

MODELLING TRIBAL GENEALOGIES FOR INFORMATION SYSTEMS DESIGN AND DEVELOPMENT

A THESIS SUBMITTED TO THE AUCKLAND UNIVERSITY OF TECHNOLOGY
FOR THE DEGREE OF MASTER OF BUSINESS (INFORMATION TECHNOLOGY)
IN THE FACULTY OF BUSINESS

December 2005

By
Alan Te Morenga Litchfield

Contents

Abstract	11
Declaration	12
Copyright	13
Acknowledgements	14
1 Introduction	18
1.1 Overview	18
1.2 Ethnography in systems design	21
1.3 Note regarding change to sources	23
1.4 Analysis of data	24
1.5 Summary	25
1.6 Thesis outline	26
2 Whakapapa and the collective	28
2.1 The individual and the collective	28
2.2 Whakapapa in relation to the collective	30
2.3 Relationship between genealogy and history	31
2.4 The Historian vs. the Genealogist	34
2.5 Tīmatanga/Ursprung	36
2.6 Kotahitanga/Herkunft	41
2.7 Hei Āhua/Entstehung	44
2.8 An application of symbols	51
2.9 Summary	53
3 Methodology	54
3.1 Discussion of methods	54
3.1.1 Model	57
3.1.2 Concept	60

3.1.3	Theory	65
3.1.4	Research question	69
3.1.5	Methodology	69
3.2	Method	70
3.2.1	Data gathering methods	70
3.2.2	Selection of informants	71
3.2.3	Data analysis	71
3.3	Summary	72
4	Analysis	73
4.1	Ethnographic analysis	73
4.2	Analysis of interviews	75
4.2.1	Analysis of Interview 1	75
4.2.2	Analysis of Interview 2	85
4.2.3	Meta-analysis of interviews 1 & 2	95
4.3	Analysis of text sources	102
4.3.1	Analysis of Marsden by Parsonson	103
4.3.2	Analysis of Te Ao-kapurangi by Ballara	107
4.3.3	Meta-analysis of text source analyses	109
4.4	Derivation of symbols	113
4.4.1	Pedigree	118
4.4.2	Genealogist	119
4.4.3	Event	119
4.4.4	Connective Thread	119
4.4.5	Group identification	120
4.4.6	Status/Personal and group	120
4.4.7	Status/Subjection	121
4.4.8	Cosmology/Universal time frame	121
4.4.9	Cosmology/Linkage	121
4.4.10	Inclusive	122
4.4.11	Collective memory	122
4.4.12	Demotic	123
4.4.13	Allegory/Collective understanding	124
4.4.14	Allegory/Protocols	124
4.4.15	Allegory/Tools include/Shared history	124
4.4.16	Allegory/Tools include/Music	124
4.4.17	Allegory/Tools include/Story & Knowledge/Stories	125
4.4.18	Allegory/Tools include/Humour, ... /Food	125
4.4.19	Allegory/Tools include/Survival or prevalence	125

4.4.20	Allegory/Tools include/Speech	125
4.4.21	Protocol	126
4.4.22	Knowledge/Shared knowledge	126
4.4.23	Knowledge/Ahuatanga Māori .../Tikanga Māori, .../Tribal ad- ditions	126
4.4.24	Knowledge/Origins	127
4.4.25	Knowledge/Present conditions	127
4.4.26	Knowledge/Mana	127
4.4.27	Knowledge/Details, .../Remembrances, .../Lists of dead, .../Erudition, .../Karakia	127
4.4.28	Knowledge/Discussion or argument	128
4.4.29	Knowledge/Interpretation	128
4.4.30	Hui wānanga	129
4.5	Summary	129
5	Conclusion	130
5.1	Summary of introduction, concept development and analysis method . .	130
5.2	Human and cultural factors	131
5.3	Appropriateness of the factors	137
5.4	Post study projection	138
5.5	Reflections on the study	142
5.6	Summary	144
A	Interview transcripts	147
A.1	Interview 1	147
A.2	Interview 2	155
B	Text sources	164
B.1	Marsden, Samuel 1765–1838	164
B.2	Te Ao-kapurangi 1818–1830	169
C	APPLICATION FOR ETHICS APPROVAL FOR RESEARCH PROJECTS	
	Auckland University of Technology Ethics Committee (AUTEC)	
	FORM EA1	171
C.1	General Information	171
C.1.1	Project Title	171
C.1.2	Applicant Name/Qualifications	171
C.1.3	School/Department/Academic Group/Centre	171
C.1.4	Faculty	171
C.1.5	Complete this section only if the researcher is a student	172

