (elders) are, the importance of the past, protocols at hui, the meaning of common mihi (greetings) and of designs in carvings. It is explained what kapa haka and waiata are and some lyrics and translations offered. The basics of te reo Māori are provided in a concise online course accompanied by quizzes for self-assessment. Other Education Resources allow the visitor to see if they remembered what they have learned throughout their stay at MOrg. A collection of Māori legends from the creations narrative to a Māori Fantasy Story called Kura introduces the visitor to some of the many oral traditions of Māoridom.98

Māori-in-OZ is in some respects similarly to MOrg, however with a focus on Māori who made Australia their new home or plan to do so. Hence, its content ranges from specifics relating to the website itself (Privacy Policy, Copyright, FAQ – these FAQ also include some information and links to assist in whakapapa research), to extensive link-collections on various topics and directories of cultural groups, language courses and businesses. NZ Maori News and Oz Panui-Hui/News keep visitors informed on what is happening in Aotearoa and Australia alike. The main body of MOZ can be found under the heading Sub Menu. Here, articles on Māori artists, businesses, concerts and food recipes along with background information on special Māori delicacies can be found.99 Other aspects covered relate more strongly

98 MOrg’s design, structure and content greatly still match what was available in 2006. One noteworthy addition is a Mobile/PDA Version, allowing central parts of the site to be accessed from mobile devices.
99 Some examples are rotten corn and various edible greens such as poroporo, puha and watercress.
to Māori culture and mythology as dedicated pages introduce waiata, legends, poems and historic information. The latter is mostly re-produced with permission from sources such as Te Ara – The Encyclopedia of New Zealand, whereas the majority of all other contributions are written by visitors and the hosts alike. Readers are encouraged to send new articles about themselves, their business, cultural group or otherwise pertaining to Māoridom to the host to be considered for publication. The site also provides information for Māori considering Migrating To Oz. Lastly, an Online Whare (a discussion group) allows MOZ-visitors to interact directly as well.100

Most of the information-sites discussed here are created with great personal dedication. While they are all rich in information, most of the general information provided is likely to primarily satisfy visitors with little knowledge about te ao Māori. For others, the various forums, discussion boards and additional text and PDF-files might be of greater use. The latter because they contain a lot of information requiring pre-existing knowledge, otherwise the names of ancestors, locations and tribal histories shared in them are likely to remain without meaning to the reader.

All the sites, with the exception of FLA, in some respect more strongly address a Māori audience. MOZ was created with the purpose to keep Māori in Australia connected with each other and with te ao Māori. Considering the large number of Māori moving to Australia every year, such a website can be a useful resource to hear about Māori events or about local businesses and organizations run by Māori fostering a sense of community. While addressing pan-tribal audiences, tribal identities are nonetheless acknowledged throughout all of the websites. The following section now turns our focus to iwi-sites.

100 MOZ is still going strong. The web-design changed slightly, so did its structure. Some of the changes saw a Forum included as part of the website and a General-section now contains the previous whakapapa FAQ.
Iwi

This category as noted earlier includes websites provided by iwi, hapū and Whale Watch Kaikoura. The sites vary greatly in size and the content they provide, but all have the commonality that their specific tribal identity and history are central facets.

The Rūnanga o Ngāi Tahu is the most complex and extensive iwi-site. About half of Ngāi Tahu’s members live outside the tribal area (Solomon, 2006). The website appears to acknowledge this, as the information provided is at times very detailed and covers diverse areas: background on Te Rūnanga o Ngāi Tahu, their role and visions, the services they provide and its overall structure which is illustrated through flow-charts; information on Subsidiary Entities like Tahu Communications or Ngai Tahu Finance for small businesses; and background information About Ngāi Tahu. Here, a sub-section with a number of pages on The [Treaty] Settlement, the grievances it addressed, details on the actual process, related research as well as the outcome can be found. The settlement created a financial base which is apparent from the content of TRoNT as funding, finance and savings (Whai Rawa) all for the cultural, social and economic advancement of the iwi and its people are prominent throughout.

Related to this, accountability of the rūnanga to its members seems one purpose of TRoNT as well. This is achieved through various means, one of which is the provision of Annual Reports in the form of PDF-files. Another way are occasional Pānui covering current media releases concerned with business developments and success stories like Ngāi Tahu signing [i]the first joint management plan [with] DOC.101 Lastly it is noteworthy that TRoNT provides online access to Te Karaka. This is a print-magazine with news from the rohe (tribal area) as well as from Aotearoa and around the globe of interest to Ngāi Tahu people.

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101 Department of Conservation.
The largest section of TRoNT in terms of sub-pages is Ngāi Tahu Whānui which includes information specifically for Ngāi Tahu people. The range of topics covered here is extensive as well. Scholarships encourages visitors to learn about funding possibilities and tertiary education and briefly informs them about collaborations between various South Island tertiary education providers and Ngāi Tahu. The sub-sections Ngāi Tahu Fund and Ngāi Tahu Summit are similarly brief compared to Natural Environment. Whereas the first three sub-sections are mostly concerned with the cultural and socio-economic wellbeing of tribal members, the last section directs the visitors’ attention to another central concern of Ngāi Tahu; the wellbeing of the tribal area’s flora and fauna and the protection of natural resources and of culturally significant sites like wāhi tapu (sacred places) and traditional food sources. These pages especially highlight the large scope of responsibilities and roles the rūnanga has not just in direct interaction with tribal members, but also with external organizations like government. The rūnanga is involved in Resource Consent applications, acts as a cultural consultant, liaises with DOC, develops tribal policy regarding natural resources and sustainable customary resource use and is involved in research into local wildlife. Together, these pages highlight the importance of the natural surroundings and of the land Ngāi Tahu connects to through whakapapa for the tribe’s wellbeing. The importance of being kaitiaki (guardian) is reflected within the site.

A common aspect of tribal-sites is concerned with tribal membership and its registration. TRoNT not only explains its importance but also provides background information regarding the process of verifying the authenticity of whakapapa connections. While providing a list of ancestors’ names to which one needs to be able to trace kinship relations, the site does not make information concerning specific whakapapa connections per se available. The rūnanga however offers personal support when it comes to researching whakapapa. Ngāi Tahu does not allow online
registrations but rather provides the option to either download a printable form or to contact the rūnanga to post it.\textsuperscript{102}

Some of the other sites analyzed here allow for this process to be undertaken online. One such case is Ngāti Apa. This website on one hand represents the unifying voice of the rūnanga and the work it does. On the other hand it emphasizes the separate hapū under the umbrella of the iwi. The connections to the land and rivers in the rohe are stated for each hapū, along with some basic whakapapa information through which these connections were established. Related to this, the history of the tribe and how the various hapū came about to form Ngāti Apa is briefly outlined under About Us. This section also notes that the tribe’s history is commonly mistaken and that the information provided here is actually how the tribe came about. This historic account then emphasizes the importance of intermarriage and whakapapa in the development of iwi. The history of the rūnanga is also captured and the difference between the tribal authority and the iwi becomes clear. Both these historic perspectives are strongly linked to the present through the introduction of the health and education services within the rohe, the Treaty claims and matters linked to the fisheries settlement. Relating to this, the financial side of modern tribal life is disclosed and visitors encouraged to Register with the rūnanga. The site provides several means to do so, including freepost, free contact number and, as noted above, online. This was further promoted by a Registration Competition at the time of analysis.

News-updates (which also feature on the index-page) tend to be around claims-developments but also about social events. Newsletters are not available for online access. Instead registered iwi members receive the print version by post. This creates a distinct exclusion of non-registered visitors. An Event Calendar encourages members to attend happenings within the rohe, ranging from rūnanga hui, invitations to social happenings on different marae to working-bees. Information on four Marae is provided, including their pepeha (personal proverb) and contact numbers to book

\textsuperscript{102} TRoNT’s website changed its design but kept much of the content as described here. Amongst the few additions two are especially noteworthy: the CommunityNet which is a password protected area for registered iwi-members only and the extension of Whai Rawa which was just being developed at the time of analysis. Te Karaka (magazine) is now available from www.tekaraka.co.nz.
the marae. Two marae are introduced in slightly more detail by locating them within their history. APA is described as *a place for all Ngāti Apa descendants to gather*. This is true insofar as a guestbook also allows visitors to interact.\(^{103}\)

Ngāti Hine’s index-page asks visitors to choose between entering the main website or to go directly to the online-registration process for *Fisheries Allocation and Claims Purposes*. This registration-process can be completed online or printable forms can be downloaded and posted. While noting that Ngāti Hine are kaitiaki of the Treaty, no further information is provided on this topic. Besides three brief statements concerning Hine-a-maru, the ancestor of Ngāti Hine and the mentioning of their whakapapa link to Ngāpuhi, no other whakapapa is included in this website. HIN has a strong focus on the Histories of Ngāti Hine and its leaders. It is briefly noted how they became an independent iwi and visitors are introduced to Sir James Henare. Biographies of other tribal leaders available online via the *Dictionary of New Zealand Biography* are mentioned but no links are provided. This Histories-section announces the tribe’s intention to *compile accounts of Ngati Hine history and traditions* and encourages visitors’ contributions.

Although these sub-pages on history make up a great part of HIN’s overall content, this is not to say that the tribe is locked in the past, on the contrary. An Info-section is concerned with the present and future alike. A Scholarships-subpage provides a long list of available grants for different educational levels, with basic details on the benefits as well as deadlines. These dates indicate that this particular page has not been updated since 2000. Its News-subpage hosts a statement by Erima Henare with information on the fisheries claim and the injustice were Ngāti Hine’s status as an iwi denied for the purpose of fisheries asset distributions. The steps taken since 1997 to see the iwi-status confirmed are outlined. It was written in August 2004 in response to a Parliamentary Select Committee report on the *Māori Fisheries Act* which supported Ngāti Hine’s recognition as an iwi. Henare’s statement stresses that these developments do not change whakapapa links with Ngāpuhi and that it is of

\(^{103}\) APA did not change greatly. Only a few news items (last in 2007) and events (last 2008) were added and the competition removed.
great importance for members to attend upcoming hui on local marae regarding this matter. It is noteworthy that no updates were made since the original statement and the time of analysis. HIN is the only tribal-site analyzed here to include a Retail-section where t-shirts can be purchased allowing members to ‘wear’ their tribal identity.\(^{104}\)

At a first glance Te Hikutu appears to be a work in progress. A closer look reveals that the development of the site simply stopped in 2000. The overall focus of the site at the time of analysis was a reunion which took place over the Christmas holiday-period of 2000/2001. The site informs whānau on the progress of the planning, posts enquiries for help and it provides a printable form to register for the reunion as well as a ‘proposed’ program. Besides all of this, the site also presents information on tribal proverbs, karakia and waiata with significance to the hapū. Basic whakapapa links are traced from Kupe downwards and the names of 80 families are listed under Kaupapa Page Four along with printable whakapapa Forms.\(^{105}\) Limited information on Te Hikutu Outward Bound Committee and Te Rangatahi O Te Ramaroa, a committee specifically for whānau in Auckland, along with pictures of previous events are made available. All of this emphasizes the continuing importance of whanaungatanga (lived relationships), even in the city.

HIK is an attempt to use the internet to keep members informed but also to motivate individuals to get involved in the organization of the reunion. Both of these functions are especially apparent from the collection of Panui (newsletters). These are all about ongoing events like fundraisers and hui but also about volunteer research into the history and whakapapa of the hapū. The sudden halt in the site’s development is

\(^{104}\) HIN as discussed here no longer exists. Rather the refurbished site now includes additional aspects such as an Environmental Plan, information on Marae, Image Galleries, a waiata in the form of an MP3-file as well as a Forum allowing members all over the globe to interact. Not only did it develop in term of its content, but also in its appearance. It now has a similar āhua as APA and TRoNT.

\(^{105}\) Kupe is the first Polynesian navigator to discover Aotearoa (J. Williams, 2004).
especially intriguing since several newsletters state that these will no longer be sent by post in the future, instead they would only be available online. 106

Whale Watch Kaikoura focuses on promoting Kati Kuri’s Whale Watch venture. The business however is contextualized within the history of the hapū and within mātauranga Māori regarding the relationship between humans and the natural world. Under About Whale Watch three areas (Who Are Whale Watch?, Who Is Paikea The Whale Rider? and Our Conservation Policy) provide information on the tribe behind Whale Watch and the importance whales and the ocean carry for them. WWK shares the legend of their ancestor Paikea, who was saved and brought to Aotearoa on the back of a whale named Tohora. This special relationship between the local people and the whales of the region gained a new level of significance in the 1980s. Unemployment was spreading and Kāti Kuri leaders began to look towards this local treasure to provide income for their people. The page on the company’s conservation policy highlights that the protection of the natural environment does not only have economic relevance to Māori, but more importantly carries a strong spiritual significance. As noted above, the site is available in a low-speed and Flash-version. The surfers to the low-speed version, though, miss out on this information because it focuses on the business side of WWK only.107

HIN and HIK not only differ from TRoNT and APA in appearance as noted earlier, but more importantly in terms of their content. The latter have much greater focus on ‘neo-tribal’ (Rata, 1999) facets of contemporary tribalism. Henare’s statement (HIN) regarding the developments related to the Māori Fisheries Act and the prominence of the registration-facility on the index-page are signs of these modern aspects of tribal life as well, but HIN does not provide details on any staff of the rūnanga, the organizational structure or their services, unlike APA and TRoNT. HIK most strongly appears to be utilized as a means of communication between the organizing

106 This website is no longer active and no new site could be found.
107 The current website no longer gives the choice of a low-speed version. Instead, it now represents a ‘merger’ of the two. While the Flash-animations are still prominent aspects of the site, most of this information is now provided as text part of the main body of the content. This includes the stories about Paikea and Kāti Kuri previously only accessible via the high-speed version.
committee for the reunion and whānau. The fact that it was not updated for more than five years before completely disappearing from the internet without any apparent reason is most puzzling. APA can be seen to be the only iwi-site analyzed here which provides more regular updates to their upcoming events which allows its members to plan ahead and participate in hui and other happenings.

**The sample**

This facet of the content analysis shows that many of the traditional identity markers introduced in *Chapter Two* are indeed represented within the sample, but also that modern and everyday aspects of te ao Māori are not ignored either.

Whakapapa is a matter of variable concern within the sample. While APA, HIK and TRoNT provide specific information on tribal ancestors, only the latter offers assistance to those who are uncertain about their whakapapa. In most other cases it is assumed that the visitors are familiar with their genealogy. On the other hand, resources which provide tips on whakapapa research or direct visitors to websites and other points of contact such as genealogical societies are more common. Dedicated forums and guestbooks are also utilized to inquire into specific ancestors but appear to be less commonly used for very general whakapapa enquiries. However, these were not explored in detail here.

Closely linked to the topic of whakapapa is the broad subject of tribalism. Tribal identities are made a topic of concern within most sample-sites in some way. Names of tribes are often mentioned without providing details on the tribe in question, thereby presupposing existing knowledge. Tribal-sites while introducing themselves also limit further in-depth information. Pepeha and information relevant for them are not uncommon but their deeper meaning is not made accessible because tribal histories, legends and stories about ancestors, places and events, if shared at all, are often rather concise. Nonetheless, the complexities of Māoridom regarding tribal organizations are evident. This relates particularly to the differences between tribal organizations such as iwi, hapū and whānau, how they are interrelated and
interdependent. The level of detail however varies greatly between sites. The impact of modern influences, for example the prevalence of rūnanga, is ever-present, but they do not overshadow the underlying social groupings rooted in tikanga Māori.

The Treaty of Waitangi and Treaty claims are widely mentioned subjects. Whereas the Treaty itself is only explored in full detail by ToWT, its existence and importance is ascertained in various contexts. TRoNT is one of the īwi-sites to explain in some detail what their claim was about and what the settlement meant for the tribe and its people. This host is also an exception when it comes to customary practices such as fishing and other forms of food gathering. The details shared concerning this subject are more likely to be useful or meaningful to individuals who are already familiar with Ngāi Tahu’s rohe and tikanga. Related to this, MOrg provides brief explanations of hunting and fishing traps and their uses. Information on native flora and fauna is not extensively covered as only three sites consider the topic to be relevant.

While interpersonal contact and marae encounters are stressed as central aspects of Māoritanga in the literature, it appears to have less weight within the sample. Announcements of upcoming happenings on marae or linked to specific tribes in event calendars or pānui are not overly frequent. APA stands out in this respect. It not only introduces the tribe’s marae, but days and times of regular meetings are noted as well. Only MOrg provides introductory information on what behavior and knowledge is expected of anyone wanting to take part in gatherings in marae settings. Information on significant events such as tangihanga (funeral) and unveilings is equally limited.

Some more widely known legends such as Kupe’s voyage, about Paikea the whale rider or the creation narrations, are shared online. These usually remain at a rudimentary level or require pre-existing familiarity with characters and settings. This is especially the case when pages explore spiritual or religious aspects. The spiritual link between Māori and the surrounding environment is explained more comprehensively. MOrg in particular suggests reputable resources like books to
interested visitors. Similarly, many of LME’s products incorporate Māori mythology. Karakia are rare, whereas waiata in contrast are more widespread. Translations of lyrics are frequently provided but the same cannot be said about their context which is central to the understanding of their deeper meaning.

Many aspects of the sample’s content reflect the fact that Māoridom is part of modern life. Issues of concern particularly relate to health, education and commerce, which are covered both in positive and negative terms. The disadvantage many Māori continue to experience regarding various socio-economic indicators is mainly covered by government-sites. Equally, communities’ success stories and co-operations with government bodies are shared as well. Two iwi-sites specifically introduce their health services; likewise, AWA lists a radio-show dedicated to this matter.

Education is also a topic the sample addresses. This area is by no means restricted to children’s education (this is principally the forte of MOE). Tertiary and other forms of adult education mentioned by sample-sites are concerned with te reo Māori, arts, information management and business mentoring to name a few. The availability of scholarships and other funding support for individuals and groups alike are mentioned by some within the sample. Linked to this is the matter of research; areas referred to range from community and business assessments (noted by TPK in particular), to educational research (MOE), tribal histories, to environmental research and traditional practices. Together they stress the significant role research can have for the advancement of Māori communities and equally in the protection of mātauranga Māori.

Two businesses and a third site representing Northland’s Māori tourism operators are part of the sample. But these websites are not the only representations of Māori businesses. Others (for example TRoNT, MTR and MOZ) provide information on enterprises and one of MOrg’s databases lists various businesses. The sample leaves no uncertainty that many of these ventures are embedded in Māoritanga or incorporate Māori practices and knowledge in their business concepts. Details on
these ventures are, similar to Māori organizations other than those actually included in the sample, however rather limited.

The provision of local, national and international news, particularly political news, from a Māori perspective is equally restricted within the sample. MOZ and TRoNT can be considered to be most dedicated in providing visitors with such information. The first however focuses on directing visitors to online newspaper articles likely to be of interest to Māori, whereas the latter in fact provides their own news stories. Nonetheless, most sample-sites report ‘news’ about themselves or about their own area of interest.

The sample also makes content available which is meant to be utilized offline. Entertainment is the most prominent category in this regard. Although only two entertainment-sites are part of the sample, others provide information to allow visitors to partake in activities offline as well. MAT is a case in point, so is HIK. Both note a variety of activities being offered during their respective events. MAS makes information on students’ art exhibitions available, while MOZ and MOrg provide opportunity for visitors to announce their own events. Similarly, MMU advertises performances of Māori musicians in Aotearoa and overseas. This also includes kapa haka performances. However, MMU principally makes music available for offline-consumption contributing for waiata and contemporary Māori music to be part of everyday life. This host also provides a variety of other Māori products including jewellery and books. MMU’s range though is comparatively small. Other dedicated online shops are not part of the sample. Nonetheless, visitors do not miss out on Māori merchandise as reviews provide information on what and where to buy (MOZ and MOrg). The available assortment of products then is varied: clothing, accessories, pendants, ceramics, art prints, carvings, mugs and games, to name just some available categories.

The last aspect of everyday life offline relates to food. While no mentioning of restaurants offering Māori foods per se is made, hāngī (earth oven) are remarked upon occasionally. This is usually the case in a tourism context where the possibility
to enjoy a hāngī along a cultural performance is promoted. This topic is also covered in the form of recipes allowing everyone to explore the culinary side of te ao Māori at home. Yet again, the number of recipes available is limited and restricted to one sample-site.

Chapter summary

The analysis discussed here contributes to a better understanding of Māori cyberspace, the content available and how Māoridom is presented to visitors. Almost all sample-sites provide some information on the host; most of whom can be considered Māori and all but two are located in Aotearoa. The analysis highlighted that many sample-sites are complex but none to such a degree that it is likely to restrict accessibility.

The web-design was explored in this regard. The majority, it was found, makes use of light color schemes, avoids overcrowded pages or inconsistencies in the design throughout their sites. All of this aids the engagement with on-screen text. Another important aspect fostering accessibility is navigational support. Of all non-Flash-sites only one is not using any navigational aids. The majority provide a combination of two or more. The two sample-sites requiring visitors to have Adobe Flash-player encourage a playful engagement with the content but only one of them offers a low-speed alternative. The analysis of the sample’s use of images and of multimedia showed that Māori cyberspace is heavily text-based. Whereas images are widespread, the use of video and sound-files are more seldom occurrences.

The analysis further revealed that the sample as a whole covers a broad range of topics. While some areas, for example on the environment, flora and fauna, are less commonly addressed within the sample, others appear more frequently: the Treaty of Waitangi, tribalism in a broad sense and news to name but a few. While matters pertinent to Māori identity, such as whakapapa connections, tribal histories, tribal tikanga, are referred to throughout the sample, the information however often
remains at a basic knowledge level. The engagement with the individual sites shows that Māoridom is neither depicted as solely traditional, nor are traditional aspects ignored. Rather, many of the complexities of te ao Māori explored in previous chapters are represented in the sample-sites.

Not all sample-sites were developed strictly with a Māori audience in mind. The analysis suggests that a lot of the content available is possibly limited in its usefulness for Māori who already have some knowledge on these matters. This argument is further explored in Chapter Eight when the experiences and views of Māori internet users are considered. The following chapter however first considers on one aspect not investigated here: the use of te reo to provide information.
Te Reo Māori i te Ipurangi: The Māori Language Online

This chapter explores the state of the Māori language (te reo) online. Results from the basic analysis of the Māori Hyperlink Network’s index-pages regarding their use of te reo is followed by an in-depth investigation of the sample-sites. The linguistic analysis saw all Māori words separated from the main textual body. While this allows a very precise consideration of the proportion of Māori words online, it only supports a limited discussion concerning the actual words themselves. Nonetheless, some considerations regarding the most common words are offered along with a comparison to an existing word index, *Nga Moteatea* (R. B. Harlow & Thornton, 1986).