C.1.6	Complete this section only if other investigators are involved in the project	172
C.1.7	Are you applying concurrently to another ethics committee? . . .	172
C.1.8	Declaration	172
C.1.9	Authorising Signature	173
C.2	Project general information	174
C.2.1	Project Duration	174
C.2.2	Types of persons participating as participants	174
C.2.3	Does this research involve human remains, tissue or body fluids which does not require submission to a Regional Ethics Committee? 174	
C.2.4	Does this research involve potentially hazardous substances . . .	174
C.2.5	Does the research include the use of a questionnaire?	174
C.2.6	How will interviews be recorded?	175
C.2.7	Describe how the principles of the Treaty of Waitangi are being addressed and applied in this project	175
C.3	Project Details	180
C.3.1	Aim of project	180
C.3.2	Why are you proposing this research?	181
C.3.3	Background	182
C.3.4	Procedure	184
C.4	Participants	187
C.4.1	Who are the participants? What criteria are to be used for selecting them?	187
C.4.2	State whether the participants may perceive themselves to be in any dependent relationship to the researcher (for example, researcher's students).	187
C.4.3	Are there any potential participants who will be excluded?	188
C.4.4	How many participants will be selected?	188
C.4.5	Describe in detail the recruitment methods to be used	188
C.4.6	How will information about the project be given to participants (e.g. in writing, verbally)?	188
C.4.7	Will the participants have difficulty giving informed consent on their own behalf?	189
C.4.8	Will consent of participants be gained in writing?	189
C.4.9	Will the participants remain anonymous to the researcher? . . .	189
C.4.10	In the final report will there be any possibility that individuals or groups could be identified?	190
C.4.11	Will feedback will be disseminated to participants?	190

C.5	Other project details	191
C.5.1	Where will the project be conducted?	191
C.5.2	Who will actually conduct the study?	191
C.5.3	Who will interact with the participants?	191
C.5.4	What are the ethical risks involved for participants in the proposed research?	191
C.5.5	Will there be any other physical hazards introduced to AUT staff and/or students through the duration of this project?	191
C.5.6	Are the participants likely to experience any discomfort, embarrassment (physical, psychological, social) or incapacity as a result of the procedures?	191
C.5.7	Is deception of participants involved at any stage of the research?	192
C.5.8	How much time will participants have to give to the project?	192
C.5.9	Will any information on the participants will be obtained from third parties?	192
C.5.10	Will any identifiable information on the participants be given to third parties?	193
C.5.11	Provide details of any payment, gift or koha and, where applicable, level of payment to be made to participants.	193
C.6	Data & Consent Forms	194
C.6.1	Who will have access to the data?	194
C.6.2	Are there plans for future use of the data beyond those already described?	194
C.6.3	Provide the location and duration of final storage of data.	194
C.6.4	Will the data be destroyed?	194
C.6.5	Who will have access to the Consent Forms?	194
C.6.6	Provide the location and duration of final storage of Consent Forms.	195
C.6.7	Will the Consent Forms be destroyed?	195
C.7	Material Resources	196
C.7.1	Has application for funds to support this project been (or will be) made to a source external to AUT?	196
C.7.2	Has the application been (or will it be) submitted to an AUT Faculty Research Grants Committee or other AUT funding entity?	196
C.7.3	Is funding already available, or is it awaiting decision?	196
C.7.4	Explain the investigator's or co-investigator's financial interest, if any, in the outcome of the project.	196
C.8	Other Information	197
C.8.1	Have you ever made any other related applications?	197

C.9 Checklist	198
C.10 Consent Form signed by kaumātua	199
C.11 Information Sheet given to kaumātua and marae committee	201
C.12 Information Sheet to be given to participants	204
C.13 Consent Form for adults	207
C.14 Consent Form for adults to sign on behalf of children	209
C.15 First panui distributed to family members and posted on the Internet .	211
C.16 Second panui distributed to family members and posted on the Internet	215
C.17 Discussion of methods	218
C.17.1 Model	219
C.17.2 Concept	222
C.17.3 Theory	226
C.17.4 Hypothesis	227
C.17.5 Methodology	227
C.17.6 Data gathering method	228
References	229

List of Tables

3.1	Basic terms in research.	57
4.1	Theoretical and methodological frameworks	73
4.2	Generalisation of inferences against the concept of whakapapa	113
5.1	Summary of human and cultural factors	132
C.1	Ethics application — Basic terms used in research	219

List of Figures

2.1	Relationships between symbols	33
2.2	Aphorism expressing the sense of belonging	36
2.3	Whakapapa excerpt from the Te Rarawa iwi.	37
2.4	An illustration of how history is not fixed.	40
2.5	Te Aho Tuatahi, Māori creation story	43
3.1	Research method applied in the study	58
3.2	Representation of cultural paradigms	62
3.3	Whakapapa symbols	63
3.4	The Historian opposes the Genealogist; symbols	64
3.5	Tīmatanga/Ursprung; symbols	64
3.6	Kotahitanga/Herkunft; symbols	65
3.7	Hei Āhua/Entstehung; symbols	66
3.8	The phases followed on the analysis of data	72
4.1	Resonance → dissonance → resonance	96
4.2	The process of subject select applied by the Historian	110
4.3	Graphical representation of relationships between symbols.	115
C.1	Ethics application — Representation of cultural paradigms	182
C.2	Ethics application — Whakapapa as a process of symbolic interactions	220
C.3	Ethics application — Natures of approach	223
C.4	Ethics application — Tīmatanga/Ursprung; symbols	225
C.5	Ethics application — Kotahitanga/Herkunft; symbols	225
C.6	Ethics application — Hei Āhua/Entstehung; symbols	226
C.7	Ethics applicaiton — Whakapapa symbols	226
C.8	Ethics application — Relationships between symbols	227

Abstract

The study seeks to answer the question: What are the human and cultural factors in the whakapapa process? This research identifies human and cultural factors that will explicitly direct the future design of an Information Systems design and development project.

Current systems and approaches come from a western/euro-centric perception of the world (Locus), but much of the data that are to be stored in the system come from unique tribal sources (Demotic). These approaches, the Locus and the Demotic, oppose each other on what to store, how it should be stored and how it may be retrieved. The approaches are the result of cultural patterns that have evolved and raise issues about the treatment of data in information systems. Issues are argued against the work of Foucault and are subsequently addressed before the data that is gathered for the study are analysed.

The work of Foucault is adopted and key concepts are arrived at: Kotahitanga/Herkunft, the representation of subtle, singular, and sub-individual marks that may connect and link a person to others, forming a dense network that is difficult to unravel; Hei Ahua/Entstehung, the exact essence nature of something; and, Tīmatanga/Ursprung, the state held at the moment of arising. These establish a framework for the analysis of data.

Foucault identifies two types of person, the Genealogist and the Historian. In the study these types are used to represent the approach taken by the Locus and the Demotic. They are contrasted against each other throughout the study to show how their approaches differ in vital ways. The process of comparing and contrasting the Genealogist and the Historian includes qualitative analysis and symbolic interactionism.

The ethnographic analysis method, symbolic interactionism, is used to analyse primary data sources. Qualitative analysis is used to analyse secondary sources. Together, they are used to derive a cohesive set of 38 symbols that are recognisable as factors in the development of the information system. The 38 symbols are aggregated to arrive at 29 human and cultural factors in the whakapapa process. The factors can be used to guide the development of an information system for managing complex data structures.

Declaration

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgments.

Copyright

Copyright in text of this thesis rests with the Author. Copies (by any process) either in full, or of extracts, may be made **only** in accordance with instructions given by the Author and lodged in the library, Auckland University of Technology. Details may be obtained from the Librarian. This page must form part of any such copies made. Further copies (by any process) of copies made in accordance with such instructions may not be made without the permission (in writing) of the Author.

The ownership of any intellectual property rights which may be described in this thesis is vested in the Auckland University of Technology, subject to any prior agreement to the contrary, and may not be made available for use by third parties without the written permission of the University, which will prescribe the terms and conditions of any such agreement.

Further information on the conditions under which disclosures and exploitation may take place is available from the Librarian.

Acknowledgements

I would like to thank Karol Wilczynska for being so supportive, promoting and for being an all round good support, my inspiration. Dr.'s Phil Carter and Brian Cusack for their inspiring, challenging and uniquely complimentary styles of supervision of this thesis. Manjit Gill, for sharing thoughts and data. Honey and Jock MacDonald, for their support and incredible amount of information, which got me started in the first place. Beau Panapa, Ani Edwards and the whanui at Ahikiwi.

Mahuhuterangi te waka
Tutamoe te maunga
Tangihua maunga roho
Ki uta Tokatoka
E tu tonu
Opunake te awa
Kutereana ki te awa o te Wairoa
Tainoa ki te wahapu o te Kaipara
Ko Ahikiwi te marae
Ko Te Arangamai o te Whakapono te whare
Ngāti Hinga te hapū
Ngāti Whatua ā Te Rarawa te iwi
Ko Hame Nepia Te Morenga Ariki o Taiamai
I moe a Te Morenga ki a Mereana Haki Te Ura
Ko Mereana Haki Te Ura te tamāhine o Matutaera Tawhiao
Nō Te Rarawa a Te Morenga
Nō Ngāti Mahuta a Mereana Haki Te Ura
Ka puta ki waho
Ko Puhipi Nepia nō Te Rarawa ia
I heke iho ia ki Ahikiwi
I moe a Puhipi Nepia ki a Kataraina Panapa nō Ngāti Whatua ia
Ka puta ki waho
Ko Tame Puhipi Nepia nō Te Rarawa me Ngāti Whatua ia
I moe a Tame Puhipi Nepia ki a Kathleen Litchfield he pākeha ia
Ka puta ki waho
Ko Inez Nepia koia taku whaea
I moe a Inez Nepia ki a Raymond Bunting nō pakeha ia
ka puta ki waho
Ko ahau tenei e mahi atu ki a koutou katoa

So we beat on, boats against the current, borne back ceaselessly into the past.

(Fitzgerald, 1996)

Chapter 1

Introduction

1.1 Overview

This research will identify human and cultural factors that will explicitly direct the future design of an Information Systems design and development project. The research question has been framed as: What are the human and cultural factors in the whakapapa process?