This chapter not only focuses on results of the word count analysis, but also takes a glimpse into the possible future by considering the host’s responses to the online survey regarding their plans concerning bilingual content within their sites. The chapter sets out with a very brief review of some background information on te reo before turning to the actual findings of the analysis.

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108 The matter of Māori language use within 21 of the sample-sites was part subject of a paper published in a special issue of the *Journal of Information, Communication and Ethics in Society* on *ICTs and Social Inclusion* (Muhamad-Brandner, 2009).
Te reo Māori on the World Wide Web

Language is a central aspect of identity (Crystal, 2002). Te reo Māori was once the only mode of communication but complex social and political changes rapidly contributed to its marginalization. So much so that Hirini Moko Mead (1978/1997, p. 76) reported that some observers talked about “smooth[ing] the dying pillow” because the loss of the language seemed inevitable in the 1970s as more and more of the native speakers passed away. However, flaxroot initiatives such as Te Ataarangi and the Kōhanga Reo movement averted the extinction of this indigenous language. The media, particularly radio and television, became more and more influential in the support of the language as well (Hollings, 2005). Today, an increasing number of learners and speakers of the te reo Māori can be counted (Kalafatelis et al., 2007) and attitudes towards the language and its use in everyday and traditional media are improving (Te Puni Kōkiri, 2002b).

The Māori language is also increasingly supported by digital technologies. Microsoft Windows for example allows users to change the operating system interface to te reo. Windows XP has a Māori Language Interface Pack (LIP) included in one of the service packs available for download. Windows Vista already comes with the Māori LIP (Microsoft, n.d.-b). The Māori version of Google – Google Aotearoa (see Figure 30) – was launched on 30 July 2008. The commitment of a variety of

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109 The Māori language, though, is not only restricted to Māori contexts. New Zealand English frequently borrows Māori words. Flora and fauna regularly carry Māori names in English – most famously the Kiwi (Macalister, 2001) and common greetings as well as general words like whānau for family find widespread use. Increased knowledge about and use of words relating to Māori customs in an English context are noticeable (Macalister, 2000) and are contributing to a more widespread acceptance of te reo Māori.

110 On the interface side with computers positive developments can be noted, too. Keyboards are available with different legends, some also with bilingual layouts. For an operating system to be able to interpret the typed information correctly a driver needs to be installed. For Māori these definitions reconfigure the Windows setting of the NZ English keyboard which allows easy typing of macrons like ‘ā’ using the combination of the ‘~’-key and ‘a’. This makes the cumbersome insertion of macrons via the menu of programs like Word obsolete (Microsoft, n.d.-a).

111 Google began to provide its services in Your Language in 2001, with the vision for “everyone, no matter where they are or what language they speak, to be able to connect with information, with their community and with the global community online” (Griswold cited in Gifford, 2008, n.p.). Google is currently available in 181 different country specific domains and 134 different languages (including Klingon) and dialects (Google, 2010).
individuals beginning work in May 2007 was instrumental. The government’s Māori Language Commission only began to be involved in November 2007 (Gifford, 2008).

Figure 30: Google Aotearoa: Screenshot of www.google.co.nz
Retrieved September 30th 2008

Google’s newest language related tools can provide translations of websites. The “translator toolkit [is] a system that allows humans to correct and edit automatic machine translations for 47 languages and then stores those improvements for future use” (Knight, 2009, n.p.). Te Taka Keegan is currently involved in investigating the suitability and applicability of this technology for te reo Māori, but, as Kim Knight (2009) reports, this still lies in the distant future.

One of the first analyses of the languages on the World Wide Web was undertaken in 1997. Its results were not surprising considering where the majority of the internet users were from in the 1990s: 82 percent of the pages were in English (Alis Technologies, 1997). In the early years of the twenty-first century the linguistic dimension of the net exhibited changes: The comparison of two surveys by Xavier Gómez Guinovart (March 2002) and by Jordi Mas i Hernández (August 2003) showed that just over 60 percent of the web was in English and its proportion
continued to slightly decrease across these 17 months (Gerrand, 2007, p. 1315). A similar trend can be noted for Māori cyberspace as previous research undertaken by Te Taka Keegan and his colleagues (2003; 2004) showed an increasing use of te reo within Māori websites (see Chapter One).

**Linguistic analysis**

As for this research, the index-pages of all network members of the Māori Hyperlink Network (MHN) were analyzed regarding the language(s) used to welcome the surfers. This took place over the third week of June 2005 but unfortunately during this period of time three sites were not working. This quick analysis revealed that indeed, te reo Māori is used within the network, but not to the extent found by Keegan et al. (2003; 2004). Figure 31 shows clearly that only a small portion of the index-pages within the MHN are provided entirely in Māori (six percent), whereas the majority is delivered exclusively in English (81 percent).

![Figure 31: Language of all Māori Hyperlink Network index-pages](image)

Figure 31: Language of all Māori Hyperlink Network index-pages
In percent; N=215

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112 Both Mas i Hernàndez’s (2003) and Guinovart’s (2003) works are written in Catalan and therefore not accessible to me. I hence relied on Peter Gerrand’s (2007) article. However, both references are included in the bibliography for the interested reader fluent in Catalan.
‘Bilingual’ here does not mean that all of these internet sites offer the surfer a choice of language for the rest (or at least a great part) of the stay and that the user can easily switch between Māori and English. Instead it refers to the use of both te reo Māori and English in varying degrees. Figure 32 depicts a more detailed account of the 24 bilingual index-pages (11 percent of all network members). In the case of 14 index-pages bilingual refers to an approximate equal use of both Māori and English. Three members additionally use Māori categories for navigation. Some pages make use of both languages, but to differing extents; out of seven cases, two tended to use more Māori and five relied more on English to deliver information.

![Figure 32: Bilingual Māori Hyperlink Network index-pages In percent; n=24](image)

These figures clearly stand in stark contrast to the findings of previous research which showed an increase and strong utilization of te reo Māori online. The MHN with merely 17 percent of index-pages being offered to some extent in Māori seems to counter the previously established trend. This intriguing fact might be explained by two reasons. Firstly, Keegan’s et al. (2003; 2004) research focused on websites with considerable use of the Māori language, whereas the MHN did not exclude websites based on language use. Secondly, the fact that even though the number of web-pages available in Māori was reported to have significantly increased (100 fold) between the analyses undertaken in 1997/98 and 2002, the internet sites hosting these
pages did not multiply to the same extent. The majority of pages in Māori were provided by a handful of sites: “92% of Web pages come from 7% of the Websites” (Keegan et al., 2004, p. 35). The use of language(s) within the MHN discussed at this point refers only to the index-page and not the full depth of the internet sites’ structure. The following section will prominently analyze the sample-sites to investigate the use of te reo Māori in greater detail. Table 23 below provides an overview of the sample regarding its overall use of te reo.

<table>
<thead>
<tr>
<th>Label</th>
<th>Site</th>
<th>All words</th>
<th>% Māori</th>
<th>Word Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUK</td>
<td><a href="http://www.pukana.co.nz">www.pukana.co.nz</a></td>
<td>1,556</td>
<td>92.67</td>
<td>348</td>
</tr>
<tr>
<td>MTR</td>
<td><a href="http://www.ma-tereo.co.nz">www.ma-tereo.co.nz</a></td>
<td>35,506</td>
<td>62.93</td>
<td>1351</td>
</tr>
<tr>
<td>MAT</td>
<td><a href="http://www.tematatini.org.nz">www.tematatini.org.nz</a></td>
<td>2,184</td>
<td>36.49</td>
<td>206</td>
</tr>
<tr>
<td>AWA</td>
<td><a href="http://www.awa.irirangi.net">www.awa.irirangi.net</a></td>
<td>3,550</td>
<td>36.20</td>
<td>348</td>
</tr>
<tr>
<td>TRW</td>
<td><a href="http://www.trw.org.nz">www.trw.org.nz</a></td>
<td>22,816</td>
<td>25.40</td>
<td>1027</td>
</tr>
<tr>
<td>MAS</td>
<td><a href="http://maori.massey.ac.nz">http://maori.massey.ac.nz</a></td>
<td>62,594</td>
<td>23.72</td>
<td>1281</td>
</tr>
<tr>
<td>APA</td>
<td><a href="http://www.ngatiapa.iwi.nz">www.ngatiapa.iwi.nz</a></td>
<td>5,062</td>
<td>19.04</td>
<td>196</td>
</tr>
<tr>
<td>TPK</td>
<td><a href="http://www.tpk.govt.nz">www.tpk.govt.nz</a></td>
<td>124,313</td>
<td>18.61</td>
<td>1611</td>
</tr>
<tr>
<td>HIN</td>
<td><a href="http://www.ngatihine.iwi.nz">www.ngatihine.iwi.nz</a></td>
<td>5,678</td>
<td>17.65</td>
<td>249</td>
</tr>
<tr>
<td>HIK</td>
<td><a href="http://www.tehikutu.co.nz">www.tehikutu.co.nz</a></td>
<td>10,752</td>
<td>17.50</td>
<td>443</td>
</tr>
<tr>
<td>GEO</td>
<td><a href="http://www.geocities.com/Heartland/Park/7572">www.geocities.com/Heartland/Park/7572</a></td>
<td>7,639</td>
<td>14.78</td>
<td>393</td>
</tr>
<tr>
<td>TRoNT</td>
<td><a href="http://www.ngaitahu.iwi.nz">www.ngaitahu.iwi.nz</a></td>
<td>69,469</td>
<td>13.29</td>
<td>565</td>
</tr>
<tr>
<td>MOrg</td>
<td><a href="http://www.maori.org.nz">www.maori.org.nz</a></td>
<td>111,335</td>
<td>12.84</td>
<td>1753</td>
</tr>
<tr>
<td>ToWT</td>
<td><a href="http://www.waitangi-tribunal.govt.nz">www.waitangi-tribunal.govt.nz</a></td>
<td>126,685</td>
<td>11.76</td>
<td>1287</td>
</tr>
<tr>
<td>MMU</td>
<td><a href="http://www.maorimusic.com">www.maorimusic.com</a></td>
<td>9,133</td>
<td>10.20</td>
<td>294</td>
</tr>
<tr>
<td>TAI</td>
<td><a href="http://www.taitokerau.co.nz">www.taitokerau.co.nz</a></td>
<td>43,152</td>
<td>9.26</td>
<td>336</td>
</tr>
<tr>
<td>MOZ</td>
<td><a href="http://www.maori-in-oz.com">www.maori-in-oz.com</a></td>
<td>141,441</td>
<td>7.94</td>
<td>988</td>
</tr>
<tr>
<td>MOE</td>
<td><a href="http://www.minedu.govt.nz">www.minedu.govt.nz</a></td>
<td>397,287</td>
<td>6.77</td>
<td>1718</td>
</tr>
<tr>
<td>NZMIS</td>
<td><a href="http://www.nzmis.org.nz">www.nzmis.org.nz</a></td>
<td>1,704</td>
<td>6.28</td>
<td>23</td>
</tr>
<tr>
<td>FLA</td>
<td><a href="http://flagspot.net/flags/nz_mao.html">http://flagspot.net/flags/nz_mao.html</a></td>
<td>8,662</td>
<td>5.18</td>
<td>107</td>
</tr>
<tr>
<td>LME</td>
<td><a href="http://www.learningmedia.co.nz">www.learningmedia.co.nz</a></td>
<td>38,652</td>
<td>4.82</td>
<td>520</td>
</tr>
<tr>
<td>WWK</td>
<td><a href="http://www.whalewatch.co.nz">www.whalewatch.co.nz</a></td>
<td>14,628</td>
<td>2.71</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 23: The sample: Number of all words, percent in Māori and word forms Sorted according to overall proportion in Māori; N=22

In its entirety the sample uses 1,243,798 words to inform the surfers of which 158,923 are in Māori, just under 13 percent of all words. The proportion of Māori used as well as the number of distinct word forms varied vastly between individual internet sites starting as low as 2.71 percent up to being almost monolingual in te reo (92.7 percent). The majority of sites provide up to a quarter of their words in te reo.
Māori, with a significant share of those using ten percent or less. Sites with a high proportion of their words in Māori were less frequent in this sample (see Figure 33). An average of 687 different word forms are used by the individual sample-sites however a very wide span can be noted ranging from as low as 23 distinct words forms to 1753. As discussed in *Chapter Four*, this can relate to the overall size of the site, the variety of topics covered but also to the actual style of writing and different ways of spelling. This is particularly the case when it comes to the indication of stretched vowels. Considering all pages within the sample altogether, 6434 different Māori word forms were used.

![Figure 33: Proportion of Māori words within the sample in four groups](image)

The above figures relate to a diverse sample of sites and hence it is essential to investigate the four groups in more detail. Those with the lowest proportion – up to 10 percent – of Māori words are partly business sites targeting and informing consumers of Māori products and services. Two sites in particular are tourist enterprises both of which acknowledge the importance of Māoridom to their business. The target audiences are overseas tourists who are unlikely to have an extensive knowledge of the Māori language. A similar situation is a given with FLA

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113 MMU, LME, WWK, TAI, FLA, MOZ, MOE and NZMIS.
which discusses New Zealand and Māori flags and also provides (historic) background information to allow a good understanding of the meaning of symbols and colors used in the flags. The site of the New Zealand Māori Internet Society (NZMIS) is the second smallest site within the sample and focuses its energies on providing information concerned with ongoing achievements regarding Māori cyberspace and on current efforts. One of which at the time of analysis was about the progress of the translation project of Google Aotearoa. MOZ on the other hand is the second largest internet site within the sample but it is provided by a family. Multilingual content provision is restricted, but te reo Māori nonetheless is promoted by listing details on language courses. The website of the Ministry of Education is also represented in this group. The use of te reo Māori is to a great part restricted to mihi (greetings) in reports as well as words commonly used in English.

The ‘up to 25 percent’ group more strongly addresses Māori as an audience. Internet sites representing tribal organizations like iwi and hapū (tribes and sub-tribes) as well as a site concerned with whakapapa (genealogy) are all included in this group. All of these particular sites, though targeting Māori surfers, use a low variety of word forms and names of persons and places make up a greater proportion of Māori words within these sites than in others. MOrg and ToWT on the other hand do target a more general audience. Both address Māori and Pākehā (Europeans) who are interested in issues relating to Māoridom. The provision of content in the Māori language therefore takes a backseat.

TRW and the MAS have the highest proportion of Māori words within this group. The School of Māori Studies provides some of its pages bilingually; seventeen out of 120 pages have a high use of te reo Māori, of which five are fully bilingual, though this institution does not provide the option to switch per se, but rather the English text is followed by its equivalent in Māori. These pages extend a welcome to the surfer and give background information as well as a Mission Statement of the School. The other pages are concerned with previous conferences and information regarding in-house publications. Four papers offered by the school are almost fully outlined in

\[114\] TRoNT, HIN, APA, HIK, GEO, MOrg, ToWT, TRW, MAS and TPK.
te reo Māori (all are for stage (year) three at undergraduate level and postgraduate papers); English is mostly restricted to headlines within the course description as part of the general template applied to all course descriptions. Eight of the 17 pages provide part of the text both in Māori and English but the majority is only available in English. These pages include three undergraduate language papers and the main areas of study (Language, Visual Arts and Museum Studies). Te Puni Kōkiri (TPK) on the other hand offers the surfer a choice to actually switch between te reo Māori and English, at least for some parts of the site; this special case of bilingualism will be discussed in more detail in the following section along with another bilingual site.

The sites from the last two groups from Figure 33 strongly address a Māori audience. Two sites comprise the ‘up to 50 percent’ group: MAT uses the website to inform on upcoming events and regional competition results. It lists the competing groups, the regions they represent and what category they are competing under. Almost one fifth (19 percent) of the site’s Māori words can be attributed to one singe word: the specific article ‘te’ (the). Further, 15 percent of the Māori words merely appear once within the text corpus and a further 17 percent of words are only used twice. Merely one whole sentence rather than groups of words appears on the website: Whaia e koe te iti kahurangi – Pursue the highest pinnacle of excellence. This represents the motto of the organization. The second website within this group represents AWA which has, it is stated, the vision to promote the local dialect. The station’s website does provide a possibility to switch between Māori and English, but unfortunately the Māori version was not up and running at the time of writing. The Awa FM site provides detailed descriptions of their different radio programs and out of 17 shows five are introduced in Māori. Also, only one staff-member uses the Māori language to a greater extent in the staff profile and two more give a brief mihi, but details about themselves are in English. Similar to the other site in this group though to a slightly smaller extent, the article ‘te’ and words that only occur once make up a big proportion of the overall Māori words (11 and 13 percent respectively).
Bilingual internet sites

Mā te Reo falls in the last group represented in Figure 33. Its web-presence with 35,506 words is not exceedingly spacious but the site is very consistent in its language use. Just below 63 percent (22,344) of all words are in Māori, which includes some as part of the English text. The surfer is able to readily switch between languages at any time with one significant exception; upon entering the website users are addressed in English and no other option is available. The login area, where only registered users can acquire access when submitting an application for funding or to check on existing submissions, is available in both languages, but the Māori version carries substantial English content (77% of all words). MTR’s remaining pages though are truly bilingual; eleven out of 13 pages being fully available in both languages make this website a successful example of bilingualism online. A fluent speaker was consulted to assess whether the content of both language versions corresponded. This was confirmed with the exception of very few discrepancies which can be attributed to the differences in the languages themselves which did not affect the actual meaning the text carried overall.

The before mentioned site of Te Puni Kōkiri is partly available bilingually. As a whole it uses 124,313 words to provide its content of which 23,140 are in Māori (19 percent). Compared to the above discussed site, this is very low. This is partly due to the fact that the structure of this internet site can be divided into two areas – English only and bilingual. The English only area contributes greatly to the overall content of the site: 42 percent of all words stem from pages within this section. Table 24 shows that this part of the site does not rely strongly on te reo Māori to provide information.

<table>
<thead>
<tr>
<th>All words</th>
<th>Māori (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English only</td>
<td>52,593</td>
</tr>
<tr>
<td>Bilingual area</td>
<td>71,720</td>
</tr>
<tr>
<td>English option</td>
<td>35,010</td>
</tr>
<tr>
<td>Māori option</td>
<td>36,710</td>
</tr>
</tbody>
</table>

Table 24: Word counts of Te Puni Kōkiri: Bilingual- and English only sections
Number of all words and proportion of Māori words in percent
This *English only* section uses similar proportions of te reo Māori as the other Ministry in the sample – the Ministry of Education. The *bilingual* sites, though, are clearly not fully available in both languages either. Less than 28 percent of words within this whole section are Māori words and this still does not compare well to the high proportion of te reo Māori within MTR’s internet site. When following the pages of the Māori version only, the use of English continues to dominate. Table 24 shows that only 43 percent of words used within these pages are Māori, more than half are English. One would expect this to be close to 100 percent Māori.

Further, the content of some of these *bilingual* pages is not the same when one switches between the languages as the following example highlights. Under the navigation *Kāwanatanga/Government* there is a sub-category called *Ngā Whakahau Ture/Legislative Reform*. The English version states that TPK is not responsible for any reforms at the time and therefore no reports are available. On the other hand, the ‘Māori’ version (it is one of the pages which is only available in English) gives details on proposed changes regarding three Bills:

- *Māori Purposes Bill (No 2) 2002*
- *Māori Television Service Act 2003*
- *Taonga Māori Protection Bill 1996*

The claim that this particular content is updated on a regular basis to keep reports current is not true for either of the versions. The English page was last revised on June 13th 2005, about one year before the page was downloaded for analysis. The Māori edition though was last brought up to date on May 6th 2003. It is understandable that when an internet site is initially provided only in one language and a decision is made to provide the information bilingually it will take time for all pages to be available in both languages. This will certainly be the case if the structure is as complex as TPK’s, but one would expect both versions of a page to at least receive the same attention when it comes to changes in content, especially if the actual languages used in both ‘versions’ are the same to begin with.
The above discussion paints a rather bleak picture of the Ministry of Māori Development’s web-presence. Then again, the site of TPK received a complete overhaul in April 2008. The design and structure of the site changed and the bilingual content increased. A detailed investigation to be able to compare the ‘old’ TPK site with the ‘new’ is not available. A very basic comparison undertaken on May 5th 2008 of the pages of both language versions indicates extensive improvements. The English only section of the previous version disappeared and visitors can now switch between the languages at any time within all pages. When selecting the Māori language setting, only ten out of 74 pages provide the main text still in English. The majority of pages are available in Māori with the occasional word (e.g. Email, Fax) and in-text link description (like find out more or read more) interspersed in English. Within other pages these words are also translated into Māori. The content of both language versions is identical, unlike the previous ‘neglect’ of some Māori pages in the ‘old’ version.

Unfortunately, similar to MTR’s site, the ‘default-setting’ of the index-page continues to be English. However, two points of difference can be noted. Firstly, unlike at MTR’s site, a switch to Māori is possible, even though little change is taking place. A word count undertaken of this page only revealed that 40 percent of the words of the index-page remain in English if the Māori language version is selected. Secondly, TPK uses cookies to remember the language selection. This means that the language setting will be remembered if the surfer enables cookies in her/his browser. Should one leave the website with the Māori setting active, the next visit would then automatically be to the Māori version. Once the cookie is deleted, the next visit will be, by default, in English.

**Monolingual internet sites**

As can be seen in Table 23 earlier in this chapter, the website of Whale Watch Kaikoura has the lowest percentage of te reo Māori (2.7 percent or 397 words) even though it is not one of the smallest considering the overall word count of the sites within the sample. Moreover, the number of different word forms is predictably low;
the content of the site focuses on informing the surfer of what to expect from a Whale Watch experience as well as of Kaikoura and the surrounding area. The most frequently used Māori word is therefore Kaikoura, mainly in reference to the town itself rather than relating to the tourist operator’s name. This word on its own makes up 37 percent of all Māori words used. Hence, the mention of locations contributes most strongly to the corpus of Māori words (41 percent) within this site, followed by names (26 percent) – of staff-members, tribal ancestors and legendary heroes as well as names given to known whales and the company’s vessels. Another 26 percent include common greetings (like kia ora – hello – or ka kite anō – see you again), flora and fauna, mentioning of iwi, hapū and marae (meeting grounds) and widely familiar words frequently used in New Zealand English (for example paua – abalone – or waka – canoe). This leaves just seven percent of all Māori words of this internet site actually functioning in a Māori context; meaning it is not part of a commonly used greeting, but rather of a Māori phrase or sentence and its immediate neighbor is a Māori word.