This study emerged from a personal interest in genealogy and the whakapapa (genealogy) of my whānau (direct family group). The original intention had been to create a genealogical database using tools readily available but a problem soon arose, the story of which is detailed later. The systems investigated permitted the addition of data from various sources, and each system varied in what data may be entered and how those data could be produced in a standardised range of report formats. The problem was that I wanted to conduct queries based on a range of parameters that did not feature in any of the systems, and none of the report formats used these parameters. In particular, I wanted to sort and group data around tribal, sub-tribal and by which waka (canoe) the groups had arrived in Aotearoa/New Zealand. Date data, the principal focus of most genealogical systems, was a secondary issue since much of the information to hand predated the introduction of the European/western concept of measuring the annualised passage of time with a calendar. Again, these issues are detailed later.

It must be stated therefore that I have a personal stake in the success of this study, as does my whānau. More recently I have been elected to the position of Secretary to the trust, which maintains the marae around which much of the whakapapa pertains, The Ahikiwi Marae Administration Trust, and I have been elected as a trustee of the same. This study started well before these became an issue, the opportunity to engage at this level arose partly due to the profile the study gave me in and around the marae.

On page 15 is a statement of who I am. In English it says that I am descended from those who arrived on the canoe Mahuhuterangi; that I gain strength and identity from three mountains, Tutamoe, Tangihua and Tokatoka, and three bodies of water, the river Opunake, the river Kutereana which runs into the Northern Wairoa, and the Tainoa, a tributary that runs into the Kaipara Harbour; that my home place is called Ahikiwi and on it is the meeting house called Te Arangamai o te Whakapono; that my sub-tribe is called Ngāti Hinga and I have affiliations to two main tribal groups, Ngāti Whatua and Te Rarawa. It then runs through the line of descent from my great great grandfather to me.

Essentially this research has focussed on a very small part of a large study, which is the development of a computerised system that can be used to manage the complex relationships that exist in tribal genealogical systems. And before we begin, it is reasonable to ask the question of why such a system is needed, after all there are many well established genealogy programs available, aren't there?

Most systems currently available are produced in USA or Europe for a global market, and it is here that the problem lies. There is an apparent need in many who herald from a largely middle class Protestant European ancestry to be recognised as individuals, to be measured by their own merit, and not to carry the encumbrance of their forebears (for example the Christian rejection of the Old Testament law that the sins and debts of the father would be paid by their sons). These are the descendants of they who settled the colonies of England and western Europe in the nineteenth and twentieth centuries and it colours their way of thinking, including consideration of their ancestors in relation to themselves (Nietzsche, 1995, p. 33) — and in so doing partially defines *genealogy*.

It is fair to say that for every single person that lives or has lived there has been one mother and one father, biologically speaking, even though recent news events highlight an apparent movement to challenge that, and this because of advances in implantation techniques and changes in attitudes towards surrogacy. Therefore, systems (computerised or otherwise) that have been developed tend to take this somewhat simplistic view and extend that, so that a person may have the allotted number of biological parents and perhaps other surrogate or adoptive parents. Beyond this, other relationships are defined such as cousins, uncles, aunts, grand parents and so on. What needs to be understood about this system though, is that it is the result of a cultural process (albeit predominant and therefore hard to see). And the problem is that this cultural process may represent other cultural systems poorly, in particular, tribal genealogies.

All this came about when I was given the opportunity to transcribe into a computerised database the tribal genealogies for my tribe, or iwi, Ngati Whatua and Te Rarawa. I began a search for an appropriate system and eventually found an Open

Source package called Lifelines¹ that mostly allowed what was needed, but in all the packages there were common problems such as the inability to reference tribal groups (nationality can be identified, but that is a cultural understanding which is heavily contextualised), the understanding that an ‘uncle’ or ‘aunt’ can only be the sibling of one’s parents, and so on. So I decided that a new system needed to be developed that catered for genealogical information that is not necessarily rooted in biology, and allows for different cultural contexts. Now, to identify aspects of how this can be made apparent I have sought to define the tribal genealogical system, the Māori whakapapa. This study then considers that model and measures it against the need to identify human factors, those factors that would make the system useful for the end user.

The results of this study will be of most use to the system’s designer, in guiding them on their decision making process. As such, its greatest facility appears in the design process prior to the definition of a functional specification. Which raises the question: How would the results of this study be applied? Before answering this, it is helpful to understand that if the issues raised in this study had not been addressed, then the system’s designer may not have thought to ask about them.

In Chapter 5 factors important to the development of an information system are identified. These provide a set of guiding concepts and principles for the system’s designer. When the design for an information system is laid out it is likely that the system will reflect certain biases that exist within the subconscious mind of the designer. This has led to the standard design embodied by genealogical systems that exist now. In other words, the designer makes assumptions based on their own experience, knowledge, or what they have been taught. To counter this, the human and cultural factors listed in Table 5.1 are intended to sit in the forefront of the designer’s mind as they make decisions that will influence the appearance of the system’s design. The application of the factors in the table may be applied at any stage of the systems design process. An example of how the human and cultural factors may be applied is illustrated in Section 5.3.

For this study the model *symbolic interactionism* (see Section 3.1.1 on page 57) and *qualitative analysis* (Section 3.1.5), were selected (Section 3.1) to analyse observations and interview transcripts and then identify what actually goes on when people engage in the transfer of genealogical information. The assumption has been made at this point that a system ought to reflect the natural occurrence of what goes on at the point of transfer of information, knowledge or wisdom, rather than just being an elaborate filing system. It is also assumed that it is not sufficient to limit the application of this approach to surface level (interface) design issues, because it is the underlying system itself that limits the capture and dissemination of tribal genealogical data.

¹<http://sourceforge.lifelines.org>

An important feature of symbolic interactionism as a qualitative method is the use of symbols to represent concepts, understandings, participants, events, and artefacts. All of which can be identified as objects that can be observed. As objects they have meaning and relationships with other objects. The ethnographic method includes the description of the objects and relationships, and how those relationships are built up during interactions. The objects, relationships and their related meanings are symbolic of human processes and it is that which requires interpretation.

In order to begin to identify these symbols in Chapter 2, whakapapa is defined relative to Foucault's discussion of genealogy and the work of the Genealogist vs. the Historian (Foucault, 2000; Gross, 2001). Foucault therefore provides a number of significant understandings which can be used as symbols in the analysis of the collected data. For the study Foucault's treatment of these personas have been adopted to interrogate present understandings of genealogical processes that have been observed. This is not a critique of Foucault's work, instead Foucault's method of enquiry offers a framework that is complimentary to the requirements of the study.

In the next section is a discussion about the application of ethnography in systems design. The discussion centres around an article by Gail Bader and James Nyce and responses by other researchers and developers. It presents an interesting argument for the use of qualitative methods in systems development. See Section 3.1 on page 54 for a discussion of methods and in particular Section 3.1.5 on page 69 for a description of its application.

1.2 Ethnography in systems design

Gail Bader and James Nyce (1998) ask the question of whether 'cultural analysis'² can play a role in information systems development. Their answer has two parts: on the one hand they see that cultural analysis helps people to understand why systems have been designed the way they are, how they may be evaluated and why some are considered strong and others weak. On the other hand, they do not see that cultural analysis will ever become a routine part of any actual design process. For them, the most important reason for why these claims are made is related to the kind of knowledge and insight that a cultural analysis will produce, which is that it is not the kind that is valued by the development community — it is their contention that the development community values "scientific" knowledge more than that which is not easily quantified. Bader and Nyce say that developers have reduced ethnography to a methodology that is used to

²Bader and Nyce use and interchange the terms 'cultural analysis' and 'ethnography.' It appears that when they use 'cultural analysis' they are referring to the analysis phases of the ethnographic method, whereas when they use 'ethnography' they are referring to data gathering methods — open interviewing, recording, and so on.

count and describe behaviours, events and actions. So that ethnography is no more than a data gathering technique to which ‘positivist’ quantitative methods can be applied.

They say that the view that developers hold — that society can be defined by complex sets of rules and principles — is challenged by those who engage in cultural analysis and is presented back to the development community as naïve at best. This is understandable because developers appear to make two kinds of epistemological errors: That developers mistake themselves as informants, without realising it; and, they use informants to justify their own position. Part of the reason for this is that if ethnographic methods produce results that confirm the developer’s views, then the developer never needs to notice “that the end user’s world may be radically different from their own.” Therefore the developer does not need to acknowledge the world of the end user, and here is the point. It is this part of ethnographic analysis that is missing from the practice of developers because ethnography, or cultural analysis, often requires the developer to question the things they take for granted, or knowledge that is assumed.

For an ethnographer, an implicit understanding is that people and cultures are different and it is the job of the researcher to begin to understand these differences. Simonsen and Kensing (1997, cited in; Bader & Nyce, 1998) point out that when ethnography is applied as a method, developers can discover that multiple viewpoints may exist in a workplace. But Bader and Nyce elaborate on this, they say these different or opposing views are not limited to individuals or groups holding opinions or stances about the same subject. For them the perspective needs to be broadened to include understandings held by anthropologists — in which studies are conducted to find differences between social worlds, social imperatives, social needs, and social goals. In recognition of these differences the realisation may be that different workers doing the “same work” are actually engaged in “different endeavours.”

In a response article to Bader & Nyce, Jesper Simonsen and Finn Kensing (1998) say that the development community is using ethnography. They cite specific fields that include Computer Supported Cooperative Work, Human Computer Interaction and Participatory Design. The reason they give for the use of ethnography is that practitioners “have a concern for the end user experience.” That is, while there are developers who want to understand the end user and provide systems that meet their needs, ethnography will only be applied if developers, computer scientists and members of other development communities make room for it. They say that ethnography needs to take a still larger role in design.

In another article, also responding to Bader and Nyce, Andrew Dillon (1998) raises a very important question: “...to what extent can a deep social science methodology influence the process of technology design usefully?” And in answer, he finds that Bader and Nyce’s view is largely correct, although he doesn’t share their rationale.

He points out that the problem does not lie with the system designer, but with the inappropriate use of ethnography as ‘cultural analysis’ (it appears that Bader and Nyce make the assumption that ‘cultural analysis’ is the most useful social scientific method). Designers/developers are well intentioned, he says, but lack the necessary skills to fully address the needs of the end user. They do not know the methodological steps required to ensure that user issues are fully addressed.