Whale Watch Kaikoura is a good example of how ‘comfortable’ New Zealand English is when it comes to the practice of incorporating words of Māori origins. The following website however exemplifies just the opposite. Pūkana is the smallest (1,556 words overall) within the sample. It mainly provides background information on segments of the programme and introduces the hosts. Māori is the primary language used (92.7 percent) with function or grammatical words being the most frequently used type. The top ten word forms include nine function words (te, i, nga, a, ki, ko, o, e, to) as well as one lexical or content word – koe (you). The majority of the English words relate to the hosts – their musical preferences (one of the favorite songs at the time was Chris Brown’s Yo, Excuse Me Miss), favorite foods (like Butter Chicken) and their names. The rest of the English words are mostly navigational instructions (e.g. Click here to open in a pop up window). With the exception of the latter, English is integrated in a natural way. Non-Māori words or phrases are used and not awkwardly translated. Just as foreign words are incorporated into English on a regular basis, especially when it comes to food and music.
Actual words used

As mentioned before, over six thousand different word forms were used, of which about 38 percent of the words only appear once. The most frequent words though are of more interest. According to Peter Keegan (2007), the most commonly used word in Māori speech and text is the specific article *te* (the). As the most widespread content words he identifies *kōrero* (to talk, speech) and *haere* (to go). Table 25 below lists the number of appearance of each word disregarding differences in spelling, including the indication of stretched vowels. It highlights that lexical words appear more often within the sample-sites than function words. *Kōrero* and *haere* are clearly not the most frequently used words.\(^{115}\) Many speakers of New Zealand English will be familiar with a good majority of the words in Table 25, since they are borrowed into English on a regular basis in a variety of contexts.

<table>
<thead>
<tr>
<th>maori</th>
<th>18569</th>
</tr>
</thead>
<tbody>
<tr>
<td>te</td>
<td>14799</td>
</tr>
<tr>
<td>nga</td>
<td>3929</td>
</tr>
<tr>
<td>i</td>
<td>3492</td>
</tr>
<tr>
<td>o</td>
<td>3408</td>
</tr>
<tr>
<td>reo</td>
<td>2881</td>
</tr>
<tr>
<td>ki</td>
<td>2637</td>
</tr>
<tr>
<td>a</td>
<td>2218</td>
</tr>
<tr>
<td>e</td>
<td>2174</td>
</tr>
<tr>
<td>ngati</td>
<td>2023</td>
</tr>
<tr>
<td>iwi</td>
<td>1799</td>
</tr>
<tr>
<td>whanau</td>
<td>1649</td>
</tr>
<tr>
<td>tahu</td>
<td>1591</td>
</tr>
<tr>
<td>he</td>
<td>1314</td>
</tr>
<tr>
<td>ko</td>
<td>1210</td>
</tr>
<tr>
<td>waitangi</td>
<td>1161</td>
</tr>
<tr>
<td>ka</td>
<td>1100</td>
</tr>
<tr>
<td>me</td>
<td>1065</td>
</tr>
<tr>
<td>kaupapa</td>
<td>1042</td>
</tr>
<tr>
<td>ngai</td>
<td>1013</td>
</tr>
<tr>
<td>runanga</td>
<td>940</td>
</tr>
<tr>
<td>mai</td>
<td>922</td>
</tr>
<tr>
<td>ma</td>
<td>868</td>
</tr>
<tr>
<td>hui</td>
<td>839</td>
</tr>
<tr>
<td>marae</td>
<td>729</td>
</tr>
<tr>
<td>mo</td>
<td>723</td>
</tr>
<tr>
<td>kōrero</td>
<td>717</td>
</tr>
<tr>
<td>kia</td>
<td>712</td>
</tr>
<tr>
<td>kai</td>
<td>698</td>
</tr>
<tr>
<td>ana</td>
<td>697</td>
</tr>
<tr>
<td>aotearoa</td>
<td>664</td>
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<tr>
<td>tangata</td>
<td>661</td>
</tr>
<tr>
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<td>18569</td>
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<tr>
<td>aotearoa</td>
<td>1042</td>
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<tr>
<td>hui</td>
<td>839</td>
</tr>
<tr>
<td>marae</td>
<td>729</td>
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<tr>
<td>tahu</td>
<td>1591</td>
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<tr>
<td>tau</td>
<td>493</td>
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<tr>
<td>tai</td>
<td>491</td>
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<tr>
<td>kokiri</td>
<td>485</td>
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<td>koe</td>
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<td>puni</td>
<td>462</td>
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<td>mau</td>
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<td>kura</td>
<td>519</td>
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<tr>
<td>tau</td>
<td>493</td>
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<td>kokiri</td>
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<td>koe</td>
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<td>puni</td>
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<td>mau</td>
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<td>tau</td>
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<td>kokiri</td>
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<td>471</td>
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<tr>
<td>puni</td>
<td>462</td>
</tr>
<tr>
<td>mau</td>
<td>459</td>
</tr>
</tbody>
</table>

Table 25: Most frequent Māori words within the sample
(Note: different forms of spelling disregarded)

Comparing this frequency list with one of the first available word indexes of a substantial Māori text, *Nga Moteatea* assembled by Ray Harlow and Agathe Thornton (1986),\(^{116}\) clearly shows the influence of the borrowings into New Zealand English online: firstly, not surprisingly, traditional Māori poetry and songs use a very

\(^{115}\) *Haere* appears 246 times and can be found within the lower top 100.

different language compared to contemporary online texts. The bold words in Table 25 appear less than ten times within *Nga Moteatea* (e.g. Māori: six times, Waitangi: once, haka [posture dance]: not at all), issues of importance to both Māori and Pākehā relate to language (kōhanga reo), political concerns (Treaty of Waitangi, rūnanga [council], hui [gathering], Te Puni Kōkiri) as well as social structures and identity markers (Māori, iwi, hapū, rōpū [group], whānau (extended family), Aotearoa).

Secondly, the ratio of function and content words differs greatly. The dominance of content words (more than half) in Table 25 indicates the importance of Māori vocabulary in New Zealand English, particularly when discussing matters relating to Māori. The corpus of *Nga Moteatea* does not carry content words in comparable occurrence. Of the 25 most frequently used words which make up almost half of all the words only five are not function words. Overall, these five contribute approximately 6.5 percent to the total (R. B. Harlow & Thornton, 1986, p. 225). The number of function words in Table 25 and their considerable high quantity nonetheless highlight the weight of Māori words in actual Māori phrases or sentences.

**Future developments**

The above presentation of results relating to the use of te reo Māori highlights that this indigenous language is indeed used online and that it fairly commonly appears in a wider English language context. TPK’s example in particular shows positive ongoing developments. The questionnaire directed at the hosts of MHN-sites addressed the matter of language use as well. One question asked whether parts of the website are available biligually, followed with an example of what bilingual could mean. Figure 34 below highlights a continuing trend: few sites are provided biligually.
Figure 34: Questionnaire-responses to: *Is the website, or parts of it, available bilingually in Māori and English? For example, the visitor is able to switch between the languages but the content stays the same;* in percent; n=31

A great proportion of hosts reported no content in te reo Māori. On the other hand, 23 percent indicated to have many or all pages available in both languages. The more telling question however inquired into the hosts’ future plans regarding this matter. Figure 35 shows almost 64 percent of the respondents plan to increase the bilingual content within their websites. Those respondents who already have a fully bilingual site responded with ‘no’ but were excluded in Figure 35 below. Another response is not included below, as they did not answer ‘yes’ or ‘no’ and rather gave an additional comment: “Perhaps”.
Three indicating ‘no’ to this question provided additional comments noting that although they do not have current plans to increase the number of bilingual pages, this could possibly change in the future. One of these further explained this by stating: “it would be something we would consider if we had funding to do so.” The host of a ‘personal interest page’ noted that the content would be provided in Māori as well, if they spoke the language themselves. However, they do not currently find themselves in a position to learn te reo Māori. Funding and lack of resources were also mentioned by those who indicated a positive response to the question. Comments like the following however cloud the optimistic trend of Figure 35.

We do tend to include content in both English and te Reo Maori, but we do not have the resources to duplicate all content in both languages.

**Chapter summary**

Te reo Māori is clearly used within cyberspace but by no means consistently. Within the MHN English is, similar to the rest of the internet, still widespread. The word frequency analysis of the sample showed that the linguistic spectrum ranges from
sites almost fully in English to almost complete monolingualism in te reo Māori. It is positive to see a website specifically targeting children provided nearly monolingually in Māori. Note however, that this is the case for only one particular site. In total three internet sites are specifically aimed at a young audience within the MHN. The language use of the other two does not echo the example of Pūkana’s website.\footnote{www.taiohi.co.nz and www.ora.org.nz.}

Considering the government’s recognition of and commitment to the Māori language it is peculiar that their websites, even when only looking at sections directly relevant to Māori or discussing Māori related issues, have a low proportion of text in Māori. The neglect of the country’s official language online undermined positive developments in other public/governmental spheres for too long. Therefore, improvements like the new version of TPK and other successful bilingual sites are huge steps in the right direction. As the majority of speakers of te reo Māori are bilingual and their language skills can vary greatly, it is positive to see that some websites provide their information (or parts thereof) accurately in the two most commonly spoken languages of the country.

However, most of the internet sites within the sample and the MHN as a whole do not specifically or exclusively target speakers of the Māori language. This is clearly represented within the results presented here. The answers to a question of the survey addressing the hosts’ future plans regarding bilingual content on their own website allow for optimism. Overall, the results presented in this chapter might not indicate a very widespread utilization of te reo online. Nonetheless it is clear that even within an English language context Māori words and phrases are common which in turn might contribute to a naturalization of this indigenous language. The following chapter discusses the experience of users with te reo in cyberspace, their views on bilingual content provision and other various aspects.
Ngā Whakaaro me ngā Wheako o ngā Kaiwhakahaere: Opinions and Experiences of Users

This chapter presents findings from interviews undertaken with five regular Māori internet users. Its organization is strongly influenced by the structure of the actual interviews (see Appendix) and therefore begins with background information about the participants and what they deem central to being Māori. The main part of the conversations focused on their use of the internet; this ranged from their general use to their engagement with Māori cyberspace. The chapter explores the interviewees’ experiences with and expectations and opinions of Māori cyberspace. Many aspects already subject of this thesis up until this point were discussed with the participants, including their views on available content, on Māori specific second-level domains and the use of the Māori language online.

The interviews also sought the users’ views on other areas such as the benefits and risks this technology might pose to Māori. The section on this particular issue also includes the hosts’ opinions in this regard. The chapter closes with a consideration of ‘things Māori’ that, according to the participants, are still missing on the World Wide Web.
Meeting the participants

Chapter Four briefly introduced the participants. Here, additional information on what they perceive to be central aspects of their Māori identity is considered. Personal information is kept to a minimum and details concerning their studies are not revealed. However, all interviewees are students at the University of Auckland at various stages of their undergraduate and postgraduate degrees.

Being Māori is important to all the participants at this stage of their lives, as is learning about te ao Māori (the Māori world). Three of the participants grew up immersed in Māoridom to varying degrees. Rima shared that she was raised bilingually until she completed school and moved away from her rural home area. By so doing she also moved away from her Māori identity. Travelling overseas, having a child, today’s fast-paced technological change and increasing globalization led her to realize the importance of Māoritanga (Māori culture) in her life.

Wha repeatedly spoke about her Māori identity having been stifled until her early adulthood and Rua mentioned that his immediate family associates being Māori with negative experiences and therefore promoted Pākehā (European) values and practices during his upbringing. Both had negative experiences with ‘real’ Māori who derided, questioned, or negated their taha Māori (Māori side) which in turn led them to actively embrace their Māoriness. For Rua this was during his early teenage years. He has since been selective in incorporating aspects of te ao Māori in his identity. This process is very reflexive, embedded in deep knowledge and also influenced by his faith. For Wha the rebuilding of her identity began at university. While similarly reflexive her identity assertion, especially at the early stages, had a stronger focus on her appearance. At the same time, as she was learning about Māoritanga she increasingly realized that many things she does are, in fact, Māori. Besides wanting to look more Māori it is also important to her to know about tikanga (customs) and

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118 Quotes from interviews are highlighted in italics.
practices relating specifically to her tribal organizations and whānau (extended family).

All participants identify with more than one tribe and all live outside their tribes’ rohe (territory). For some this means that visits to their marae (meeting grounds) are limited to tangihanga (funeral) and similar important occasions. Tahi and Toru grew up with regular visits to their marae and are actively involved in various activities within this setting. So much so that Toru says her marae makes [her] feel at home. Whanaungatanga, the lived relationship and care between whānau members, is central to all the participants’ identity as Māori, as is te reo Māori, the Māori language. Only Toru stated that she has very limited te reo skills. All others vary greatly in their competency; from being fluent or semi-fluent to beginner level.

**Biography as internet users**

All except Wha and Rima began to use the internet during their early teenage years. The participants have been connected between ten and five years. All were asked to estimate how much time they spend online. The quick response was usually something akin to ‘too much’. Three can be considered heavy users as they spend 20 hours or more per week online. Again three had broadband connections at home and two relied on accessing the internet at university.\(^{119}\) Wha did not have a home connection for reasons of affordability and because the connection at university is satisfactory for her needs. Table 26 below illustrates this information:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Years connected</th>
<th>Hours/day</th>
<th>Home connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tahi</td>
<td>F</td>
<td>18</td>
<td>5</td>
<td>2 Broadband</td>
</tr>
<tr>
<td>Rua</td>
<td>M</td>
<td>23</td>
<td>8</td>
<td>4 Broadband</td>
</tr>
<tr>
<td>Toru</td>
<td>F</td>
<td>24</td>
<td>10</td>
<td>1-2 No</td>
</tr>
<tr>
<td>Wha</td>
<td>F</td>
<td>24</td>
<td>7</td>
<td>4 No</td>
</tr>
<tr>
<td>Rima</td>
<td>F</td>
<td>33</td>
<td>7</td>
<td>6 Broadband</td>
</tr>
</tbody>
</table>

Table 26: Participants’ internet related characteristics

\(^{119}\) The University of Auckland provides free limited high-speed internet access to all students. Exceeding the data-limit reduces the speed, or extra data can be purchased. Postgraduate students have unlimited internet access.
Most speak about changes in their use of the internet over the years. The online activities became more varied and at times of greater commitment during their studies activities relate more strongly to their work at university. The main reasons the participants use the internet overall is to communicate with friends and family and to keep themselves informed. All participants are competent and confident users and Rua is also creating content himself. Besides overseeing various groups on Bebo he also keeps a blog about the Māori world. He is also interested in web-design and programming. In no other interview did the matter of content creation arise.

**Use of Māori cyberspace**

All participants were asked to think about their use of Māori websites. This part of the chapter hence discusses each participant’s individual experience and their interests before going through a pre-conceptualized list of topics used during the interviews.

Wha’s use of Māori cyberspace got underway when she enrolled in a Māori language course. She did not know some aspects of her pepeha (personal proverb) and began to find out about her Māori background by asking relatives but they either did not know or the information was not fully satisfactory. This led her to turn to the internet where she found useful information particularly relating to her own marae, its people and an important ancestress. She also looked at some whakapapa (genealogy) sites and forums on this matter, however she felt too ashamed and not knowledgeable enough to ask questions. Seeing that others had similar questions made her feel slightly better but not strong enough to post something herself. She then began talking to a kaumatua (elder) which helped in her search for her Māori identity. Today she still has a strong interest in her own background, more so relating to tikanga particularly of her whānau, marae and hapū (sub-tribe). The internet now is mostly used for her studies which are strongly embedded in a Māori context. Her personal interests see her researching historic events like wars and battles as well as
proverbs and their historic context and meaning. Learning kahū-ki-te-kahū (face-to-face) continues to take a central place in her ongoing discovery of her taha Māori.

Of all the participants Rima spends the most time online. The internet plays a central role in her life in general and also in terms of Māoridom. She utilizes the internet for her own purposes and interests. It is however also common that family members contact her to go online for them which usually relates to Māori something. Her own internet use in this respect is strongly linked to her university studies and personal interest in history and moko (tattoo). The widespread use of moko by non-Māori and Māori alike without apparent consideration of the meaning arouse feelings of anger and upset even though she herself did not fully understand their meaning. She turned to the internet to increase her own understanding of moko and tikanga relating to them. Learning about tikanga and the meaning of various things like carving, history and political developments are all important to her and therefore make up a good proportion of her internet use.

Tahi is the youngest of the participants. Nevertheless her awareness and interest in things Māori on the internet are no less developed. Her use of the net also strongly relates to her studies. Whenever an assignment is in someway linked to Māoridom she opts to do these but at the same time she stressed that these decisions are influenced by her own personal interests. Politics, history and contemporary social problems are topics of great relevance to her. Her interest in issues relating to crime and politics in particular and her awareness of negative stereotypes prevailing in the media also shape much of her online activities and her critical approach to websites. This sees her prefer to talk to kaumatua (elders) and other people offline and to read about things in books. She uses web-resources to develop a broad sense of a topic or to check upon specific details. Her last cyber-adventure relating to Māoridom was for a presentation as part of her studies on the Māori Party. Another use of the internet for her is to find information on Māori events and performances. These searches usually are instigated by at least some vague knowledge about the happenings.
Rua stands out from amongst the other participants mostly because of his in-depth knowledge of the technology itself and his interest in providing content to further others’ understanding of te ao Māori and Māori pride. At the moment this is limited to blogging and social networking sites. His awareness of what is available online with relevance to Māoridom is high and is on one hand guided by his manifold interests particularly concerning politics, news and history. On the other hand he is business-minded and wants to develop a good understanding of what Māori businesses are represented online in order to be aware of where his opportunity to provide online services to Māori might lie in the future. He also has a deep-seated interest in Māori culture and history. His last surf-expedition in this regard saw him looking for specific song lyrics for which he visited Maori.org.nz but, as he expected, the search was unsuccessful. He is critical of this site and Māori cyberspace in general as most information provided remains at a general and basic level whereas he is interested in more in-depth and complex information.

Toru is firmly embedded in Māoridom offline and prefers to learn about Māoritanga from family members and kaumātua. Just as her overall use of the internet is one of the lowest, so is her utilization of Māori websites. When she does explore them, it is mostly because of her personal interest and compared to the other participants it seldom relates to her studies. Reassurance and double-checking are central in anything she does and the internet is one step in this process. It is common for her to read about something in a magazine or to see something of interest on television which induces her to turn to the internet to check up on it or to learn more. A signifier of how important personal relationships are to her when it comes to anything to do with Māoritanga can be seen by the fact that she often takes what she encounters online to someone knowledgeable offline. One of the last things she looked for online was information relating to an upcoming event advertised on one of her tribe’s websites. She also used the online registration of her tribe’s trust board and revisits this site every two to three months.

A list of 23 topics was developed based on the findings of the content analysis of the sample-sites and from the engagement with literature on Māori identity. The purpose
of this list during the interviews was to stimulate the participants’ memory about whether they were ever interested in any of these subjects. It has to be noted at this point that despite the best intentions not all items were discussed with all participants because the structure of the interview outline was not followed strictly. This only became apparent during the analysis of the transcripts and was particularly the case with Rua. 

Many different scholarships for Māori students are available and since all participants were students they were asked if they ever used the internet to look for such information. All except Wha said that this was a regular point of interest for them. The online provision of application criteria, forms, deadlines and contact details were judged to be useful, practical and highly desirable. All were interested in Māori education in its broadest sense. Wha particularly used the internet to learn more about this topic to help a friend in the past. This experience inspired her to turn to the internet to increase her own understandings of Māori forms of learning and how they differed from mainstream education.

The broad area of nature, environment and plants, as well as those of health and food are only of very minor interest to the participants. Wha and Rua are more strongly interested in the first subject area, although only because of their studies. Health is mostly restricted to government statistics. Wha and Toru stated that they do not need to rely on the internet for information relating to Māori foods and recipes. Rima specifically mentioned that she enjoys looking up such information with her daughter. Websites relating to Māori arts and performing arts had more appeal. Everyone except Toru had previously looked up websites about Māori artists, various artworks and crafts. TradeMe (New Zealand’s eBay) is also used at times to find Māori artworks. Rua shared that he used to visit an online trading site dedicated to Māori arts before it was closed down. When asked about online entertainment, Māori Television’s website was mentioned by Tahi, Toru and Rima. It is occasionally

\[120\] The following topic areas were not discussed during the interview with Rua: Treaty of Waitangi, land- and social issues and Māori tourism. Two topics were left unaddressed with Wha: language resources and political issues. Tahi’s interview did not explore her interest in Māori organizations besides Māori Television.
visited to look up programs. Māori internet-radio is ‘tuned in’ by Rua, Toru and Wha. Rua enjoys listening to his iwi (tribe) which he prefers over any radio station available in Auckland. However, he reported that he regularly experiences technical difficulties with online-radios.

Looking up Māori organizations was not something of great significance to the participants. Only Rima visits the sites of various trusts on a regular basis. Māori business is also not a topic which attracts great attention. Only Rua has an extensive interest in this subject, as noted above, as well as Wha. She was very interested in Mike Tamaki and looked up information on him and his business ventures. Mike Tamaki is a successful Māori businessman in the tourism sector. Māori tour operators were something that interested Wha but other than that she is not using the internet to look up information concerned with Māori tourism. Toru once did a school project on Māori tourism and used the internet to find some resources. Rima on the other hand used the internet to plan a ‘Māori experience’ when she was overseas and brought a visitor back to Aotearoa/New Zealand. Whereas the visitor much enjoyed the ‘experience’ Rima still gets embarrassed when thinking of this holiday indicating a stereotypical representation of te ao Māori to tourists. Online merchandise is also not an area of great importance to the participants besides in the earlier mentioned area of the arts. In the past Toru looked for Māori products on the internet when she was overseas and became homesick and Wha mentioned that one of her tribes offers merchandise online.

We now move away from the profane to consider the tapu (sacred) sphere of Māoridom concerned with information on religious and spiritual matters. This is returned to in more detail further down. Wha was interested in learning more about Māori understandings of wairua (spirit) and Rima and Tahi sometimes look up karakia (prayer) to learn about their meaning. Whakapapa, in contrast, is a topic that everyone is interested in, but they use the internet very differently in this regard. Toru’s whānau, for example, has their own website to keep family members connected and informed. This site also contains whakapapa information for everyone to access. Tahi prefers to learn about this topic face-to-face, nevertheless she is
interested in finding out more about historic ancestors for which she uses the internet. Besides this personal interest, Tahi also used the internet to research legends and mythology during her school years. Besides her, only Wha expressed far-reaching interest in this respect. More general history, however, is one of the most significant subject areas available online. Everyone at some point uses the internet to learn about history related topics, Toru more so when she was still in school while Rua is greatly interested but has difficulties finding what he is looking for as complex subjects are commonly only published in books. Tahi on the other hand prefers books for these issues.

The Treaty of Waitangi is of great relevance in New Zealand. Wha said that she is not interested in this issue on the net at all as it was taught well in school and has been part of her tertiary studies. Others are at least somewhat interested in learning more about the Treaty online and more so about what it means in the contemporary situation or how their own tribes are affected by Treaty claims and settlements. The broad field of land issues is a matter that most are interested in online. Toru knows that it will be of greater importance in her studies in the future and she might then go online to gain a more in-depth understanding. At the time though, it was not of interest to her. Rima said that one of the last major things she was doing online at the time of the interview was to find out more about land of her whānau and how the many small titles could be brought together under one trust. For this she used the online database of the Māori Land Court and contacted her iwi and hapū for assistance. She prefers to do this particular work online as it is more effective and practical.

A subject area in which the internet plays a significant role in the eyes of some participants is politics. Rua stressed: *if you are Māori you cannot help but be political.* Everyone except Toru reads news online. But Wha noted that specific Māori news is not something she follows online frequently. For Tahi, Rua and Rima Māori news and politics make up a major part of their time spent online. The online presence of the Māori Party is of great interest to them. Rima regularly visits their website and Rua follows them on *Facebook* and *Bebo*. Some of the participants’
attention is also directed at Māori politicians, policies and changes in political powers and how all of this affects Māori. Social issues linked to Māoridom only interest Wha and Tahi somewhat.

The internet is utilized fairly regularly relating to te reo Māori. Online dictionaries are especially valued and Rima utilizes them on a daily basis. She also mentioned language games her daughter plays online. So does Tahi on occasion. Toru, as noted above, has a limited te reo competency, yet she eagerly looks up new words and phrases she wants to learn more about. She especially values sites that include sound files to learn the correct pronunciation. The topic of te reo Māori is discussed in more detail below.

The research is not specifically interested in the use of social networking sites, but the topic was explored during all interviews at some point. The use of these tools for most is restricted to keeping in touch with their family and friends and for some they are part of their daily routine. Tahi mentioned being a follower of IMTV which relates to a television program whose target audience is young people. Rua is most strongly involved with this particular technology. He is a follower of various Māori individuals who host groups and of other organizations with a site on Facebook or Bebo, many of which are specifically about Māori pride, te reo Māori, or politics and, as noted earlier, he uses social networking sites to create his own content as well.

**Opinions on different aspects of Māori cyberspace**

**Tapu knowledge**

*Chapters Two* and *Four* discussed the various kinds of knowledge within te ao Māori. Particularly whakapapa, some karakia and spiritual concepts are widely considered highly tapu and not to be shared lightly. The participants’ opinions on this matter are not straight forward and are linked to what information exactly is under
consideration. Whakapapa for example, it is more widely agreed, should be available online.

Rua: Of course, whakapapa is extremely tapu .. but .. if we can’t access it .. then what good is the tapu? It might as well be ngaro [lost, forgotten]. In other words you know what’s the point of keeping it sacred if I don’t have access to it? If I don’t have access to it then it will be lost so it doesn’t matter if it’s tapu or not.

He went on to stress the need for increased adaptability of tikanga in the face of changing circumstances:

Rua: The old ways have a place and they should be treasured and they should be valued. But when they stand in the way of practicality then they need to be thrown away. And I think that our tiŋuna [ancestors] understood that perfectly .. That is why they stopped growing yams when Captain Cook brought the potato. ‘Cause they realized that it was easier [laughs]. Practicality.

Not only are increasing numbers of Māori mentioned as living overseas, but also reflecting on their own situations, living away from their rohe and kaumātua makes the correct channels (Rima) slow and unpractical. However, unrestricted and fully public access is not necessarily what is being promoted either. The suggestion of password protected areas for whakapapa information was well received as this would allow some control over who has the right of access. When dealing with whakapapa offline, certain protocols are followed. People need to know how to treat this information, no matter how they gained access to it. Toru said:

And then it’s up to them how they use the information. I mean I put trust in other people that they would know the right thing to do.

Having access to whakapapa does not necessarily provide meaning and a deep relationship with the ancestors the whakapapa pertains to. Wha stresses this point: it feels a bit like a kind of devoid space. There is no heart, there is no soul. Wha is even more cautious when it comes to tapu knowledge other than whakapapa. This
understanding only developed with increased knowledge. She herself was, as noted before, looking for information on wairua (spirit) online and could not find much. After learning more about this topic she realized why the web-content in this regard is miniscule: the people holding such information know that it is inappropriate to make it publicly available. To Wha personal contact continues to take a central place when learning about such taonga (treasures). Tahi took a similarly apprehensive stance; rather than providing this type of information online to everyone she prefers if those in search are directed towards suitable individuals to talk to in person.

Rua expressed the possibility that Māori will miss out in two ways if they do not provide such information themselves. Firstly, individuals might not have other means of finding out about it due to distance. Secondly, non-Māori might make it available and even turn it into a commercial venture placing the knowledge out of Māori control. All agree online access to tapu knowledge is inevitable for an increasing number of individuals. This makes it paramount that Māori take the lead, even if it means that it is turned into a business, as Rua repeatedly stressed, so that Māori on all levels can benefit.

**Te reo**

When it comes to sharing their opinion regarding the language use within Māori websites those participants with lower levels of te reo felt hesitant to comment. The two participants who are relatively fluent (Tahi and Rua) have countering views: whereas Tahi thought that a lot of websites in Māori are available Rua was resolute that the internet is in need of more resources. Some noted the power of language to exclude. Therefore not only the kind of language used is of importance but also the level of complexity both in Māori and English. Rima pointed out that English is a second language to some Māori and a number have low literacy skills. Rua noted that some websites (especially government sites) use te reo which is difficult to him. This does not mean that he wished for it to be simplified; on the contrary. With adequate support such challenging language can function as an opportunity to learn. Online dictionaries and embedded translators were perceived to be excellent tools in this
respect. This way, even if a Māori text or phrase is challenging to the visitor it can develop into a positive learning experience. Such incidences were common and almost welcomed and mentioned by all participants except Tahi.

In contrast, websites fully in Māori can be perceived negatively by non-fluent speakers. In these cases the host’s language choice can act as a deterrent. Wha said that she does not even try to figure out what information might be presented:

Wha: *If I see websites where everything is in Māori, yeah, I just sort of think. I’m not even going to try to read that because you know if I am trying to pick up specific words or like sentences but I don’t actually fully understand what’s being written.*

The matter of bilingual sites was discussed with all interviewees and without exception all were generally enthusiastic. They too were perceived as outstanding learning possibilities by allowing a comparison of the two language texts, and, as Toru pointed out, they allow the user to make the choice of what language suits her/his needs best. In this context the interviews also inquired into the participants’ views regarding the matter of bilingual government sites. Three were strong supporters whereas Rima and Rua were ambivalent about it. One of the reasons why bilingual government sites should exist was incisively expressed by Tahi: *We’re a bilingual country.*

Another reason why bilingual government sites were perceived to be valuable is because they can help to *normalize* (Wha) te reo. Rua explained his views on this as follows:

Rua: […] it would make Māori more natural. And, *What I mean by that… you know when people become accustomed to new things. So by having it, by having Māori bilingual government sites, there it would kind of make it normal. And then, maybe, antagonism towards Māori language would dissipate truly through making it normal.*
However, Rua was uncertain whether an actual need for bilingual governmental-sites exists or whether it would just be a tokenistic gesture. But then again, even if it was just symbolic he could see an advantage for Māori: employment for translators. The financial side of bilingual governmental sites was exactly the reason why Rima was undecided about this topic. The translation of all governmental websites would come at great cost to the New Zealand taxpayer and she worries about the social consequences such a step would have. Overall it appears that Rua and Rima, like all other participants, would support the implementation of a bilingual online presence of all government institutions as long as it is done in a considerate manner.

**Māori cyber-rohe**

The participants were asked whether they were familiar with the Māori specific domain name spaces (DNS) discussed in Chapter Three and what they thought about them. Only Rua knew exactly what they were and how .maori.nz came into existence. He also had the most hesitant stance towards it. From a business/traffic perspective he thought that users are less familiar with them (supported by the other interviews) possibly making it harder to remember web-addresses (URLs). However, he also envisions them to be of benefit to Māori in the future.

Toru had noticed the DNS in question but was not sure what they were. They were briefly explained to the four interviewees unfamiliar with them. Following this all expressed a generally positive outlook, particularly towards .iwi.nz. The fact that it is a restricted DNS undergoing moderation appeared very appealing to the participants. So much so that Wha and Rima suggested that they would prefer some form of moderation of .maori.nz as well. The fact that everyone can register a domain and provide a website under .maori.nz without serious restrictions in place opens the possibility of ‘masquerading’:

*Wha: I would be cautious about, ahm, there being not certain knowledge out there that, you know, that seems to be Māori, coming from a Māori, view, but that might actually, not be from a Māori view. If that makes sense? So it’s kinda like masqueraded.*
The .maori.nz in URLs might suggest to users that a website indeed is provided by Māori, whereas the domain is not necessarily a signifier of that. Iwi.nz with its restrictions in place on who can register a domain name provides more certainty. The fact that the applicant must have a trust board was perceived positively by Rima:

*I like that one then because it means that you have got a trust board there is checks and balances put in place to make sure that it, it’s beneficial to Māori for Māori and it means it has been taken into account for Māori.*

The attention to URLs and awareness of the Māori 2LDs is low amongst most of the users interviewed. The symbolic significance of the Māori domain spaces does not appear to matter to the users when actually surfing the web. Nonetheless, the attitudes towards them are generally positive.

**Tribal websites**

All interviewees had previously visited tribal websites. But while some of them go to their tribes’ sites at least once in a while, to Rua, and to some extent to Wha, they are not of great importance. Wha enjoyed learning about her tribes’ history yet strongly feels that face-to-face interaction and communication are much more important when wanting to learn about that. Even so, a well-done tribal-site is understood to be at least a good starting point for people to reconnect with their tribe. All participants agreed that to achieve this, and for them to be of real significance in the lives of Māori, tribal websites have to improve:

*Tahi: But, I think they probably need a bit more. They could make ‘em better. To, sort of have a role within the tribe.*

During the interview, all participants were asked what a good tribal-site should provide to visitors. The responses differed between those who view access to information and knowledge paramount, and those to whom kanohi-ki-te-kanohi relationships are more vital. This is most apparent when it comes to the listing of
whakapapa; whereas all agreed that information central to a tribe’s identity expressed in pepeha should be part of tribal-sites, their views regarding the inclusion of more extensive details were conflicting (as noted above). Similarly, opinions on the provision of other information were influenced by these two positions, but less staunchly.

Such is the case when it comes to tribal history and legends. Wha, a strong proponent of face-to-face interaction, found the light weight knowledge very useful when she began to learn more about her tribes. She would like to see a greater balance between basic background information and more in-depth accounts. At the same time she noted that this creates greater possibilities for conflict within the tribe. This is because various narrations of one event exist often with only minor divergences. For her it would therefore be important that any written account indicates that differences exist and whose interpretation or version is presented to visitors. Toru however stressed that learning about one’s tribe’s history online is not optimal:

**Toru:** *It’s not really genuine. Like if I’d wanted to learn more about it I would go and ask the person. I wouldn’t look on the internet.*

Then again, Rima particularly felt that such websites are prefect means for people to gain information about their iwi unlike other media which tend to generalize and discuss matters as if Māori were a homogenous group. The websites could be used to provide in-depth information on tribal dealings with the government, internal developments and affairs, particularly regarding land and Treaty issues and the actions of tribal trusts, their future plans and how the people of the tribe benefit from these. Rima is especially concerned with financial transparency and accountability of the trust to its members. A website would be highly suitable to keep people informed on such important matters and they could also explain why certain decisions are made and how the members are affected by it. A good and thorough understanding of these complex activities the tribes are involved in today is hence central to Rima.
Likewise, Rua thought iwi websites could be hubs of service and resource provision to its members. He particularly stressed this point concerning already existing publications and suggested that books, other print material and video clips specifically on the tribe could be supplied online (as long as they have the rights to do so). The provision of videos and interactive services might be particularly attractive to young Māori, a point emphasized by Tahi. She saw great potential for tribal-sites to appeal to youth if they used social networking tools, forums and made members of the trust board more approachable.

As much as tribal websites were perceived as suitable tools for tribes to communicate with their people, Rua and Rima voiced three very important points each tribe, and to some extent any other host as well, should consider when going online. Firstly, the website has to be tailored to the requirements of the tribe’s members. This means that each tribe needs to find out what their people actually need and want. Secondly, Rima emphasized that not all Māori individuals have ready access to the internet. Providing information via the internet only will exclude these persons. Iwi thus have to continue to communicate news and information through other means. Thirdly, she made the point that dial-up connections continue to be widespread amongst Māori particularly in rural areas which results in long loading times if sites are too big. Rima remarked: *So yes the internet at times isn’t working.* The next section of this chapter continues this line of reasoning by looking at the negative and positive aspects of the internet as perceived by users and hosts alike.

**Benefit and harm**

Both the interviews and the questionnaire included a question enquiring into opinions regarding any possible harm and benefit posed by the internet. Twenty-seven hosts responded to this question, including two in te reo Māori. The views expressed by the hosts in this regard bear great resemblance with the interview participants’ views. Just as some of the interviewees did not think that Māori are differently affected by this technology, five of the hosts also expressed this position. One respondent to the questionnaire limited the answer to a single sentence: *Race is NOT an issue.*
Some examples of possible differences were nonetheless noted. Toru named cyber-bullying as a pertinent problem explaining that Māori victims of bullying are often not just harassed by an individual but by groups of people which magnifies the impact. She relates this to the importance strong social relationships have within Māoridom. Rua similarly remarked that Māori might be slightly more affected by scams or virus and phishing threats. Rima noted the fact that because some Māori have low computer and internet skills it puts them at greater risk. Her concern regarding access, or lack thereof, by some Māori, was mentioned earlier. This was also brought up by four hosts of whom one not only mentioned prohibitive costs relating to computers and the internet connection but also problems relating to the internet infrastructure; a difficulty which continues to be widespread amongst rural Māori communities as mentioned by Rima as well. Another interesting aspect was addressed by Rua: the effect this technology might prove to have on written and spoken language skills particularly regarding grammar and spelling. He at first described this in general terms and then compared it to the effect literacy had on the capacity of individuals to memorize complex stories and events over long periods of time when Māoridom was firmly embedded in oral forms of communication. He also linked this to education, as those with better education will be less affected in his view.

Problems regarding the presentation of content relating to Māori were of concern to all interviewees except Rua. Potential tribulations range from blatant misrepresentation, difficulties to capture the Māori essence (Wha) particularly by non-Māori, making things Māori appear inferior compared to other cultures or knowledge, the overrepresentation of negative aspects like focusing on the bad actions of a few individuals, to the reinforcing of stereotypes by overemphasizing certain aspects of Māoritanga. The responses of four hosts agree with these issues and some providers feel that Māori only have limited power over the depth and quality of information available. One respondent wrote that the internet misses the scrutiny of the marae:
There is the risk of traditional history being distorted by individuals posting information without due scrutiny by other kaumatua as occurs when people make public statements on the marae.

This is a stance shared by Wha, as noted earlier concerning tribal-sites. Linked to this, five respondents mentioned that it is any hosts’ responsibility to have adequate knowledge regarding tikanga Māori not to include material which is considered inappropriate or insensitive. One provider shared that they made a policy decision not to put whakapapa on the website.

With all of this in mind, another effect the internet is perceived to have is that it contributes to diluted forms of Māoritanga.

Rima: I think you’ll just .. you’ll get a watered down version .. I think the more internet starts to penetrate Māori life the more watered down it will become. It will become much more as it is. It will change over time. Because it is, so wide, that it will change over time very quickly [mhm] so yeah that is I think it will water down very quickly.

A possible negative aspect of the internet anticipated by some is the demise of interaction kanohi-ki-te-kanohi. One host remarked that because people spend more time online they forget about maintaining live relationships. Two others think that with more information being available online it will erode the old face-to-face ways. This was also of some concern during the interviews. Tahi for example felt that Māori youth in particular rely too strongly on this technology in everyday life, neglecting involvement in important offline activities.

Concerns regarding the misuse and theft of Māori intellectual property (IP), especially of treasured symbols and designs, vary amongst the interview and questionnaire participants. Toru appears least moved by the misuse of Māori IP because it does not have a great bearing in her life and because it is often done without intent:
Toru: [...] the people that are using it don’t have an understanding of the importance behind it anyways. So, you can’t really blame them. I mean, I wouldn’t. They don’t know what they’re doing, so.

Others expressed more concern. They viewed the internet as an important contributor to the misuse. Tahi talked about the false and hollow use of Māori symbols in non-Māori contexts:

Tahi: I think if you are under the ahm, sort of impression that it was going to be Māori stuff or would actually involve something Māori and it’s kinda fake. That won’t be as good.

Rua and Rima were concerned about the commercial gains others make at the expense of Māori not just online, but by taking designs and photos available online and using those for low quality products being sold in shops. None were completely against the utilization of symbols and designs online by non-Māori as long as it is done correctly and Māori are able to benefit in some way.

Rua: You know and I mean if people wanna take our cultural icons and make money. Sweet. Just, let me in at it as well.

Nine hosts also expressed concerns regarding the unauthorized use of Māori knowledge. The loss of control, particularly over images and photos of ancestors, was a specific problem four hosts mentioned. One wrote:

Ka takahia te mana o te iwi, o te hapu, o te whanau ranei mehemea kaore i ata tiakina nga taonga Māori. Hei tauira, whakaahua Māori i runga i te ipurangi kaore e aata tiakina.

Translation:
Tribal, sub-tribal and family honor and dignity are jeopardized if items of great value to Māori are not safeguarded. For example, Māori photographs on the internet are not protected.
Three hosts explicitly stated that even if a copyright exists it is often not respected. The matter of photos depicting persons and ancestors was not mentioned by any of the interview participants. Awareness of the misuse and theft of Māori IP taking place on the internet was great and some saw a potential for it to become even worse. Wha reasoned that because of uncertainties concerning future developments it is evermore important that safeguards are put in place. Rima agreed, but felt that the problem cannot be satisfactorily solved unless efforts find support by government and Māoridom alike. Similarly, Rua viewed it paramount for Māori to be smart and to be proactive in the protection of his peoples’ intellectual properties:

Rua: Māori need to take responsibility for that. They need to make sure that we have good resources, good lawyers that can help us with these things. And ahm. That can make sure that people aren’t screwing us over. We need to be smart about that. But I don’t think we need to be afraid you know.

Despite all these concerns none of the users or hosts advocated that Māori should turn away from the internet as users or withdraw content relating to Māoridom or as Toru phrased it: Yeah I think it’s a really proactive positive thing for Māori to be represented on the internet. The greatest benefit, also on a very personal level, can be seen in terms of communication and easier means of keeping in touch with whānau and friends. Eleven respondents to the questionnaire agreed with this and four of them emphasized the benefit of being able to keep in touch with whānau overseas. Two responses stressed the networking potential for professionals like researchers, developers, and supporters of te reo Māori. In a similar line of thought, the internet was perceived to be a suitable promotion and communication tool by seven hosts. One even noted the usefulness of the internet for organizing hui (gatherings). Rua, being business-minded, mentioned the great opportunity for small businesses.

An equally important benefit of the internet noted by the Māori users is the possibility to share information, ideas and different viewpoints. This of course goes hand in hand with easy and ready access to a wide range of information including, as
Toru noted, how to make things. The importance of having access to information is highlighted by Rima:

Rima: So I think that when having information at my fingertips, literally at my fingertips, gives me a sense of having, ahm the same amount of .. intellect to, choose, ahm to hold my own conversations with, ahm, professionals. That definitely. To, also to be knowledgeable enough that, you can’t pull wool over my eyes. I like to think that I’m an informed person. And the internet really does help me in that way.

For Rima the information available online makes her feel ‘knowledgeable’ and increasingly secure in conversations and interactions offline. Having access to various perspectives on different topics increased not only the participants’ awareness, it also made them more critical. Some hosts not only refer to information relating to Māoridom in the strictest sense in this context. One for example wrote about accessing global information and another response coming from an education background notes the benefit particularly to rural communities by having a huge wealth of information available to help in education (espec [sic] for remote communities) and decision making.

The possibility for Māori to present themselves to the world relates to the ease of access to information. One host remarked: It puts Maori on a global stage to show off the best of what our culture has to offer in every aspect. Self-representation and to some extent self-determination and image management were explicitly mentioned by two hosts. Two others stressed that the internet contributes to a better understanding of te ao Māori by non-Māori. A point shared by Rua as well who noted the importance of blogging in this context as a good way to expose non-Māori to alternative views.

All users agreed that the internet can be a good starting point to reconnect with one’s identity as Māori, be it through tribal websites or others. No-one but Wha though stressed the internet as a way to get one’s Māori identity confirmed in the face of other aspects of everyday life denying such an acknowledgement.
Wha: And in another sense to me kind of having a cultural identity that was, stifled and having experience with the ahm with people at university who weren’t receptive of me ahm as a Māori who didn’t have a very strong cultural identity was definitely a great place for me to start to actually kind of acknowledge and validate my Māori identity.

Wha’s use of past tense here is an important signifier that the internet today plays a lesser role in the acknowledgement of her taha Māori to be approved by others. It is much more just another aspect, dimension, or outlet (Toru).

As noted earlier, almost all of the interviewees thought that the internet provided ample opportunity to better one’s te reo skills. This was also referred to by three questionnaire participants. One of the hosts noted the following: It is one way to ensure that our language survives into the future. The internet’s part in the retention of other knowledge and information was mentioned by three other hosts. One way of doing this is to create digital tribal collections of treasured objects or other archives which can contain pictures of past events or website content which is outdated. These later points were not mentioned by the interview participants.

Neither users nor hosts perceived the internet to be a direct threat to Māori individuals or communities. Overall it was met with wide agreement that the benefits outweigh the difficulties and risks. The next section now looks at what the interview participants would ask the hosts to provide online if they could send them a wish-list.

*The Wish-list*

All interviews ended by asking what the interviewee would put down on their wish-list to the hosts of Māori cyberspace and these responses will bring this chapter to a close as well. Rua led the way in this regard as he sees the need for more content in te reo Māori about anything and everything all the while focusing on effective communication; an aspect of concern to Rima, too. As noted before she stressed that the kind of language used is too complex, both in te reo Māori and English alike.
which requires simplifying without being condescending (Rima). For this to be achieved content needs to be provided for several language skill levels in both languages depending on who the target audience actually is. One means to do this might be to use more visual means of communication, like pictures and videos. Rua in particular would like to see more ‘how to’ videos similar to the many tutorials provided on YouTube to demonstrate to people how various things are made:

Rua: I imagine things like how to make a [piupiu? (waist skirt)] or a korowai [cloak]. I think that these things could be posted on there very easily.