The questions that are usually raised against the use of qualitative research methods are related to the usefulness of the information produced in prediction, and reliability through sufficiently large populations, so that the effect of biases and so on are minimised. In his paper, Dillon (1998) addresses the apparent lack of predictive quality in ethnography. He deals with this directly by stating that social scientists, like designers, want their findings to guide future actions. A social scientist who is happy with a rich description, rather than looking for predictive knowledge, is not doing their job. And any theory that does not support the derivation of any prediction does not have any value in academia or industry anyway. When the issue of reliability is raised, Dillon says, people miss the point. He says that ethnography serves the purpose of increasing our understanding of, and to perceive differences between, the social worlds of the participants. Therefore ethnographic analysis should be done at the earliest stages of design, then the findings can be corroborated with quantitative methods later. Reliability is obtained by satisfying all the issues that emerge during analysis, particularly through the application of scenarios.

In this study the focus is squarely on ethnography and, as Dillon indicated above, the objective has been to gain a deeper understanding of the processes, objects and subjects of the whakapapa process. These are used to describe user requirements which will, in the larger project design, be used as a guiding force in making decisions about systems and applications design.

1.3 Note regarding change to sources

Originally it had been my intention to work with material from a number of sources to get to a point where any concepts could be tested and their results generalised.

In Section 3.2.1 four sources are identified; observation; textual analysis, interview, and transcript. Of these, examples were gathered of text sources, interviews and the transcription of a portion of video that included a number of people engaged in the process of whakapapa.

Observation is an ongoing process throughout this study, especially since whakapapa forms an important part of my own personal work and so it has proved difficult to divorce what is observed from general life occurrences and events specific to this study. Text sources are readily available through the Internet. These sources were obtained from

the Dictionary of New Zealand Biography website³. Interview transcripts were taken as part of the overall project, of which this study forms a part. A portion of a video extract was selected based upon the relative veracity of the process observed within it, some time after the event had been recorded.

From the beginning of the study the video footage that had been selected was transcribed and an analysis started. This was done at the same time that consent was sought from all those who appeared in the video recording. The consent process which followed was that dictated by the AUT Ethics Committee, in which it is necessary to gain the consent of all those who are impacted by the data gathering phase of a study. This process is designed to protect all likely stakeholders during and after the study, but it is a peculiarly western-centric approach to a demotic system of approval (in previous discussions with the kaumātua and marae committee approval had been granted on behalf of those who might attend, however this did not satisfy the committee's protocols). One of those who appeared in the video refused to give their consent, as is their right, and therefore the video footage cannot now be used. The transcript, partially completed analysis and any evidence of it have been removed from this study. From time to time there is mention of video data, for example within the context of the method.

1.4 Analysis of data

The data are analysed by using two processes, symbolic interactionism (analysis in Section 4.2) mentioned previously and qualitative analysis (analysis in Section 4.3). These two approaches are adopted because the data sources involved both interview transcripts and text sources, with the purpose of uncovering factors that may influence the design of an information system rather than identifying linguistic nuances within the texts themselves.

The sources have been analysed against the methodological framework identified in Sections 3.1.3 and 3.1.5 (and restated in Table 4.1 on page 73). The analysis set out to consider that genealogy is a process of discourse between the Genealogist and a historical figure. In the first phase of the discourse, and in the absence of knowledge or understanding about the historical figure, the Genealogist resorts to the methods of the Historian to build a figure that satisfies their historical sense. The historical figure is identified by facts that can be validated by documentary evidence or corroboration. In the second phase the Genealogist seeks to make the historical figure effective by giving them attributes that closely fit their perception of what is acceptable (other attributes that are unacceptable are ignored, discarded or relegated). Then, if the third phase occurs and a connection is made to the life of the historical figure, the Genealogist may

³<http://www.dnzb.govt.nz>

invest in them the facility of agency as they begin to develop sentiment about them.

These three stages of understanding or connection relate to a historical figure. The Historian inhabits the first two stages, in which the Historian seeks to gain knowledge about a historical figure, then they will attempt to make that figure effective (illustrated in Figure 2.1). The third stage concerns the Genealogist solely, whereas they can inhabit the first two stages too.

The analysis follows a series of phases (Section 4.1) in which the data are analysed, which returns sets of symbols. These are analysed, in turn, as a meta-analysis to return a generalised set of symbols and related against a model derived from an application of Foucault's work (Figure 3.3). The result of these analyses are summarised in Table 5.1. In each of the phases the data is abstracted so that it can be more generally applied to the development of an information system.

1.5 Summary

The study addresses the question: *What are the human and cultural factors in the whakapapa process?*

The analysis of data shows that the processes engaged in vary, depending upon which role the investigator adopts. While the Genealogist may follow this route, the Historian does not. In fact the Historian is not interested in those elements that the Genealogist holds dear: instinct, sentiment, love, and conscience.

It will be shown how an information system is required to fulfil the needs of two convergent personas, the Historian and the Genealogist (see Figure 3.4). The Historian is charged with the responsibility of putting history into context, and will refer to available facts in order to create context. Or the Historian may write in a style that conjures the spirit of the age, the zeitgeist (albeit from the safe distance of objectivity). The Genealogist does these too, except they also take into account sentiment, love, conscience and instinct to deepen their appreciation of a historical figure. From this respect it may be suggested that the Genealogist is therefore self-serving, in contrast with the magnanimous servitude of the Historian.

The Historian, it will be seen, tries to cover themselves in facts, stories and styles to mask their true intentions and self so they can say they did not influence their narrative with personal bias. But they must realise that they cannot remove themselves from the narrative process and the Historian therefore exercises the influence of their political leanings over whatever choices they make. This may be seen in what people, places or events the Historian chooses to include or exclude, in the exercising of their power over these as objects, and creating new histories or historical perspectives. The Historian participates in the persistence of tradition or societal injustice by continuing to retell the story of their emergence, which is later referred to as their *Timatanga/Ursprung*

(Section 2.5) and Hei Āhua/Entstehung (Section 2.7).

In relation to the development of an information system, it will be shown that a system is required to create, maintain, manage and remove objects that represent people, places, events, artefacts, relationships, knowledge, stories, chants, aphorisms, and any other objects not-previously considered for use.

Symbols that are representative of whakapapa processes are identified in Table 5.1. These symbols and objects represent sources of data and information that are diverse. A system needs to accommodate a wide range of data and facsimiles of artefacts. And so one kind of object, in which the application of each is identified by attributes, differentiates symbolic objects relative uses are proposed. Each object may be related to multiple other objects, which exist in a recursive relationship with that same object.

Information Systems of various kinds have always been used in a broad sense of meaning, originally as artefacts and places. For example, ancient stories are retold that attach artefacts and places them to a demotic group. The evolution of writing added to this richness by offering a medium of abstract retention, which meant that stories could be transcribed and preserved while new stories could be created and told. Today the range of technologies capable of preserving stories is expanding.

The study has succeeded in what it set out to do, but as may be expected with a foray into this field, the number of questions that have been raised is huge. Certainly there is plenty of scope for further development, but the next stage from here will be to begin creating prototypes and testing them.

1.6 Thesis outline

In this chapter is presented an overview of the thesis, its aims and objectives. There is a discussion supporting the use of ethnographic methods in systems design because there exists a bias towards quantitative methods. In the chapter, the data analysis process is described and a summary of the analyses presented (in the previous section).

In Chapter 2 is a review of publications that relate to this study. The chapter introduces the concepts of the Demotic and the Locus, as representations of the result of cultural evolutionary processes. The Demotic and Locus are placed within the context of genealogy and whakapapa and then Foucault's descriptions of the personas, the Historian and the Genealogist, are introduced and compared against them, and each other. In this chapter Foucault's concepts are adopted and used to describe Tīmatanga/Ursprung, Kotahitanga/Herkunft, and Hei Āhua/Entstehung which are symbolic of processes and core understandings of whakapapa. To round this chapter off the symbols are applied to whakapapa.

In Chapter 3 is a discussion of the methods applied in the study. The qualitative method is described. The process from model, to concept, to theory, to methodology, to

analysis, and then to summary is described. The data gathering methods are described, how informants were selected and how the data was prepared for analysis.

Chapter 4 contains three main parts. In the first part (Section 4.2) the interviews are analysed using the ethnographic method, symbolic interactionism. The results of the analysis are analysed again in a meta-analysis phase to produce a generalisable set of symbols that represent the processes a Genealogist and a Historian engage in when considering whakapapa data. In the second part (Section 4.3) text sources are analysed using qualitative analysis. The results of the analysis are analysed again in a meta-analysis phase to produce more symbols. The symbols from the previous two parts are merged in the final part of the chapter (Section 4.4) with the model produced during the discussion of Foucault's treatment of genealogy (Figure 3.3). From this phase of the analysis symbols are derived that define whakapapa processes. These are used to produce the human and cultural factors identified in the next chapter.

In the final chapter, Chapter 5, is a summary of the thesis and the human and cultural factors derived from the previous chapter. The study is considered and a reflection offered on how it was conducted, improvements that may be made if it were to be done again, its relative strengths and weaknesses. There is a projection about where the results of this study lead and how they will be applied in subsequent studies and activities.

Chapter 2

Whakapapa and the collective

In this chapter is a discussion of the position taken about whakapapa and current views or perceptions that have influenced the design of this study.

2.1 The individual and the collective

As a starting point tribal genealogical systems need to be given some kind of context so that the following discussions can maintain their relevance. So far it has been said that existing systems have little or no allowance for tribal data, and that a system which did would be desirable. However the distinction between tribal and other kinds of knowledge needs to be made clear and to achieve this a number of ways of understanding tribal systems are compared with the predominant cultural system, which signals its Græco-Roman roots. And for the purpose of this discussion, as a vehicle for making a clear comparison, two concepts are referred to; the locus and the demotic cultural paradigms (Litchfield, 2003a).