Such videos were not mentioned by any other participants.

Rima and Toru would like to see more involvement of kaumātua in the creation of content relating to Māoritanga. This would not only allow the older generation to direct what is available online, but the content would also be more authoritative. When it comes to information offline, kaumātua are highly trusted and it is this trust they would like to see extended to the internet. Rima suggested a clear statement, similar to the various web-seals utilized by online businesses, on Māori websites letting the users know that the site was blessed by a kaumātua. This then could function similar to a seal of approval.

The interviewees called for more online resources specifically concerned with Māori matters. Rua wished that the many resources available offline especially the vast amounts of books would be available online as well. On one hand he noted that not everyone has access to good libraries like him, on the other hand a lot of books and other print resources are hard to nearly impossible to find with many books being out of print. Digitizing and making these resources available for downloading, even if a small koha (gift) might be involved would make a lot of existing knowledge about Māoridom accessible. In this line of thought, Rima remarked that an official website should be provided which allows everyone to access precise and widely agreed upon understandings of Māori concepts and symbols, again with kaumātua approval. Toru
would like to see more community based resources online and Tahi expressed the longing to have more access to Māori stories or folklore.

The last aspect discussed here is rather interesting as it leaves the sphere of Māoritanga behind and shifts towards content for Māori which is not about Māori culture, politics, or traditions but about everyday life and global matters and even trivialities. All participants except Rima had something on their wish-list along these lines. Rua, it was previously mentioned, is interested to see things in te reo Māori about anything one could think of and he hopes for an information overload:

Rua: I would say that in English we have a media overload, an image overload. We don’t have that overload in Māori. I want that overload in Māori. It’s not there yet. Maybe one day it will be.

Hence, information about movies, books, magazines about various topics from a Māori perspective, in te reo and English alike are lacking in Māori cyberspace. The case of global news is something that Rua was particularly missing online. The absence of Māori role models on the internet was also something remarked upon. It was noted as a criticism that Māori youth are predominantly exposed to overseas celebrities. Wha in particular stressed that a site like E! Online (www.eonline.com) reporting on Māori celebrities, fashion trends, hairstyles and the like could be beneficial to young Māori:

Wha: I think what would probably be missing for me in a big stage of my life when I was going through high school would have been to actually have had you know Māori role models who, you know kinda, similar age or you know just older. You know kinda celebrities as such rather than looking at these American people [laughs] with their stupid plastic surgery and you know, and their million dollar dresses and bling [laughs].

Toru would also like to see more websites dedicated to Māori achievements from various parts of society like the sports world or from the education sector.
Chapter summary

The conversations with the Māori internet users highlighted a number of significant points. First and foremost, it can be noted that users exhibited a varied and changing use of the internet, both generally speaking and in terms of their use of Māori websites. Those who spend more time online, also do so when venturing into Māori cyberspace. The internet was overall viewed as a good way to learn and to increase one’s awareness particularly when it comes to political issues. Regarding Māoritanga, however, the internet was understood to be limited partly because the information available itself is limited to basic material and in-depth content is hard to come by and partly because face-to-face interactions were identified to be more important when it comes to learning about certain aspects. One explicit exception was te reo Māori. Websites with some content in te reo were acknowledged as great learning opportunities if supported by online dictionaries or information is made available bilingually. All participants were interested in a broad field of topics but what these exactly are greatly varies over time and is usually strongly related to what is going on in their lives and wider afield in society, politics and on a global level.

Awareness of misuse, misrepresentation and of low quality information is very high. The users’ concerns strongly intersect with those expressed in the responses provided by the hosts. The need for foresight was emphasized. The users’ wish-lists revealed that Māori cyberspace is missing several things, some relating to Māoritanga and others only indirectly. In the eyes of some interviewees, the consultation, involvement and blessing of kaumātua are tikanga Māori cyberspace needs to embrace in order to improve as well.

In the end, the need for improved, effective and therefore targeted communication was expressed by the users, irrespective of content. Concerns surrounding
connectivity, language, literacy, computer skills and content however do not negate the fact that the internet is perceived to be a good tool to communicate information, connect people and to counter the negative portrayal of Māori in other media. As long as Māori continue to have control over the presentation of Māoritanga to themselves and to the world, the internet is seen to contribute positively to Māoridom.
Chapter Nine – Wāhanga Tuaiwa

Matapakinga: Discussion

This thesis set out with two main objectives in mind. Firstly, to explore Māori cyberspace and secondly, to learn about Māori users’ experiences and expectations. The preceding chapters hence presented a diverse range of subject areas concerned with history, politics, social changes, demographics, identity, technology, methodological considerations and results from very different empirical investigations. Discussions of these topics were, until now, kept brief. Therefore, the aim of this chapter is to weave these various strands together to create two kete mātauranga (knowledge baskets). The first kete draws all findings relating to Māori cyberspace together and discusses their meanings and significance in the context of the ideas introduced in the thesis’ background chapters. A similar approach is taken regarding the second kete which focuses on the users’ experiences and opinions.

The conclusion returns to the central research question posed in the Introduction and considers whether the internet indeed contributes to negotiation or maintenance of Māori identity offline. The fact that the research focused on Māori websites means that some aspects of importance were necessarily left unexplored. The chapter, and with it this thesis, therefore closes with some considerations of areas requiring further attention.
This thesis followed Faye Ginsburg’s (2002) advise to consider the wider context of ‘minority media’ in its approach to Māori cyberspace. The internet arrived in Aotearoa/New Zealand at a time when a bicultural consciousness began to gain in relevance and momentum. The status of Māori as tāngata whenua (people of the land) and the principles of the Treaty of Waitangi became increasingly relevant in politics, policy and public discourse. Concurrently, New Zealand embraced neo-liberal economic principles. Together this created a climate of contradictions seeing Māori interests in mainstream media restricted but opening up possibilities for the creation of new Māori-controlled media outlets. Māori struggled for decades to control their own voice and to be able to tell their stories, news and views from their own perspective. Chapter One demonstrated that success in this respect was achieved to varying degrees. However, when considering the free-market capitalist system these media outlets have to operate in and, in the case of MTS, under the political state of affairs, the optimism regarding Māori control over their own media outlets might get dampened. The concomitant positive and cautious stance taken by many regarding the possibility of indigenous and ethnic minority groups hence is not surprising (selected examples from New Zealand and other contexts are: Alia & Bull, 2005; Browne, 2005; Downing & Husband, 2005; Ginsburg, 2002; Mander, 1991; Pietikäinen, 2008; C. W. Smith, 1994; Jo Smith & Abel, 2008; Stuart, 1996, 2003, 2007).

Yet it can be argued that it is precisely this historic background which contributed to ‘shape’ Māori cyberspace and Māori individuals’ organizations’, and academics’ views about it. Early writers (Brown, 1996a; A. Smith, 1997; A. Smith & Sullivan, 1996) expressed a cautious but generally positive stance towards the internet. This has not changed even in later years (Keegan, 2000; Lemon, 2001; Pewhairangi, 2002). Media reports in the 1990s indicated similarly dichotomous opinions held by Māori individuals and organizations (McDonald, 1995; Pullar-Strecker, 1999; The Evening Post, 1997). This thesis found attitudes towards the internet by hosts and users to be akin to all of those. The previous experiences and struggles with
traditional media however also prepared Māoridom to proactively face the challenges this new technology posed.

This is particularly apparent when investigating the country’s domain name system (DNS). New Zealand’s internet structure has been ‘biculural’ from its beginnings with the inclusion of the second-level domain (2LD) .iwi.nz. This 2LD, while having been restricted to tribal organizations, excluded some tribes. The registration criteria originally were strongly influenced by the political understanding of what should be considered as iwi (tribe). This 2LD then can be understood to be, in Stephen Cornell and Douglas Hartman’s (2007) terms, “assigned”, rather than “asserted”. But when tracing the change of the domain’s criteria to better suit contemporary tribal organizations, it suggests that Māoriness in terms of the DNS is increasingly “asserted”. The creation of a new Māori-initiated domain (.maori.nz), the successful push towards the use of macrons in domain names and the proposal of a bilingual domain name space further contribute to the strengthening of this assertion process. On a structural level it can be said that Aotearoa’s internet is increasingly bearing the mark of the indigenous population.

Māori began their attempts to adapt the internet’s structure in 1997. Similarly, Māori can be understood as early adopters of this technology as some provided distinctly Māori web-resources beginning in the early days of the internet’s arrival in Aotearoa. This suggestion is supported by the hosts’ responses to the online questionnaire with many of them mentioning that their site was launched before 2000. Media reports from this time explored in Chapter Three allowed a glimpse into the past. They highlighted that two matters of great importance to Māori offline, land and language, were prevalent online as well. In its aim of developing a broad understanding of Māori cyberspace today, this thesis took a hyperlink network analytical approach. The demarcated Māori Hyperlink Network (MHN) represents a snapshot of Māori cyberspace in 2005. This step had two purposes: firstly to use the results of the network analysis to select a range of websites for further investigations and secondly to develop an understanding of what Māori cyberspace looks like. That is, what
Māori websites are available online and are viewed by the online community, to use a rather elusive label, to be relevant enough to refer their own visitors to.

This research step consequently revealed a network of 215 internet sites. Many MHN-members are well connected and only a minor section of the network overall is made up of marginalized websites. These can be considered as such because they were not able to attract high levels of acknowledgements from others at the time the network was analyzed. The right level of connectivity via hyperlinks indeed is of great importance. Hyperlinks can be understood as a form of communication between the provider, their visitors and even between hosts. But more importantly, the search for information would be futile without or even with too many hyperlinks. The analysis of the hyperlinks within the MHN revealed that only a small proportion of the network sets a high volume of hyperlinks, whereas most direct up to 10 references at other network members.

One third of the MHN does not set any hyperlinks. Within this group of non-linkers websites from the iwi-category and tribal radio stations stand out as being more strongly represented. The reasons behind this are unknown and we can only make speculations about them. One reason might lie in the possibility that tribal-sites, particularly of small hapū (sub-tribes), may be more likely to focus on themselves; the provision of information about who they are and what is going-on in the tribe takes precedence over directing visitors elsewhere. This is also a possible explanation for many of the online-radio stations not setting any links. After all, these sites have one main purpose, for their visitors to tune in the virtual wireless. Another reason may lie in the fact that some pages were, at the time of the hyperlink analysis in 2005, only being developed. In any case, non-linkers are not necessarily marginal sites as they are overall as a category perceived as a worthwhile resource by others.

The connections of two central network members (Te Puni Kōkiri [TPK] and Maori.org.nz [MOrg]) were analyzed in detail. This showed that TPK differs from others within its own category (government). It receives a much greater proportion of
references from outside the group and is able to attract (and also reciprocates) connections with a broad variety of Māori-sites. Contrary to this, other government-sites are more focused on directing their visitors to other government websites. MOrg on the other hand is a very heavy linking information-site. It provides details on a wide range of topics which is mirrored in the pages dedicated to links. This particular website hence can be viewed as a central starting point when trying to find others’ (users and host alike) suggestions on where to find useful information and resources on te ao Māori (Māori world).

Māori cyberspace is to a great extent home-grown. Only very few websites stated an overseas location. This is to some degree influenced by the internet sites selected as starting points for the hyperlink analysis. When focusing on locations within Aotearoa only, it becomes apparent that sites hosted by metropolitan providers are more likely to be pan-tribal and government related. Whereas more rural locations have a stronger emphasis on tribal-sites from the iwi and entertainment groups. This is not unexpected. Government organizations and pan-tribal groups are less likely to operate from rural areas and similarly tribalism is strongly linked to a specific rohe (territory). Certainly the major cities fall within the rohe of some tribes (for example Christchurch is part of Ngāi Tahu and their website indeed states this location) but most iwi and hapū are located outside metropolitan areas. The majority of MHN-sites have a host located within the North Island. This corresponds with the distribution of the Māori population between Aotearoa’s two main islands (Statistics New Zealand, 2007d).

The analysis of the MHN not only shed light on what sites are available online, how they are connected and where they are from, but also allowed a sense of what content is available. Tribal, pan-tribal, as well as governmental interests are represented. Māori specific information concerned with art, te reo (Māori language) and various general information is available. Business advancement for Māori, education and entertainment are other areas represented within the MHN. The analysis of the sample-sites however provides us with a more in-depth understanding of the content offered and how it is presented to users. While the sample is by no means statistically
representative, the content analysis nonetheless supports three general arguments to be made regarding Māori cyberspace.

Firstly, variety within Māori cyberspace is great. This is not only limited to the range of topics covered, but also extends to the profundity of information provided and to the actual audience content is targeted at. All of this holds true for the sample as a whole, but is also often the case when looking at individual websites. It is common that a website has specific sections for its various audiences; similarly, the depth of information may differ depending on who the target audience is. Secondly, many aspects of relevance to Māoridom and Māori identity are covered and the complexities discussed in Chapters One and Two in this regard were found to be represented online. Hence, te ao Māori is neither depicted as fully traditional, nor are modern facets of contemporary Māori reality ignored. Research by Ellen Arnold and Darcy Plymire (2000; 2004) and Rhonda Fair (2000) indicated that traditional representations of Native Americans were more commonly used when content was targeted at non-Native audiences. This however, cannot be argued with similar vigor here. Traditional and modern (but nonetheless distinctly Māori), representations can be found within pages both targeted at Māori and non-Māori audiences alike. Thirdly, it can be noted that the findings of the content analysis in many cases mirror the experiences and views the interview participants expressed. This will be returned to later on in this chapter.

The sharing of in-depth or specialized mātauranga Māori (Māori knowledge) is greatly restricted. Such information is in many cases considered tapu (sacred) and therefore should be restricted in its accessibility. This is especially adhered to within the sample when content relates to whakapapa (genealogy), tribal histories and spiritual concerns. Such taonga (treasures) are mostly kept out of the virtual public view. Only one website outlines actual whakapapa links. All others introduce their visitors to some of their tīpuna (ancestors) who were influential in founding the tribe or otherwise in tribal history and in establishing connections to tribal land in great brevity. But even where slightly more information besides a name is offered, the deeper meaning is unlikely to be accessible to those who are not already familiar
with the wider context. Tribal histories and legends are similarly kept short and only
give visitors an indication about links to the past. Māori legends about more popular
characters and events are retold in somewhat greater detail within some of the
*information*-sites of the sample.

Marae (meeting ground) encounters are central parts of Māori society. Not only are
they fully embedded in Māori values and practices, but they are also important
spheres of identity construction and maintenance (Salmond, 2004). The
announcements of tribal events such as hui (gathering), tangihanga (funeral),
celebrations or other social happenings are a facet of the sample’s content, but entries
are not very frequent. Similarly, explanations of such occasions and their protocols
are scarce within the sample but allow familiarity nonetheless. Some of the hosts’
responses to the questionnaire indicated that one reason for their online presence was
to keep tribal members informed about and connected with their rohe. In this vein,
dedicated news-sections are common. But just like event calendars, they are not
frequently extended and reports about tribal events that took place are uncommon.

Nonetheless, the continuing significance of tribal identities within te ao Māori is
unquestionably transposed to cyberspace. The names of iwi and hapū are commonly
stated within the sample to contextualize information and people alike. In most cases
however no further information is provided on the concerned tribe(s). The complex
roles of tribal organizations in terms of bureaucratic, political, economic and social
terms become most clear within *iwi*-sites. Ongoing and successfully settled Treaty
claims are addressed by almost all tribal-sites. While this kind of content highlights
the increasing influence of ‘neo-tribal capitalism’ (Rata, 1999; 2003) and the tension
this poses to tribal organizations, the websites within the sample appear to aim for a
balance between these different demands. Official whakapapa registration is central
to all tribal sample-sites and is in some cases explicitly linked to the tribes’ Treaty or
fisheries settlement. But cultural advancement of tribal members in terms of
mātauranga Māori, tikanga (practice, custom) and te reo are equally essential facets
of tribal online representations.
In this vein, cultural practices such as waiata (song), kapa haka (posture dance), weaving and carving are all attracting significant online attention. Although in-depth information is often limited, interested users are encouraged to learn about these matters offline either by attending related events or to participate in educational programs. Hence, information on cultural groups, their performances and concerts or exhibitions by Māori artists is frequently advertised within the sample. This is similarly, but less prominently, the case with formal and informal courses with a focus on cultural practices.

The analysis of the sample-sites highlighted that in most cases their purpose is in fact to provide a channel of communication from the hosts to visitors. The reverse flow of communication is less frequent within the websites with the exception of MOZ who encourage visitors to share articles as well as the occasional forum or guestbook. These were commonly utilized amongst visitors to ask for or exchange specialized information. The content analysis also investigated the packaging of the sample-sites. This revealed that Māori cyberspace is to a great extent text-based. The use of video and sound files to provide content is rare. Images however are much more common ranging from depictions of kapa haka performers, staff-pictures, scenery and wildlife shots, photos of whare nui (meeting houses), marae and urupā (cemetery), to close-ups of carvings, pendants and artworks. The sample-sites are in general very accessible both in terms of readability of text and navigational support. The sample was additionally analyzed in terms of its use of te reo Māori to provide content.

The findings of the Treaty of Waitangi Tribunal in 1986 noted that in order to protect the Māori language broadcasting can play a central role (Beatson, 1996; Fox, 1993; Hay, 1996; Mill, 2005). The interview participants and hosts agree with this in the context of the internet. While the participants’ language competencies varied, they all enjoy seeing te reo used online. Previous research undertaken in this area did in fact find a high level of utilization of te reo (Keegan & Cunningham, 2003; Keegan et al., 2004). The analysis of the index-pages of all MHN-sites did not resonate with those undertaken earlier. The level of te reo used to greet the visitors of MHN-sites was much lower. Further, the results from the word frequency analysis of the sample
were not able to support the earlier findings, either. These differences in the results are to a great extent rooted in how the respective research fields were selected and the methods used to analyze the pages. It is important to stress that the differences do not negate the relevance of either Keegan’s and his colleagues’ work or the findings of this thesis. Rather, they underscore the existing variations when it comes to te reo online.

This linguistic variety is also present within the sample-sites. These include monolingual sites both in terms of te reo and English, but most chose the indigenous language for up to a quarter of their overall words. About one third of the sample are sites with a relatively low use of Māori (up to ten percent). Although they might not be as important when it comes to providing information to speakers of te reo in their language they do, as Daniel Cunliffe (2003, p. 2) notes, “acknowledge the existence” of the language. The question of who the target audience in fact is appears to greatly influence the host’s language choice. Websites aiming to inform overseas visitors are unlikely to use words their potential customers will not understand. A Māori language television program, though, can expect its core audience (both on- and offline) to comprehend te reo. Equally, the host behind a site is of importance as well in this regard. Individuals, whānau (extended family) and small organizations possibly put more emphasis into providing content and linguistic concerns might come second.

The importance of considering the target audience when it comes to the selection of the language used was noted by the interview participants as well. From their experience, language can function to exclude people from accessing information; this is true for content in English as much as in te reo. Rima reminds us that some Māori indeed speak English only as a second language and might experience difficulties if texts are too complex. A similar problem lies in the fact that Māoridom is characterized by lower literacy levels compared to Pākehā (European) (Satherley & Lawes, 2008). Monolingual sites in te reo, too, are not a perfect solution in all cases as they can deter individuals with no or low skills from visiting altogether. Rua, a
participant with high te reo skills, noted that some internet resources use very complex Māori. This can be very challenging but nonetheless often rewarding.

The word-frequency analysis of the sample revealed a low use of te reo by some governmental hosts. This is peculiar and to some degree contradicts the official recognition of the language. But this is not a unique finding of this research, which arguably only analyzed a small number of governmental sites in-depth. The Human Rights Commission (HRC) came to very similar findings in a survey of 123 local and central government websites. Some results were reported on the Commission’s website (HRC, 2009, n.p.) highlighting that “visitors to government websites would see no indication that Māori is an official language of New Zealand”. The HRC survey also found a sketchy provision of bilingual content similar to TPK’s old version subject of analysis here. Before its complete revamp, this website allowed visitors to select their preferred language within some parts of the site which resulted in often encountering English or finding outdated content when choosing Māori.

Cunliffe (2003) stresses that such unconvincing bilingual websites not only deter audiences from using the minority language (maybe even on other websites), but it possibly also decreases the standing of the language. The host of the website might also be seen as if it does not hold the minority language in high regard. This shines a rather negative light on any government-site but more so in the case of TPK which is the Ministry of Māori Development after all. Its strong commitment to provide content almost fully bilingually when overhauling the site is very encouraging indeed. Bilingualism was not very common within the sample but from a technological perspective, bilingualism could be realized more easily online than in print media, television or radio. Such websites often allow users to switch between languages according to their needs or preferences, but most importantly, they leave the decision to the user. This was also remarked upon by the interview participants to be their main advantage.

Keegan and his colleagues (T. T. Keegan, 2007; Keegan & Cunningham, 2005; Keegan et al., 2007) found surfers are likely to stay with a website’s default
language, even if a change is easily possible. The *Niupepa*-collection of the New Zealand Digital Library, which was a focus of their research, uses Māori as the index-page’s default language and provides an option for its visitors to switch the language if required. The Māori Language Commission takes another approach by simply providing the visitors with the choice to enter the website either via the *Kūwaha Māori* or the *English Gateway* on its index-page.\(^{121}\) TPK, while already having achieved major improvements, continues to welcome visitors in English by default. This Ministry and other organizations or government departments alike should consider the issue of language and its impact when undertaking future developments and refurbishments including that of their index-page. First impressions do matter, even on the internet, as Keegan and his colleagues’ work has demonstrated.

When talking about increasing the number of bilingual internet sites different issues require consideration. The responses to the questionnaire highlighted that funding and lack of resources are central concerns. This means either to consult a professional translator or a competent staff-member has to translate the content. Both cases inevitably mean higher costs, be it in wages or volunteer time. The size of a website and/or the rate of changes can also contribute towards the persistence of monolingualism. Shortage of resources, both monetary and human, must be seen as important reasons for low rates of bilingualism online. The questionnaire highlighted that many hosts have the intention to increase the proportion of Māori within their sites but they are hindered by scarce resources in many cases. Cunliffe’s (2003) argument regarding bilingual websites which are not fully functioning has to be recalled at this point. If a growing number of hosts want to offer a bilingual environment but are restrained by a lack of resources they are faced with a difficult decision. Do they continue to be monolingual or do they rather offer only some sites bilingually? Either alternative has potential for negative implications, both for the hosts of continuing monolingual or of incomplete bilingual websites and for their users.

The analysis of te reo was restricted to the language’s use in its written form since the medium is still heavily text-based, as highlighted by the content analysis. Therefore a good command of written Māori is of importance. Music and other audio files challenging the users’ listening skills are available online but they are at this point of time still scarce (with the exception of online iwi radio stations). The advancement of technology specifically in the realm of broadband internet is likely to contribute to an increase in content like narrations, speeches or songs provided audio-visually. This can be especially advantageous for beginners, as one of the interview participants’ use of such sound files underscores, as well as for those with low literacy skills.

Children play a crucial role in ensuring the continuance of the Māori language, particularly as older native speakers become fewer in number (Statistics New Zealand, 2006b). The emphasis of the language movement therefore is directed towards the education system. Keegan et al.’s (2004, table 5) research in 2002 located eight websites with 53 pages with ‘considerable’ use of Māori provided by schools. Children learn different languages with more ease but what is learned at school can be forgotten just as easily if it is not used outside the school context. In 2000 Te Taura Whiri i te Reo Māori launched a campaign showing ‘everyone being Into Te Reo’. One of the posters depicts a snowboarder in mid-air with the slogan in the form of graffiti under the board. The campaign aims at changing the image of the language from “an archaic thing” to something “quite sexy” to appeal to younger generations (Te Taura Whiri i te Reo Māori, 2000, n.p.). Using te reo online to provide a variety of information and resources of interest and relevance to young people (rangatahi) in particular can support this image change even further. The MHN includes three sites specifically directed at rangatahi, only one of which is fully available in Māori. The area of online content specifically for rangatahi was noted to be greatly underdeveloped by the participants as well.

122 Te Matatini’s current website is a case in point.
Māori users’ experiences and expectations

The second goal of this thesis is to learn about Māori internet users’ experiences with Māori cyberspace. Some of the interview participants’ opinions on various general aspects of cyberspace were already included above. This section hence focuses on their personal experiences as well as their expectations and wishes for further improvements. Five individuals from various backgrounds agreed to participate in semi-structured interviews, all with three important commonalities: firstly, all identified as Māori; secondly, all were tertiary students; and thirdly, all were regular users of Māori internet sites. Certainly, the low number of interviews limits any generalizing statements, but the conversations even with this small number of users indicated that generalizing remarks might be near impossible in any case. Each individual narrative highlighted prevalent ambivalences which were most pronounced in areas where users had greater awareness or in-depth knowledge; be it regarding te ao Māori, wider New Zealand society or the technology itself. This made clear-cut answers for them at times difficult when expressing their views.

The participants varied in their general use of the internet, just as they did in their use of Māori cyberspace. Overall, communication with friends and family were noted to be the main reason for their internet use along with seeking information. Most of their activities online are strongly embedded within their life offline. This very much resonates with theoretical understandings of internet use discussed in Chapter Two (Fuchs, 2008; Haythornthwaite & Wellman, 2002; Rainie, 2004). Happenings within their whānau, personal interests and development, university assignments, politics and engagement with other media were all motivators to use Māori internet sites. For these participants the internet indeed is an everyday technology intertwined with various aspects of their lives.

The pre-conceptualized list of topics used during the interviews showed all subject areas being able to attract at least some interest but also that some were more relevant to the participants than others. Those of lesser significance were the broad
area of nature, health-related topics, Māori organizations, social issues, tourism, Māori business and online shopping for merchandise with the exception of Māori art. Areas of greater interest relate to Māori news, politics, Treaty of Waitangi, land issues, history and particularly matters specifically relating to their own background and tribal connections. The main reason why some of these areas are not able to attract much interest lies in the fact that they also do not play a large role in the participants’ life offline.

All participants expressed mostly positive attitudes towards Māori cyberspace, but some were at times slightly more apprehensive. This is closely related to their views on the importance of face-to-face interaction when learning about Māori knowledge. To some, personal interactions are so central that the internet is perceived to be of limited use when it comes to matters relating to Māoridom. This is strongly influenced by their relatively easy access to knowledgeable whānau members and kaumātua (elders). Wha, whose Māori identity has been growing stronger during her years at university, changed how she makes use of the internet when it comes to te ao Māori. Her knowledge about who she is, about her whānau, tribes, ancestors and tikanga grew and she developed relationships with knowledgeable people she feels comfortable to approach. Consequently, her use of Māori cyberspace in the past differs from that in more recent times; it became more reflective and increasingly restrictive. Those with limited access to knowledgeable people also encounter greater difficulties in gaining in-depth information through face-to-face interactions. Their view regarding the internet is much more practical and they find the internet to be more useful for their purposes and circumstances than traditional channels.

This dichotomy was most apparent when the content in question is widely considered tapu within Māoridom such as whakapapa. This is one of the most central aspects of Māori identity, but it is not just important to have Māori ancestry, but rather to have a “meaningful relationship”, as Tahu Kukutai (2003, p. 21) phrases it. The participants’ experiences with the internet seem to be rather limited in this respect. On one hand this relates to the point made above in terms of the importance of face-to-face interaction when it comes to this particular tapu knowledge. On the other
hand, others perceived the internet to be limited in extending the knowledge about and to develop a ‘meaningful relationship’ because the available information and resources are insufficient. The content analysis of the sample-sites shows that the information being made available in these areas are very concise yet limited as well.

Some solutions to this quandary are to increase information on who might best be contacted and met in person to learn more about whakapapa and related areas like stories about historic ancestors, land, waiata, myths and tribal tikanga. Another approach would be to actually provide more in-depth information. This can be seen as a controversial call, as some of the interviewees expressed. But also one which is perceived by others to be vital particularly to individuals outside their rohe (especially if they are overseas). Restricted accessibility to such tapu information is one possibility. If this was to eventuate in the future, it was important to the participants that Māori themselves do so, as only then can it be assured that control over the information online remains in Māori hands. This is important even to the proponents of easy and pragmatic access.

The broad area of Māori arts has been one which was able to attract wide interest. The performing arts like kapa haka and waiata are significant cultural practices within Māoridom (Matthews & Paringatai, 2004). The internet was used as an information source on upcoming events the users were interested in attending or even to read about them afterwards because they missed the event. Results from competitions were followed online as well. However, it was reported to be common to only find out about events and competitions when it was already too late to make arrangements to attend or even after it took place altogether. It was also uncommon that a website brought an upcoming event to the participants’ awareness to begin with. This again resonates strongly with the findings of the content-analysis. Websites about Māori artists were sought after as well and participants occasionally look for Māori art online. Purchasing carvings or similar pieces of art over the internet, while being widely available, nonetheless is not a common activity. Reliance on the skills of whānau and friends continues to take preference over online shopping.
Rua poignantly stated that being Māori one cannot help but be political. This statement and the fact that almost all of the participants were interested in politics, news pertinent directly to Māori, policies or Treaty related developments are likely to be linked to one of the commonalities of the interview participants: higher education. A point similarly made by Carla Houkamau (2006) regarding the importance of tertiary education in the development of strong political and Treaty awareness. Overall this area was one of the greatest motivators to utilize the internet. For some this interest was linked to their studies, but personal interest and the wish to be informed and knowledgeable were equally important.

The Māori Party’s online representation and their use of social network technologies were perceived to be particularly successful information. This political party is perceived to be able to provide good information in a well structured and accessible manner, and they support an aspect of importance to the participants: interactivity. Neither online representation of the Māori Party was analyzed here however. The sample-sites were found not to provide much content relating to current politics or national and global news from a Māori perspective. News commonly was locally focused or related to the hosts and their work.

*Chapter Two* highlighted the continuing importance but also the complexities of tribal identities within Māoridom. All participants have visited tribal-sites in general and those of their own tribes in particular. Some revisit them regularly but with varying frequency much depending on how often content is updated. Tribal-sites were perceived to be valuable resources but at the same time limited. This is mostly the case because the information provided caters more for individuals who are not very familiar with the tribe itself. This is particularly the case when it comes to the history of the tribe, stories about ancestors and whakapapa. Similarly, information about current developments within the tribe, matters relating to tribal lands and Treaty claims, negotiations and settlements could be discussed in much more detail online as well.
Online representations of iwi could, in the eyes of some of the users, be well suited means to inform their members about economic and political developments within the rohe. This is especially important when it comes to information which is not covered by traditional media which are limited in their ability to consider news and ongoing developments from each tribe’s perspective at all times. This viewpoint is similarly expressed by Russell Brown (1996a). On the other hand, keeping members informed is only one aspect of any engagement iwi have with their people. They are, after all social organizations in which concepts like manaaki (hospitality) and whanaungatanga (lived relationships) are influential as well. These social concepts continue to be, as Arapera Ngaha (2004) found in her research and the users stressed for themselves as well, central aspects of Māori identity. The inter-personal aspect of tribal-sites is something which was noted by most participants to be underdeveloped or missing. Hugh Kawharu (1984) stresses that tribal membership requires active involvement which has been significantly impacted upon ever since the “drift to the cities” (Metge, 1964, p. 2). One reason why the participants visited their own tribal-sites was to find out about upcoming events. This is one possibility of how the internet can facilitate face-to-face interaction by providing detailed and up-to-date information about happenings within the rohe and equally about other Māori events taking place outside the rohe as well.

Tribal websites, it was noted by some participants, could be very attractive and useful to rangatahi especially as they could facilitate increased engagement between youth and their tribe. That is, if the websites were designed with this audience in mind. Increased interactiveness with kaumātua, officials and tribal leaders would be beneficial along with increased familiarity with these individuals, both of which could be achieved online by including forums or similar technologies and by introducing important individuals well, along with photos and video clips. Overall, the participants thought online representations of their tribes were a positive development and something they were rather proud about. But for them to have a significant impact in people’s lives and to possibly develop into a virtual homeland tribal-sites need to improve in several areas: more frequent updates, increased interactiveness, more in-depth information on tribal matters and general news from
the tribes’ perspectives, additional resources like digital versions of print material about a particular tribe, as well as audio and video files were variously mentioned.

The content analysis found that tribal-sites offered many aspects the participants mentioned to be looking for. But equally, it was evident that iwi-sites are less successful in other areas. This might be because the information provided is brief and content such as events or news is not frequently updated. The various expectations expressed by the interviewees in this regard certainly pose challenges particularly to smaller tribal organizations. Keeping tribal members all over the world fully informed about all happenings within the rohe might be limited by sheer access to resources, be this in volunteer times or being able to employ someone to keep information up-to-date.

History is an area all participants are interested in to some extent. New Zealand’s wars, inter-tribal conflicts, tribal histories, narratives about tīpuna, the history of marae, whare nui and of moko (tattoo) were all mentioned by the users to have been of interest to them online. Whereas some areas were perceived to be covered well, like specific battles and wars, the available content on others was perceived to be less adequate. One important aspect brought up by one participant is that narratives about historic events are often presented as factual truth and existing divergences in interpretations are not commonly mentioned or addressed in detail. The retelling of histories pertinent to tribal identities has been, and continues to be, a cultural practice of great importance. This commonly takes place at gatherings on marae where they are under the scrutiny of others, especially of kaumātua (Salmond, 2004). The online environment however is missing this ‘scrutiny of the marae’ as one host expressed it. By not acknowledging that a particular rendition of an event presented on a website may not be the only one and by not giving voice to alternative narratives, it was perceived that the internet’s usefulness in this regard is restricted. Books were therefore mentioned to be more valuable resources. This was a similar finding of the content analysis, with one information-site in fact suggesting books to visitors to extend their knowledge further. However, this practice was not limited to the topic of history.
The participants displayed a high level of variety in their activities and interests when it comes to Māori websites. Their experiences were generally positive and they saw many benefits for Māori individuals and communities alike. Being able to communicate easily with people all over the world and being able to keep them informed about goings-on and equally being able to access information more easily were mentioned as key benefits. Another prominent advantage lies in the possibility to provide alternative perspectives and understandings about te ao Māori which in turn can contribute to reduced misunderstandings and increased awareness amongst Māori and non-Māori alike. Ian Stuart (2003) stressed this benefit in the context of Māori radio, and Māori Television has been noted to be successful in this respect as well (Poihipi, 2007), but MTS’s shift towards a stronger emphasis on nation-building threatens to undermine this potential (Jo Smith & Abel, 2008). The internet is experienced as an additional avenue giving Māori the ability to present positive self-images to themselves and the world.

This global accessibility of information and resources concomitantly creates opportunities for their misappropriation and intellectual property right breaches. Awareness of these negative aspects was great amongst the users and the hosts alike, just as they were amongst the writers discussed in Chapter One. Māori should not, in the view of the participants, turn away from the internet because of concerns to lose control over traditional knowledge and taonga like photos of tīpuna or depictions of carvings and weaving designs, but rather find practical ways to share these taonga with no loss but possibly (financial) gains to Māoridom. The fact that these concerns, particularly relating to intellectual and cultural property rights, have been in discussion since the very early days of the internet in New Zealand, and before that in the context of other media as well, underscores that this is a very complex matter and requires not only Māoridom’s involvement and leadership. Rather, and this is also acknowledged by the participants, the government’s willingness and support is also necessary to develop practical and appropriate solutions to these pertinent issues. But not only that, the global internet community’s and other indigenous peoples’ input and co-operation is equally vital as Popova-Gosart’s (2009) report Traditional Knowledge & Indigenous Peoples highlights.
The wish-list discussed with the participants concerned areas still missing in Māori cyberspace or requiring further improvements. They included two points which relate to the above issue. Firstly, the call for a stronger involvement of kaumātua in the development of web-content pertinent to Māori was voiced. Kaumātua are highly valued for their knowledge and experience which is, to some extent, missing online. If online information was developed jointly with these experts of mātauranga and tikanga Māori the quality and authority of online content would improve and it would also be perceived more positively and trustworthy. It would also ease the exclusion of this population group from Māoridom online and potentially strengthen relationships between kaumātua and rangatahi. Traditional tikanga such as ceremonial blessings of websites was mentioned as well. The names of involved kaumātua could be stated on the website along with the date the blessing was performed. Together this could function as a form of (spiritual) web-seal to indicate to visitors that the information is reputable and therefore strengthen the authority of a website. Such a web-seal is likely to be more meaningful to Māori users than ‘traditional’ seals of approval used online which were found to be ineffective by previous research (Peszynski, 2001; Peszynski & Thanasankit, 2002).

Secondly, the development of an ‘official Māori website’ similar to MOrg with (kaumātua) approved information and Māori taonga which are sanctioned to be used by others, including non-Māori was suggested. One important aspect of such a website would also have to be education. Some of the participants noted that most misuse of Māori taonga is not necessarily done out of spite, but rather ignorance; a standpoint shared by Ruth Lemon (2001). Detailed explanations of the significance of carvings, symbols and associated knowledge would need to be made available along with the resources themselves. Certainly, this would not rule out all forms of misuse especially those which have a commercial aspect to them. As Rua repeatedly expressed during his interview, commercial gain should not be something Māori should shy away from. Using Māori culture for business is not an inherent problem, as long as Māori are benefitting. The ‘official Māori website’ could, in time, oversee the commercial use of Māori taonga online as well. The suggestion of an official Māori website however seems to be fraught with difficulties even if it would only
function to provide information and access to pictures and the like. A commercial side to such a pan-tribal undertaking brings to mind the long-lasting dispute surrounding the allocation of the fisheries assets discussed in Chapter One.

Other points included on the participants’ wish-list were already discussed; particularly their call for increased interactivity and concerning the limitations of information available. In this vein, a desire for more content on world news and everyday matters from a Māori perspective, possibly in te reo Māori was expressed. An increased provision of resources like videos, sound files and e-books were talked about as well as the previously mentioned lack of websites specifically for Māori youth. A focus on Māori celebrities and success stories from various parts of life including education, sports and entertainment would expose rangatahi to positive Māori role models and Māori values. Some of these wishes indicate that Māori internet users at times would like to just use the internet as an everyday technology and engage with content on everyday matters as Māori-selves.

**Conclusion**

At this point we shall return to the research question posed in the *Introduction*: *Does the internet contribute to Māori identity offline?* In addressing this question it is imperative to keep in mind that Māoridom is, like any society, changing and so is Māori identity. Angela Borell’s (1998) work has highlighted that change and complexity have always been part of Māori society. But change took place within a relatively limited scope until the arrival of the ‘other’ (Pākehā) which saw te ao Māori exponentially unsettled in economic, technological social and cultural terms. While tribal identities have always waxed, waned, merged or disappeared as a functioning social organization, a notion of pan-tribalism did not exist. Today, both are of significance in Aotearoa. Frederik Barth’s (1969/1996) notion of the shifting boundary is applicable here. How the boundary comes to be defined matters. The competition between processes of assertion during the Māori renaissance and continuing attempts by others to determine Māori ethnicity for Māori saw an
emphasis of traditional understandings of Māoriness in public discourses: whakapapa, tribalism, te reo Māori and being knowledgeable in mātauranga Māori. However this strict focus on traditional identity markers excludes many individuals and ignores existing socio-economic differences (McIntosh, 2005; Poata-Smith, 2004; Rata, 2005, 2006).

Māori are, like other ethnic groups in modern nation states, embedded in various contexts each creating different demands and challenges to Māori both as an ethnic group and as individuals. The diverse social reality Māori find themselves today contributes greatly to the existing complexities in terms of Māori identity. Colonization, intertribal conflicts, loss of land, changes in social organization, urbanization, cultural suppression and loss of culture, social- and cultural movements, shifts in power, biculturalism and globalization all work together to create social settings distinct from those of ‘traditional times’. It is important to acknowledge that some of these processes contributed to disrupt the development of a “primary [Māori] identity” (Jenkins, 2008a, p. p. 48) for many. Hence, great variances exist in terms of commitment to and relevance of taha Māori (the Māori side) in the lives of individuals and both are likely to grow or diminish over the course of individuals’ lives.

This is linked to various factors: urbanization rates among Māori continue to be very high (Statistics New Zealand, 2007d), this can also be said for Māori living overseas, especially in Australia (Hamer, 2007; L. W. Nikora, 2007). Intermarriage sees many Māori identify with several ethnicities and similarly, most have whakapapa connections to different hapū and iwi (Statistics New Zealand, 2007d, 2007e). Some Māori grow up fully engulfed in te ao Māori and their identity as Māori is deeply rooted while others are (in some cases intentionally) kept away from anything Māori during their upbringing (Houkamau, 2006). Yet again others are denied the acknowledgement of their identity by other Māori (and non-Māori) because they do not look or act as expected (van Meijl, 2002). An increasing number of research projects have been concerned with the question of what it means to be Māori in modern contexts (Borell, 2005a; Gagné, 2004; Houkamau, 2006; Moeke-Maxwell,
2003; Ngaha, 2004; L. W. Nikora, 2007; Stevenson, 2004; van Meijl, 2002, 2006). All of them agree, Māori identity is becoming more diverse but none negate the relevance of traditional aspects, either. Māori certainly are not a homogenous indigenous population, but Māori ethnicity matters significantly. This is the case both offline and on the internet.

Social constructionist approaches to ethnic identity compel us to consider the context in which identity construction takes place and the adaptability of acceptable identity markers (Callero, 2003; Fenton, 2003; Fishman, 1996; Jenkins, 2008a; Karner, 2007). Additionally to this, post-modern perspectives underscore that these contexts are constantly transforming and that this takes place at an ever faster pace. Making sense of the surrounding world and piecing a coherent identity together is increasingly challenging and conflicting. Media, it is argued, play an important role in these processes (Gergen, 1991; Giddens, 1991). The ‘definition’ of Māori identity used for this research hence reflects these understandings. Instead of developing a precise and implicitly narrow concept of Māori identity the breath of existing realities was explored. This in turn led the empirical engagement down various paths and towards several conclusions. The following pages therefore consider these regarding Māoritanga (Māori culture) in cyberspace and its impact on Māori identity offline both on the level of an ethnic group and as individuals.

The internet is limited in its possibility to affect Māori identity, positively or negatively, if Māori do not have (adequate) access. Quantitative surveys discussed in Chapter Three established that Māori continue to fall behind Pākehā and Asian New Zealanders in terms of internet access statistics. The high cost of computer hardware and monthly connection fees along with persisting infrastructure problems particularly in rural areas still put reliable internet access out of reach for some. Although the digital divide is steadily declining, not least because of Māori-led initiatives, some Māori continue to be excluded from this technology or are limited in their use due to low speed, restrictive data-caps, low computer- or internet skills and in some cases even problems with general literacy. None of these aspects applied to the participants who contributed to this research, but some noted that this is a
reality for parts of Māori society and similar points were stressed by hosts. As increasing numbers of websites incorporate features requiring more bandwidth it will further disadvantage individuals on dial-up connections and may limit their internet use to essential activities only or possibly discourage them from using the internet altogether. On the other hand, increasing incorporation of sound and video files (both of course requiring more bandwidth than text and small images) plays in favor of those individuals with lower literacy skills. At the same time such a step could support oral traditions of storytelling and communication, both central aspects of tikanga Māori. Whale Watch Kaikoura’s solution to this issue is simple and effective: to provide a low-speed text only version with all the important information of the site alongside the high-bandwidth flash-version.

The potential of the internet will also be limited regarding Māori identity if aspects of importance to Māori identity are not represented online. It was shown that this, too, is becoming less of a concern as more websites are created by Māori, for Māori and are following Māori tikanga. Māori cyberspace represents many subject matters considered of importance to Māoridom offline. Various iwi, hapū and whānau created a homepage their people can return to online. The broad variety of topics ranging from traditional cultural practices and mātauranga to business advancement and support specifically aimed at Māori entrepreneurs as well as Māori internet and ICT interest groups mirror the diversity of Māori society offline. The research further highlights that online opportunities for cultural, social and economic retention and advancement are taken up by Māori as the majority of websites within the MHN are provided by Māori hosts. Significant areas of exception however must be stressed: internet sites within the MHN specifically dedicated to history and some relating to the subject of Māori art are provided by non-Māori hosts. The fact that they are nonetheless acknowledged by network members and the widespread interest in both these subject matters amongst the participants along with importance of control over mātauranga Māori expressed by the users indicates that this area still has room for improvements.
Language is central in the development of identity and concurrently a significant identity marker (Jenkins, 2008b). This is no different when it comes to te reo Māori which is, due to various factors, a minority language within Aotearoa, Māoridom and Māori cyberspace alike. However, the dominance of English in all three spheres is likely to become lessened in the future as greater numbers of Māori (re)gain proficiency in te reo. The World Internet Project New Zealand (WIPNZ) survey included a question only addressed to speakers of Māori and Pacific languages inquiring whether they believed that “the Internet is helping [to] keep their languages alive rather than the opposite” (Bell et al., 2008, p. 16). The responses showed that many (51 percent) agree with this statement in contrast to 23 percent disagreeing to some extent. A sentiment shared by the interview participants. The internet contributes to the language being ‘kept alive’ as it offers yet another “sanctuary” (Stein, 2006, p. 118) for te reo to be ‘heard’ and ‘spoken’. The use of te reo does increase the exposure of the language and can therefore contribute to greater familiarization with and ‘normalization’ of the language within the wider community. More extensive provision of internet sites in both languages, though, would allow those who know te reo to use their skills. Even if not all surfers are fluent, the simple possibility to try is important to keep a language an active part in everyday life, a point made by the users of Māori sites and also an important aspect of official language strategies (Hohepa, 2000; Te Puni Kōkiri & Te Taura Whiri i te Reo Māori, 2003).

For a long time, the internet was widely likened to McDonald’s and Disneyland. It was perceived to be just another channel to spread American culture to the rest of the world (Flynn, 2000). Just as English dominated within the early WWW, this has been similarly true regarding its structure in the form of the domain name system. Generic top-level domains (like .com) are generally open to the world market. Smaller cultural communities were initially excluded from having their own domain space unless they were an officially recognized country (National Research Council, 2005). Aotearoa’s DNS has been culturally accommodating from its beginnings and

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123 The numbers here differ from those presented in Bell et al. (2008) as the ‘strongly disagree’ figure is incorrect in the report and should be 7.9 percent (N. Smith, personal communication, 08.10.2009).
became increasingly indigenized. The introduction of .maori.nz was the first step in this direction and would not have been possible without the persistence of influential individuals within the Māori internet community. It also would have never taken place without the acceptance of the wider internet community. The support for the introduction of .maori.nz was overwhelmingly positive. This success, it was argued in Chapter Three, was strongly influenced by the existence of bicultural sentiments in New Zealand at the time.

Although awareness of both .maori.nz and .iwi.nz amongst the participants was very low such developments nonetheless can contribute to the strengthening of Māori identity. Certainly Māori could be settling into the WWW without their own cyber-rohe, but the mere existence adds another site in which this ethnicity is relevant in organizing social life. By continuing to be active when it comes to the DNS and to ensure it meets the changing cultural and social needs, Māori are also able to steer the discourse about Māori identity, even if it is mostly limited to debates within Māoridom. The change to the criteria of .iwi.nz and the preceding discussions about what can be acceptable as ‘iwi’ from the perspective of Māori is a good example of that. It can therefore be concluded that the internet in this respect contributed positively to the negotiation of Māori ethnic identity in the past and is likely to do so in the future.

While the preceding four aspects (access, content, language and structure) all highlight positive developments, it cannot be ignored that Māori knowledge and treasured possessions are exposed to greater challenges in this digital environment. Awareness about this negative side is widespread. The lack of knowledge about what is proper to provide online on one hand and uninformed users on the other create a climate of uncertainty and worry amongst hosts and users alike. To counter this, some hosts decided to develop guidelines for themselves. The users thought that more engagement with visitors and hosts who might not be familiar with tikanga in relation to Māori knowledge is necessary. Also, their call for greater involvement of kaumātua in the creation of online content and the ceremonial blessing of websites further underscore that Māori tikanga is highly relevant even in cyberspace. Existing
ambivalences surrounding tapu content like whakapapa as well as highly treasured information and artifacts like photos and whether they should be available online constitute difficult demands for hosts and web-developers. They will always please some while upsetting others, no matter what they do. Both hosts and users judged the internet to be a suitable and useful technology for Māori individuals and communities alike. Access to information, though highly valued, should not supersede the protection of taonga. But fears of possible misuse or loss of control should not completely deter Māori from using the internet either. Even this potentially negative aspect has the capability to contribute positively to Māori identity, as any proactive approach requires open debate about what is perceived as proper within Māoridom and how to face these challenges. Such debates are likely to continue in the future.

So far, it can therefore be concluded that the opportunity for the internet to contribute positively to Māori identity offline is a given reality as increasing numbers of Māori connect, more content in greater variety is available, Māori language content is growing, the DNS is further indigenized and negative challenges are faced. The greatest advantage can be seen in the fact that on one hand none of these developments negate the importance of traditional values and practices; a possible threat often associated with globalization and Western technology (Kamira, 2003; C. Smith, Burke, & Ward, 2000). On the other hand these developments contribute to greater debates about what is important to contemporary Māoridom. On a level of a pan-tribal ethnic identity, but also regarding tribal identities, the internet can indeed be considered to be a relevant site of identity negotiation and assertion which allows and to some extent requires Māori to take the lead in determining for themselves where Māori cyberspace is heading in the future. Not only is Māoritanga made a relevant aspect of Aotearoa’s cyberspace but Māori greatly contribute to impress their mark on it.

When we shift our attention to the individual, the answer to the research question mirrors the discussed ambivalences expressed by the interview participants and is linked to the diversity of life circumstances and differences in their identity as Māori.
From the conversations with Māori internet users, three categories can be discerned. Māori with a strong identity who are firmly embedded within te ao Māori and with ready access to knowledgeable individuals. The second category also has a strong identity as Māori, however due to their (living) circumstances cannot easily approach knowledgeable people face-to-face. The third category includes individuals who have a comparatively ‘weaker’, more insecure or even marginalized identity as Māori, who are less knowledgeable, but who are interested or already committed to learning.

For the first of these categories the internet is very limited in terms of its impact on individuals’ self-identity as Māori. Within Māoridom, face-to-face interaction has always been a central process in learning about things Māori, particularly when highly treasured and tapu. The first category hence values these traditional processes of learning. Interactions with older generations are more important than easy access to information. The internet is perceived to diverge too strongly from this traditional practice. The internet therefore is considered very limited in its potential to contribute positively to a strong and meaningful Māori identity. An advantage of the internet nonetheless lies in its ability to function as a communication and information tool in more general terms. The latter relates less to mātauranga Māori, but more so to general information relevant to Māori in everyday life; news, events, general historic knowledge, meanings of Māori words. Learning about Māori culture, history and tikanga on the internet is not perceived as effective but this does not mean that Māoritanga is irrelevant or left behind when engaging with cyberspace. Instead of being a site of identity construction per se, the internet is an additional sphere of everyday life.

The possibility of the internet to contribute to an in-depth Māori identity is similarly limited for the second category. More precisely, cyberspace in its current form is limited. This group in fact sees a great potential in this technology for Māori all over the world to keep informed about what is going on in the Māori world and to learn about mātauranga Māori. Tikanga, while acknowledged to be of importance, restricts this potential because traditional practices are not adapted to the circumstances Māori
find themselves in today. The internet is a practical tool which could allow the limitations of everyday life to be overcome. The access to a wide range of information – including mātauranga Māori, tapu information and tikanga, but also matters of global relevance from a Māori perspective – is paramount for all Māori and should not be denied to those who are not embedded within Māoridom due to their current circumstances. The promise of this technology however is closely linked to the matter of availability of content which is itself limited. While it is acknowledged that the material available is good, it is not enough. All of this is not to mean that access necessarily should be open to everyone in all cases. The protection of tapu and otherwise valued knowledge can be upheld if certain steps are put in place. Content and the protection of knowledge are both areas which require further improvements before the internet can effectively contribute to Māori identity offline.

For the third category the internet can be most beneficial in terms of its contribution to individuals’ identity. This category, as stated above, includes persons who have little or no knowledge about Māoridom and who have a weak identity as Māori, compared to the other two groups. Even though only one of the interview participants can be considered to fall into this category earlier in her life, the narratives of all others equally support this conclusion. Deriving from the previous group’s assertion that the available content in most instances is limited to basic information and the first group’s insistence that face-to-face contact is more important in the development of a meaningful and strong identity as Māori, the state of Māori cyberspace is suitable to support the development of a basic understanding about Māoridom. This includes subject areas such as Māori history, culture, language, tikanga, whakapapa, tribal organizations, the Treaty of Waitangi, the political situation and other areas.

However, as these individuals develop greater knowledge about Māoritanga the internet is likely to become less significant to them as well. This was the experience of one of the participants. The internet can make three significant contributions in this early stage of the (re-)vitalization process. Firstly, as noted above, it can provide
access to basic information. Secondly, it can provide acknowledgement of their identification as Māori, particularly if it is denied, questioned or ridiculed by people surrounding them. Thirdly, the internet can function as a gateway to get in contact with others who are either in a similar situation as themselves or to help them in their journey to discover who they are as Māori. This is one area the participants particularly stressed to be in need for further improvement: interactivity and approachability of knowledgeable people.

The viewpoints of the first group find very strong support by various theoretical understandings which put emphasis on the importance of an ongoing social interaction in social settings for the development of an in-depth knowledge about social norms and acceptable roles (Callero, 2003). It has been criticized by some participants, both hosts and users, that ever more Māori spend too much time on the internet and neglect important relationships. Youth in particular are increasingly enthused by the internet instead of approaching knowledgeable people within their whānau. This criticism however does not seem to be supported by the WIPNZ survey results, as non-users spend less time with family members and with friends compared to internet users (Bell et al., 2008, pp. 32-33). The internet can play a tangential role when it comes to face-to-face interactions by supporting easy and frequent communication to keep relationships active, particularly with whānau overseas, and by providing access to information about events which then support face-to-face interaction to take place.

Chapter Two explored ethnic identity in terms of Christian Karner’s (2007) three dimensions: structure of action, as a way of seeing and as structure of feeling. Karner noted that ethnicity as a structure of action both guides and limits individual action. This is, it has been shown, certainly true within Māori cyberspace as tikanga Māori very much shapes the content available online, especially content provided by Māori. It equally affects the actions and views of Māori individuals when they connect to the internet. The internet therefore can be understood to contribute to the maintenance of Māori ethnicity in this respect. But social structures of action can also change over time, a call which was strongly voiced by some participants. The
internet’s impact on ethnicity as a way of seeing te ao Māori has to be considered to be very limited. This means that the internet is unlikely to contribute significantly to the development of schemas which are important in processes of categorization and interpretation of information. But again, this does not negate that ethnicity influences individual’s engagement and interpretation of online content. Schema, however, have to already be in existence. The internet’s role regarding Karner’s last dimension, structure of feeling, is more considerable. This is the case because the internet enables Māori hosts to present Māoridom in a positive light and to rebut negative representations, Māori pride groups (according to one user) make up a great proportion of Māori content on social networking sites such as Bebo, and it allows individuals with marginalized self-identifications to find acknowledgment by others or to increase their (cultural) competency. All of this contributes to a positive feeling about Māoritanga and about oneself as Māori. An area requiring greater emphasis in this regard needs to be stressed: Māori role-models and success stories from all sections of Māori society.

Huia Tomlins Jahnke (2002) writes about the ‘physical’ or ‘metaphysical link’ Māori women were able to establish to keep connected to their homelands which contributes positively to their identity as Māori. Both of these connections however are strongly embedded in social interactions, the difference being that the ‘physical link’ requires actually living within the homelands and engaging with the people or to revisit the rohe regularly and to participate in everyday activities. The ‘metaphysical link’ develops through interaction with whānau and by practicing tikanga like whanaungatanga and manaaki in urban contexts. This research can only come to the conclusion that the internet can only establish a ‘virtual link’ devoid of face-to-face engagement with whānau and kaumātua as well as other central social practices and is therefore not able to contribute to a strong and meaningful identity as Māori.
Further research

The focus of this thesis on Māori websites unavoidably ignored other aspects of Māori cyberspace. The following turns our attention to some areas which warrant empirical engagement.

The spread of social networking sites and their use is ever increasing. This aspect of the internet however was not a central concern of this thesis. Nonetheless, they were mentioned by all interview participants. This area would hence be of great importance to be a subject of research as it takes up a great proportion of the time spent online and also because more and more Māori organizations (the Māori Party has been mentioned prominently) are making use of these tools. *Bebo* and *Facebook* were noted to be used to keep in contact with friends and family, but these technologies can also be utilized to disseminate information and opinions, promote events such as performances, hui and working-bees on marae. One participant in particular noted *Bebo* in connection with ‘Māori pride’ groups. Further research could investigate how Māori individuals and groups make use of these spaces and for what purposes.

Similarly, blogs, guestbooks, forums and discussion groups were not considered in this research. However, I am aware that several discussion groups on te reo Māori and Māori politics exist and some of them indeed are rather active at times. This is also true for forums, guestbooks and blogs. Research undertaken in this area could establish what sorts of topics are addressed in these spheres of the internet, who uses them and for what reason. It could also be of interest to learn about what encourages the use of such technologies and concomitantly, what holds them back. A further area of interest could be the linguistic side of such communication tools. From browsing messages posted on *Bebo* the use of te reo Māori within broader English is common, but also the use of text-Māori is an often occurrence. The adaptation of te reo to electronic communication might therefore be an interesting area to explore as well.
This thesis focused on Māori individuals and their experiences with the internet. Further research therefore is necessary to investigate the utilization of the internet, including social networking technologies, by Māori organizations and businesses. This is not only in regards to their own online presence, but also how they use internet resources to advance their work. Some hosts made mention that the internet is used for networking with experts or other similar organizations and to access information of relevance to them. Just as this research was interested in whether individual users are finding the resources they are looking for online, further research could investigate what information different organizations are looking for and what they are missing to support their goals. This can be increasingly vital for tribal organizations and rural communities in accessing local and central government information, education resources, policy information which might affect them, particularly regarding social services and resource regulations and similar fields. Whetu Simon’s proposed work was mentioned in Chapter One which demonstrates that interest in this area exists within Māoridom and that research funding grants are available (Massey News, 2007b).

However an area which might not attract this level of financial support but which will be just as important for Māoridom is in-depth research into tribal websites and how well they meet their own tribal members’ needs. This is a particularly difficult challenge if the membership is very diverse. The information, resources and services their members living within the rohe require is likely to be different to those living in the cities or rural communities outside the rohe and even more so to those living overseas. But all will also have common needs. Such research could be especially useful for smaller tribes as they are more likely to face financial constraint and efficient use of their resources is even more vital.

A matter not addressed by this research at all concerns Māori IT-professionals. The New Zealand Māori Internet Society promotes an increase in the number of Māori working as web-designers, programmers and developers. Research into the specific requirements Māori website providers have of web-designers and webmasters as well as videographers, audio-engineers and translators would allow for a better
understanding of the skills, including non-technical, which are sought after. The knowledge gained cannot only be used to develop more suitable training programs but possibly to also shape the school curriculum, support career advisors and to increase the general interest among Māori youth in this profession.

**Whakamutunga – Closing**

No reira, this western technology has, contrary to early concerns, not eroded Māori culture, traditions and practices; in some respects, it has been to the contrary. Previous experiences of struggles created an awareness which led Māori hosts and users to approach this technology with caution but concurrently with interest. While calls for greater adaptation of traditional practices regarding Māori knowledge are being voiced by some, the same people also call for greater involvement of kaumātua in the creation and blessing of Māori content online. The implementation of this wish would transpose yet another central aspect of Māoritanga to cyberspace. The internet has, it can be said with some confidence, little significance in the development of strong Māori selves. Nonetheless, being able to find *us* (from the perspective of Māori) represented online amongst all the *others* and to find information of relevance to oneself as Māori, even if room for improvement in some areas is great, adds another dimension to just *be* Māori.

Hai whakakapi, ka waiho ake ki tētahi o ngā kaihautū te kōrero whakamutunga.

*In closing, I would like to give the last word to one of the participants.*

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124 Consequently; commonly used to ring in the closing of a speech.
Questionnaire

Postal contact: Cover letter

Māori identity and the Internet

Tēnā koutou katoa,

My name is Catharina Muhamad-Brandner. I would like to invite you to take part in a research which I am conducting as part of my PhD degree with the Department of Sociology at the University of Auckland. My research is on Māori identity and the Internet and I am seeking hosts of websites concerned with Māori issues to participate in a short online questionnaire regarding their website.

I obtained your contact details from your website (URL) which was selected through a process of hyperlink analysis.

This letter includes a document with more details on the research and the link to the online questionnaire. Please do not hesitate to contact me if you have any questions or concerns with regards to the survey.
Participation is voluntary. I am not able to distinguish whether you responded to this invitation or not. I will therefore send you a reminder in about two weeks. If you would like to opt-out of the survey, please just ignore this invitation and the reminder or contact me directly.

Please feel free to forward this invitation to the most appropriate person within your organisation, maybe a webmaster or person responsible for the content of your website.

Your time and interest is highly appreciated.

Nō reira noho ora mai rā.
E-mail invitation and Participant Information Sheet

Maori Identity and the Internet – Survey Invitation
Tena koe,

My name is Catharina Muhamad-Brandner. I am a student from Austria currently enrolled in a PhD degree with the Department of Sociology at the University of Auckland. I am interested in the early adoption of the World Wide Web by Maori and other organizations to address Maori interests. I am conducting research for my thesis on Maori identity and the Internet. I am seeking hosts who provide websites concerned with Maori issues to participate in my study. This sheet provides you with information regarding this research (If you would like to receive this information in te reo Maori, please contact me directly).

You are invited to participate in an online questionnaire. Your website [URL] was selected through a process of hyperlink analysis; your website was linked to by at least two other websites concerned with Maori issues. Please feel free to forward this invitation to the most appropriate person within your organisation, maybe a webmaster or person responsible for the content of your website. At the beginning of the questionnaire you will be able to select your preferred language (Maori or English). The questionnaire consists of a maximum of eight questions regarding your website and should take no longer than 15 minutes.

Participation in the research is completely voluntary. You certainly have the option to opt-out of the survey. The questionnaire is provided by Survey Monkey (www.surveymonkey.com). Survey Monkey is bound by a privacy agreement and does not allow access to your information, including e-mail address, by third parties.

Survey Monkey is a professional online survey tool. Your IP-address will not be tracked. Responses can not be linked to individual participants and withdrawal after a survey is submitted is therefore not possible. Efforts will be made to keep all provided information confidential. Publications relating to this research will not identify individual responses and will not make reference to names and other identifiable information you may have provided in your answers. Any information you provide as part of the survey and your e-mail address will not be used for any purposes other than this research project.

Should you choose to give your answers in Maori a translator, who is bound to keep all information confidential, may be consulted.

The survey will be active for three weeks after the initial invitation. I will send you a reminder two weeks after this initial invitation. If you would like to opt-out of the survey, please just ignore this invitation and the reminder or contact me directly. If you do not want to answer or do not feel comfortable with any section of the survey please feel free to move to the next question. You are not required to respond to all questions or provide a reason for your decision.
Data in the form of computer files will only be stored on password protected computers and print-outs will be kept securely in my locked office at the University of Auckland. All responses and data will be deleted and destroyed no later than 14/11/2010.

In appreciation of your time I would like to offer you an electronic version of the thesis once it is finished. At the end of the questionnaire you will be provided with the e-mail address of my supervisor Dr. Steve Matthewman who agreed to collect requests by those respondents who wish to receive a copy. Only after the questionnaire closed will he provide me with a random list of all contacts. This does not allow me to identify your response by linking the day or time of any response to your e-mail to my supervisor.

Thank you for your time and interest. Your participation will contribute to a greater understanding of websites concerned with Maori issues. If you decide to participate in the study please follow the link to the questionnaire [link].

If you have further questions or wish to know more please do not hesitate to contact me by phone or write to:
Department of Sociology
The University of Auckland
Private Bag 92019
Auckland 1142
Email: cbra039@aucklanduni.ac.nz
Telephone: (09) 373 7599 ext. 88665

Dr. Steve Matthewman and Dr. Lane West-Newman are my supervisors and Dr. Tracey McIntosh is my Maori advisor. Dr. Bruce Curtis is the Head of Department. They can be contacted at the following address or by telephone:
Department of Sociology
The University of Auckland
Private Bag 92019
Auckland 1142
Telephone: (09) 373 7599 ext. 85057

For any queries regarding ethical concerns you may contact:
The Chair
The University of Auckland Human Participants Ethics Committee
The University of Auckland
Office of the Vice Chancellor
Private Bag 92019
Auckland 1142
Telephone: (09) 373 7599 ext. 87830

Questonnaire structure

Figure 36: Screenshot of the online questonnaire
Maori identity and the Internet - Te tuakiri Maori me Te

Please indicate your language preference.
(Return here by clicking 'Prev')

Tohua mai koa te reo e hiahia ana koe ki te whakamahi.
(Ma te patene 'Prev' koe e whakahoki mai ki konei)

☐ Maori  ☐ Tautiwi

Consent Form (Questionnaire) - Māori identity and the Internet

Consent Form (Questionnaire)

Researcher: Catharina Muhamad-Brandner

I have been given and have understood an explanation of this research project. I have had opportunity to ask questions and have them answered. I understand that the participation is voluntary and that I can not withdraw myself or any information provided in the questionnaire after submitting the survey.

• I understand that I am not required to answer all questions.
• I understand that responses are kept separately from e-mail addresses.
• I understand that all information and e-mail addresses are only used for the purpose of this research project.
• I agree that my response may only be published without the identification of individual responses and without reference to names and other identifiable information.
• I understand that for any information provided in Māori a translator bound by a confidentiality agreement may be consulted.
• I understand that the data and print-outs are stored securely and are destroyed no later than 14/11/2010.
• I understand that the online questionnaire takes approximately 15 minutes.

By submitting this questionnaire electronically I agree to take part in this research under the terms indicated in the Participant Information supplied.


I am 16 years or older.

☐ Yes  ☐ No

Pepa Whakaae (Rārangi Pātai) - Te tuakiri Māori me Te Ipurangi

Pepa Whakaae (Rārangi Pātai)

Kairangahau: Catharina Muhamad-Brandner

E mārama ana a koe ngā whakamārama kua homaihi nei ki a au mō tīnei kaupapa rangahau. Kua whai wāhui a ki te pātai i aku pātai, a, kua hoki mai anō hoki ngā whakatu. E mārama ana a koe ka kuhu tao mai te kaiwhakuru ki tānai mahi rangahau, kia mana kua tūkua kāna ara e au te tinohanga whānui, e kora a e āhui ki te kākume mai i a au tonu me ngā pārongo kua hoata e au.

• E mārama ana a, ehu i te mea me whakautua rawatia e au te kata o ngā pātai.
• E mārama ana a, kia whakaihia ra, e he kōrero whakautu me ngā whātiwhā kore kore, kore kore.
• E mārama ana a, ko ngā pārongo katoa me ngā wāhi kore kore, mō noho mutu, kore a ki tīnei kara mai a au.
• Ka tae ana a ko whakautu, e whakaae ana a me kaua rawa aua whakautu, ngā ingoa rānei me tōku anō pānga ki ngā pārongo e whakautuhia.
• E mārama ana a, hei ngā pārongo reo Māori, ko te kaiwhakamōri ka kōrero rānei, ka herea ki a mataatpu tonu
Maori identity and the Internet - Te tuakiri Maori me Te

Kua teku mā ono tako pakeke, hipa atu rānei.

☐ Ae
☐ Kāo

When was the website first launched on the Internet?
Please use numbers i.e. March 2006: 3 and 2006
If the month is unknown please enter 0

Nonahoe i whakarewahia ai te paetukutuku nei ki Te Ipurangi?
Mena kāore e mōhiotia ana te marama, whakaurua noatia atu te 0.

Month + Marama
Year + Tau

Please explain why the website was developed.

Whakamāramahia mai koa, he aha i whakawhanakehia ai te paetukutuku nei.

Approximately, how many visits does the website attract per month?
If the number of visitors is not tracked please write 'NA'.

Toro mai ai te hunga kaitoro ki tēnei paetukutuku; e hia wā ia marama? Mehe mea e kore e taea e koe tenei te whakatau, tēna koa tuhia te 'NA'.
Maori identity and the Internet - Te tuakiri Maori me Te

How often is the website updated?

☐ Daily • 1a Ra
☐ Several times a week • He maha tonu ngā whakaeautanga ia wiki
☐ Weekly • 1a wiki
☐ Several times a month • He maha tonu ngā whakaeautanga ia marama
☐ Monthly • 1a marama
☐ Never • Kore tonu
☐ Other (please specify) • He kōrero noa atu (kia tauwhāti mai ō whakamārama)

Is the website, or parts of it, available bilingually in Māori and English? For example, the visitor is able to switch between the languages but the content stays the same.

Ko ngā pārongo ā-paetukutuku nei, kei roto te katoa, ētahi wāhanga noa nei rānei i ngā reo e rua, arā, kei te reo Māori me te reo Tāuiwi?
Hei tauira, ka taea rānei e te kaitoro paetukutuku te whakawhiti atu mai i tētahi reo ki tētahi, me te mau tonu o te ngako o te kōrero.

☐ All pages • Ngā whārangī katoa
☐ Many pages • Te suria atu o ngā whārangī
☐ Some pages • Ētahi o ngā whārangī
☐ None • Korekau
☐ Other (please specify) • He kōrero noa atu (kia tauwhāti mai ō whakamārama)
Maori identity and the Internet - Te tuakiri Maori me Te

Do you plan to increase the number of bilingual pages available on your website?

☐ Yes • Äa
☐ No • Kāo

Additional comments: He kārere noa atu (kia tauwhātiti mai o whakamārama)

In your opinion, in what way can the internet be harmful to Māori individuals and communities and in what way can it be beneficial? Please explain your answer.

E al ki a koe, he aha pe a nga kino o te ipurangi ka tau mai ki tenei mea te Maori me te haporī, ā, he aha ake rānei ōna tino hua? Tēnā koa kia tauwhātiti mai o whakautu.

Tēnā koe!

Thank you for participating in this research. I appreciate your time and the information you have provided.

I would like to send you an electronic version of the thesis once it is finished. If you wish to receive a copy please send an e-mail to my supervisor Dr. Steve Matthewman (s.matthewman@auckland.ac.nz) who will collect all requests and provide a random list with all e-mail addresses to me after the questionnaire closed. This ensures that I will not be able to link your response with your e-mail.

Nō reira noho ora mai rā.
Catharina Muhamed-Brandner
cba039@aucklanduni.ac.nz

Tēnā koe!

Tēnā rawa atu ō koe i whakauru mai nei ki tenei mahi rangahau. E tino mīhi ana ki a koe i tahuri mai nei ki te homai i ēnei pārangoe.

Kia oti rā ia au tuku tushinga whakapae, e pirangi ana au ki te tuku atu i te kape 8 rorohiko māhu. Māna e pai ana tērā ki a koe, tēnā koa tona o mai tō karere rorohiko ki taku kaiwhakahaere, ki a Dr. Steve Matthewman (s.matthewman@auckland.ac.nz), māna nei ngā tona e whakawhātū, 8, māna ahū koi ngā wāhitu karere rorohiko metepākere o tona mai ki a au koe kati te Rārangi Pātai. Hei kora, kua kore e taea e au te whakawhangaanga atu tō tona ki tō karere rorohiko.

Nō reira noho ora mai rā.
Catharina Muhamed-Brandner
cba039@aucklanduni.ac.nz
Interview

Interview structure

Personal Information
- Age
- Work
- Education
- Living situation
- Children

Māori identity
We noted earlier that my research is on Māori identity and the internet. Can you tell me what it means to you to be Māori? What are the important aspects to being Māori for you personally?

- Do you identify with any iwi or hapū? [No need to know actual affiliation]
- Do you participate in activities concerning your iwi or hapū?
- Do you feel you have a lot of knowledge about Māori culture?
- How is your knowledge of the Māori language?
- How good do you consider your Māori reading skills to be?
- How important is it to you personally to maintain or learn about Māori culture and the Māori language?

General use of the internet
I would like us to begin to talk about the internet. Can you tell me a bit about your general use of the internet and your online experiences? How long have you been using it? What do you generally use it for? From where do you connect? What about your connection speed? Anything that comes to your mind…

- How long have you been using the internet?
- What do you use the internet generally for?
- Where do you connect to the internet from? Home or work?
- Do you consider your internet connection to be fast or slow?
- What would you say is your internet skill level?
- In the last seven days, how many hours would you guess you spent online?

Māori related use of the internet
I would now like you to talk more specifically about your experience with internet sites on Māori issues. Please try to remember the last time you visited a website relating to a Māori topic. Can you take me through this experience? What motivated the visit? How did you go about it? What was it about?

Have you ever looked for websites on any of these issues relating to or for Māori?

- Business
- Contemporary or traditional (performing) arts
- Education
- Entertainment
- Environment/Nature/Plants/Planting
- Food
- Funding or scholarship
- Health
- History
- Land issues
- Language
- Merchandise, products, souvenirs
- Mythology and legends
- News
- Online-communities
- Organizations
- Political issues
- Research by/on Māori
- Social issues
- Spiritual/religious topics, karakia
- Tourism
- Treaty of Waitangi
- Whakapapa

I usually visit Māori websites for my work or for my te reo studies. What are your reasons for visiting Māori websites?

Did you ever do any of the following things online? Can you please explain why or why not?

- Sign a guestbook on Māori internet sites.
- Would you mind sharing what the message was about?
- Sign up to receive a newsletter from Māori websites
  What are the newsletters about? How often do you receive them?
- Participate in a Māori forum or bulletin board.
  What is the forum about? Are you participating on a regular basis?
- Participate in Māori online-communities or chat-groups
What is it about? Are you participating on a regular basis?
Meet with people in person whom you knew from online Māori communities.
How was the meeting? Are you still in contact?

**Iwi/hapū sites**

I would like to turn the conversation to tribal websites. What do you think about tribal-sites? Are they important? What information and resources do you suggest internet sites by iwi or hapū should provide? For whom should this information be available?

Have you visited tribal internet sites before?
Can you tell me more about it?

If participants identify with any iwi or hapū

Is your iwi or hapū present in cyberspace?

*if yes*

Have you visited the website?
Can you tell me about it?
Do you visit it often?
Why do you visit it?
How well does the internet site represent your iwi or hapū?

Did the website allow you to learn something new about your iwi or hapū or to better understand certain aspects like the organizational structure or whom you can contact if you needed something?

*if no*

Would you like your iwi or hapū to be represented online?
Why/why not?
Would you visit the website if one was to be launched?

Do you think that a website can contribute to someone reconnecting or identifying stronger with their iwi or hapū?

Why? Why not? In what way?

**Opinion on Māori cyberspace**

**Language**

Māori is an official language in Aotearoa/New Zealand and more and more people know the Māori language or are learning it. If you think about Māori websites you
have visited in the past, what do you think about the Māori language use on the internet?

What do you think about the kind of Māori language used on websites?
Is it accessible or too hard for most people to understand?
What do you think of bilingual websites?
What language should internet sites by national and local government use?

Children/youth
Māori children and youth are often eager to adapt new technology. Do you think that the content on the internet meets the need and interest of Māori youth?

If the participant has children:
Are your children allowed to use the internet?
What are they using it for?
Do you encourage them to visit Māori sites? Why/why not?

2nd level domain
Have you noticed that some websites have .iwi.nz or .maori.nz in their web address? These are the first indigenous 2nd level domains or web addresses in the world and .maori.nz was developed because of the initiative of Māori. .iwi.nz is restricted to tribal organizations and .maori.nz to websites with Māori content. What do you think about these special Māori web addresses?

Harm
The internet is sometimes said to have negative effects on people and communities. In what way do you think is the internet harmful to Māori individuals and communities?

Often one hears that Māori are misrepresented in public or Māori knowledge and intellectual property are misappropriated. Do you think that this is taking place on the internet as well?

What do you think about the use of Māori symbols and important knowledge which is considered tapu by many, like whakapapa, on the internet?

Benefit
In what way can individuals but also communities benefit as Māori from using the internet?

Influence on personal life
What impact does the use of the internet and in particular of Māori websites have on you as a Māori? How did it influence your awareness or understanding of cultural practices or social issues?

Did it encourage you to get actively engaged in any of the following?

- Māori language (learning or teaching)
- Art, art classes
- Cultural group
- Sports
- Events
- Research on whakapapa
- Funding/scholarship

**Summary**

We have talked about different aspects relating to the Māori world in cyberspace. Generally speaking from your experience of Māori websites, what do you think about their content relating to Māori culture? Do they represent Māori fittingly? Can Māori individuals actually gain something from them?

If you could send a wish-list to the providers of website, what would you write on it regarding Māori culture and language? What topics, resources or services are missing on the internet or need to improve?
Te tuakiri Māori me Te Ipurangi
Pārongo mā te Kaiwhakauru (Patapatai)

Tēnā koe,

Ko Catharina Muhamad-Brandner taku ingoa. He ākonga ahau nō te whenua o Austria, arā, kei te Tari Sociology o te Whare Wānanga o Tāmaki Makaurau ahau e whai ana i taku Tohu Kairangi, arā, te PhD. Ko taku kaupapa rangahau mō tuku tuhina whakapae, ko te tuakiri Māori tonu me Te Ipurangi. E aronui ana au ki te World Wide Web me ōna nekeneke, engari ko te kaupapa e tino hiahia nei au ki te mātai, ko tā te Māori tāna whakawhanake, tāna whakamahi anō hoki i tēnei momo hangarau. Nā reira, ko ngā tāngata e tono atu nei au kia whakauru mai ki tēnei rangahau ko ngā Māori tāna whakamahi nei i Te Ipurangi. Kei te pepa nei ngā kōrero whakamārama mō tēnei rangahau.

Nā reira he pōwhiri tēnei kia whakauru mai koe ki te kōrero whakamahi Ipurangi. Ko ngā patapatai ka arotahi tonu ki ōu ake whakaaro me ōu momo whakamahi i ngā paetukutuku Māori. Ka kotahi haora pea tāua e patapatai ana. Ki te whakaee mai koe, ko hui tahi atu tāua ki te wāhi me te haora anō hoki e pai ana ki a koe, ā, ka āhei anō hoki tō whānau, ō kaitautoko rānei te kuhu mai. Mena ka whakapau moni rawa koe kia ea ai te wāhi ki a koe, ka whakahokia tonutia atu ō moni.

Ko te hunga ka whakauru mai ki tenei rangahau, ka kuhu tuao mai. Mena ka auwhi koe i ngā pātai, i ngā kaupapa kōrero rānei, ka pai noa iho tō noho wahanu. Hei ā tāua e kōrero rero ana, ka pai noa tō patapatai i a au. Mea rā e pai ana ki a koe, ka hopukina o kōrero ki te mīhini hopu reo, engari kī ana koe kia whakawetoa, kua weto taua mīhini rā. Hei te wā rā ā tīna a te rangahau nei, ka whakahokia atu aua hopukanga kōrero rā ki a koe.

Ko te whāinga matua, kia matatapu ngā kōrero nei. Ā, kia kore ai hoki e mōhioitanga nāu ake aua kōrero rā, ka whakarerekē haerehia ngā pārongo, ka wetekina mai rānei i te kape tuhi. Hei te tānga o ngā pārongo, e kore te tangata e mōhio nāu ake aua kōrero rā. Ki te kore e riore māku te kape tuhi e tuhi, ka tukuatanga atu ki a Academic Consulting, ā, koia hoki tēnā ka herea nā kia noho matatapu tonu ai ngā pārongo, engari i muia i te rirohanga atu o te kape tuhi i a Academic Consulting, ka ukuia nā ngā pārongo e tohu ana ko wai a wai, he aha te aha.

Ka āhei koe ki te pānui i te kape tuhi patapatai, ā, hei reira koe e whakamātau ai mena i hāngai tonu ki tāu i whakapuaki, i whakaroai. Hei te wā e puta ai te kape tuhi, kei a koe te tikanga
mehemea ka unu mai koe i a koe i te rangahau nei, te whakakāhore i ētahi rānei o ō kōrero i hopukina rā, engari me whakamōhio mai hoki koe ki a au i roto i te kōtahi wiki o te putanga o te kape tuhi.

 Ko ō kōrero kua hopukina rā me te kape tuhi, ka rakaina ki roto i taku tari i te Whare Wānanga o Tāmaki Makaurau. Ko ngā kōnae roirohiko, ka rīro mā te kupu whakataha rawa e whakatuwhera. Ko ngā hopukanga kōrero (mena rā kāore koe i te hiahia ki ērā), ko te kape tuhi me ngā kōnae roirohiko ka pā katoa nā kī te kaupapa rangahau nei, ka whakangaroa atu i mua i te 14/11/2010.

 Heipū ka mānaturatū koe i ngā mahi rangahau nei, ka whakaritea he tumu kōrero hei kōrerotanga māhau, ā, ka taea hoki e koe te waea a Lifeline 0800 111 777.

 Mō te wāhi ki a koe, he koha tāku māhau mai i taku whenua o Austria, ā, ko te whakaaro kē rānei a Real Groovy e rua tekau tāra nei te uara te mea e hiahia ana koe, heoi anō, hei te ērangi o taku te hiaha a whakapae, mea rā e pīrangi ana koe ki tētahi, ka hoatu e au he kape māhau.

 Tēnā rawa atu rā koe i ngākaunui mai nei. Nā tō whai wāhitanga mai ki tēnei rangahau, tērā ka mārama ake tātou he ake ahe ngā pānga o tēnei mea mea te Ipurangi ki te tuakiri Māori. Mehemea he pātai āhau, e hiahia ana rānei koe ki te kūhau mai ki ki te kaupapa rangahau nei, tēnā koa whakapā atu: tēnā koa whakapā atu ki te:

 Department of Sociology
 The University of Auckland
 Private Bag 92019
 Auckland 1142
 Karere roirohiko: cbra039@aucklanduni.ac.nz
 Waea: (09) 373 7599 ext. 88665

 Ko Dr. Steve Matthewman taku kaiwhakahaere matua, ā, ko ia tēnā kei te:
 Department of Sociology
 The University of Auckland
 Private Bag 92019
 Auckland 1142
 Karere roirohiko: s.matthewman@auckland.ac.nz
 Waea: (09) 373 7599 ext. 88616

 Ko Dr. Lane West-Newman taku kaiwhakahaere tuarua, ko Dr. Tracey Mcintosh taku kaitohutou Māori, ā, ko Dr. Bruce Curtis te Tumuaki o Te Tari. Inā hiahia koe ki te whakapā atu, tēnā koa whakapā atu ki te:
 Department of Sociology
 The University of Auckland
 Private Bag 92019
 Auckland 1142
 Waea: (09) 373 7599 ext. 85057

 Mēna ho pātai āhau e pā ana ki ngā matatika, tēnā koa whakapā atu ki:
 The Chair
 The University of Auckland Human Participants Ethics Committee
 The University of Auckland
 Office of the Vice Chancellor
 Private Bag 92019
 Auckland 1142
 Waea: (09) 373 7599 ext. 87830

Māori identity and the Internet
Participant Information Sheet (Interview)

Tēnā koe,

My name is Catharina Muhamad-Brandner. I am a student from Austria currently enrolled in a PhD degree with the Department of Sociology at the University of Auckland. I am conducting this research for my thesis on Māori identity and the Internet. I am interested in the early adoption of the World Wide Web, but more so in how the technology is being shaped and used, by Māori. Therefore, I am seeking Māori Internet users to participate in a study. This sheet provides you with information regarding this research.

You are invited to participate in an interview regarding your experiences with the Internet. It will focus on your use of and thoughts on Māori websites. The interview will take about one hour. Should you decide to participate, the interview will be held at a time and place that suits you and you may bring whānau/family support if you so wish. Any costs that you may incur in order to take part in the interview will be reimbursed.

Participation in the research is completely voluntary. You are not required to respond to questions or topics you feel uncomfortable with or do not want to answer. You are also welcome to ask me questions at any time during the interview. With your permission, the conversation will be audio-recorded, but the recorder can be stopped upon your request. You will be offered your recording once the research is completed.

Efforts will be made to keep all information confidential. Any information that may identify you will be changed or removed during transcription. All information provided will be reported or published in a way that will not identify you as its source. In the event that the interview is not transcribed by me, Academic Consulting will be bound by an agreement of confidentiality and all identifying information will be recorded over before handing the recording to Academic Consulting.

You will be given the opportunity to read the transcript of the interview and to comment and clarify your intended meaning at the time of the interview. You may withdraw any information provided or your participation from the research without giving a reason within one week after receiving the transcript by contacting me.
The recording and transcript will be kept securely in my locked office at the University of Auckland. Computer files will only be stored on password protected computers. The recording (should you not wish to receive it), transcript and related computer files will be destroyed no later than 14/11/2010.

If the participation in the research upsets you in any way arrangements will be made for you to talk to an appropriate counsellor about how you feel or you can call LifeLine on 0800 111 777.

You will be compensated for your time with a koha from Austria or a $20 voucher for Real Groovy and you will receive a copy of the finished thesis if you wish.

Thank you for your time and interest. Your participation will contribute to a better understanding of the actual use of the Internet by Māori. If you have further questions or wish to participate please contact me by phone or write to:

Department of Sociology
The University of Auckland
Private Bag 92019
Auckland 1142
Email: cbra039@aucklanduni.ac.nz
Telephone: (09) 373 7599 ext. 88665

Dr. Steve Matthewman is my main supervisor who may be contacted at:
Department of Sociology
The University of Auckland
Private Bag 92019
Auckland 1142
Email: s.matthewman@auckland.ac.nz
Telephone: (09) 373 7599 ext. 88616

Dr. Lane West-Newman is my second supervisor and Dr. Tracey McIntosh is my Māori advisor. Dr. Bruce Curtis is the Head of Department. They can be contacted at:
Department of Sociology
The University of Auckland
Private Bag 92019
Auckland 1142
Telephone: (09) 373 7599 ext. 85057

For any queries regarding ethical concerns you may contact:
The Chair
The University of Auckland Human Participants Ethics Committee
The University of Auckland
Office of the Vice Chancellor
Private Bag 92019
Auckland 1142
Telephone: (09) 373 7599 ext. 87830

Consent Form: Māori and English

Te tuakiri Māori me Te Ipurangi
Te Pepa Whakaae (Patapatai)
KA PURITIA TE PEPA WHAKAAE NEI MŌ TE ONO TAU

Kairangahau: Catharina Muhamad-Brandner

E mārama ana au ki ngā whakamārama kua homaihia nei ki a au mō tēnei kaupapa rangahau. Kua whai wāhi au ki te pātai i aku pātai, ā, kua hoki mai anō hoki ngā whakautu. E mārama ana au ka kuhu tuao mai te kaiwhakauru ki tēnei mahi rangahau, ā, ka pai noa iho hoki tātou kātu me te ētahi rānei o aku kōrero i roto i te kotahi wiki o te taenga mai o te kape tuhi ki a au.

- E whakaae ana au/ kāore au e whakaae kia hopukina ngā patapatai e te mīhini hopu reo.
- E mārama ana au, mena e hiahia ana au kia whakawetoa te mīhini hopu reo, ka whakawetoa.
- E mārama ana au, e hiahia ana au kia whakawetoa te mīhini hopu reo, ka whakawetoa.
- E mārama ana, me matatapu ngā pārongo.
- E whakaae ana au, hei ngā tāngata pārongo, e kore au e whakaingoahia, e kore rānei tētahi e mōhio he pāanga tōku ki aua pārongo.
- E mārama ana, ki te rito mā te Academic Consulting ngā patapatai nei e kape tuhi, e matatapu ana te wāhi ki a rātou.
• E whakaae ana au, ko ngā pārongo katoa, me noho motuhake ki tēnei rangahau anake.
• E whakaae ana au/ kāore au e whakaae me whiwhi kape tuhinga whakapae rawa au.
• E whakaae ana au/ kāore au e whakaae, arā, kia oti rā te rangahau nei, me whiwhi rawa au i ngā hopukanga patapatai.
• E mārama ana au, ko ngā hopukanga patapatai, ngā kape tuhi me ngā kōnae rorohiko ka puritia, ka rakaina i roto i tētahi o ngā tari o te Whare Wānanga, ā, ko tōna whakangarotanga atu hei mua i te 14/11/2010.
• E mārama ana au, inā kukume mai au i a au tonu i ngā patapatai, nāku ake te koha me te tuhinga whakapae ka tāia nā.

• E whakaae ana au ki te whakauru atu ki tēnei mahi rangahau.

Waitohu: ________________________________________________

Ingoa: __________________________________________________
(Kia mārama tonu te tuhi)

Te Rā: ________________

Māori identity and the Internet
Consent Form (Interview)

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Researcher: Catharina Muhamad-Brandner

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered. I understand that the participation is voluntary and that I may withdraw myself or any information from my interview within one week after receiving the transcript of the interview without giving a reason.

- I agree/ do not agree that the interview will be audio-recorded.
- I understand that I can choose to have the recording stopped at any time.
- I understand that I am not required to answer all questions.
- I understand that efforts are made to treat all information with confidentiality.
- I agree that all information provided may only be reported or published in a way that will not identify me as its source.
- I understand that the interview may be transcribed by Academic Consulting who is bound by a confidentiality agreement.
- I agree that all information may only be used for the purpose of this research project.
- I agree/do not agree to receive a copy of the finished thesis.
- I agree/do not agree to receive the recording of the interview once the research is completed.
- I understand that the recording, transcript and related computer files are stored at a locked University office and are destroyed no later than 14/11/2010.
- I understand that I am to keep the koha and a copy of the finished thesis even if I withdraw my participation after the interview.
Māori identity and the Internet
Participant Consent Form (Interview)

(Continued)

- I agree to participate in this research.

Signed: ____________________________________________

Name: ____________________________________________
(Please print clearly)

Date: ___________________
New Zealand second-level domain registrations: 1995 – 2009

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Table 27: Second-level domains registered by March 31st 1995-2009
Adapted from DNC (2009b)
Figure 37: Screenshot of a frequency list created with *TextStat*


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