Firstly, the demotic can be defined by looking at tribal structures. Tribal cultures maintain some form of collective recall, which are based on traditional values (Mitu, 1998). In this context “tribal” relates to all ethnic groupings who find themselves in their place of origin, not just those that are recognised as *indigenous* today (Smith, 2001). Gregory Cajete (2000, p. 187) makes the observation that the definition of what defines a culture as *indigenous* is the perception that the people are biologically rooted to that place. He says people are identified by archetypes, metaphorically bonded to a place, out of time. And he also makes the point that such perceptions are found in all places around the world, including “the archaic rural folk traditions of Europe.”

The idea of the *demotic* is similar to ‘collectivist culture’ (Hofstede, 1991), which is opposed to his ‘individualist culture’ — the individualist culture is bound to the concept of “I” and the collectivist culture is bound to “we”. He observed that these definitions are simplistic and that variances are seen in different countries, for example

he found that in Asian countries the concept of ‘face’ was an expression of collectivism where loyalty to the group was an essential element, and in African or Latin countries people will often subjugate themselves to an autocratic leader as an expression of their adhesion to the greater good. The main point of difference between the collectivist and the demotic is that in the demotic each person is subject to their own choices (not disregarding significant cultural, traditional or social pressures to conform) and the culture is therefore quite fluid. The conception of a collectivist system on the other hand is that it remains transfixed in time, by that thing which gave it being.

The collectivist assumption is that everyone works towards the greater good, or faces the same way, wanting the same thing. The demotic is a collection of people who are part of the same ‘family,’ each wanting something similar and often facing in different directions. Periodically they will all face the same way, say out of a need for self-preservation or the anticipation of gain through profit. But mostly they do not, because in the end family is the most important.

Secondly, and adjacent to the demotic, is the locus where the individual is positioned at the centre of an array of relationships identified by a set of points or lines. To this array events are added, but the individual is ranked above them. The points and lines within the array have their position satisfied or identified by one or more specified conditions — what it is that defines a mother, father, sister, brother, child, cousin, uncle, aunt, grand parents, great grand parents, and so on. So, the locus represents the individual in a family, made up from loci or other individuals. Families or groups of loci are then gathered as subsets — families, extended family groups or communities — within the super set of an event, organisation, nation or cultural identity. In Hofstede’s ‘individualistic culture’ the individual will show a tendency to fulfil their and their immediate family’s needs first.

Another different view of the individual is provided by Edge (1998, pp. 32–33) who uses the atom as a metaphor to describe the nature and behaviour of individuals in society in a similar fashion to the locus. His atomic view reduces individuals to the smallest part of a society, as objects, who make relationships between each other. But where an atom is indivisible people are divisible through various internal and external connections, social, psychological and spiritual manifestations. The locus allows for an individual to become as complex as needed, or for the researcher to simply concentrate on one facet of their being, but Edge’s atom does not have that fine-grained approach built into it.

Edge has extended his atomic view of society by defining tribal societies with the term “relational view.” His ‘atom’ theory is opposed to the concept of the ‘collectivist culture’ (Hui & Triandis, 1986) and therefore sits somewhat awkwardly alongside the demotic cultural paradigm. His premise is based on the thesis that collectivist cultures

do not really exist as they have been defined. He makes the claim that in a tribal culture personalities are not subsumed into the greater society, rather that the society is a closely packed network of relationships created by individuals. But anyone who has experienced what it is like to live in a collectivist/demotic group will confirm that collective activities are conducted with an eye to the greater good of the group. The path to that goal is often long and winding, with many by-ways and gives rise to phrases like “what’s yours is mine,” or as Cajete (2000, p. 287) said “we are all kernels on the same corncob.” It means that the concept of personal ownership does not exist in the same way that it does in the locus, for example someone buys a new and expensive item like a boat or trailer, they will probably find that it has been ‘borrowed’ for an indefinite period and that it will eventually turn up when needed.

2.2 Whakapapa in relation to the collective

Whakapapa is often equated with genealogy, where genealogy is the study of pedigrees, the evolutionary development of animals and plant from earlier forms (*The Times English Dictionary*, 2000), but it is more than that. While whakapapa traces lines of descent (pedigree) it also traces major events within which the existence of groups emerge and are defined according to significant events or more frequently, as the descendants of significant ancestors. Individuals are recognised or explained in the form of story, song, dance or artefact. Whakapapa forms a thread that creates a fabric of connection within groups. It carries forward the successes and failures that define their status. It places the person into a framework that includes not only themselves and their family group, but also the rest of the universe from the beginning of time. It is a collective memory that recalls debt and grievance. It is inclusive. It is demotic.

Perceptions from post-tribal cultures founded upon the recognition of the locus (Foucault, 2000, p. 385) oppose what may be found within the tribal context, in which the concept of the individual does not exist except that they may be remembered by the collective as a metaphor (Cajete, 2000, p. 86). For example a Māori ancestor of the Te Arawa tribe, Tama Te Kapua, appears on panels within meeting houses with walking stilts. Another ancestor, Tutanekai (he who, in the classic Māori tale, lured his beloved Hinemoa across a lake with his flute) is shown with his flute. In both these cases the ancestors are used to convey demotic wisdom, usually in the form of allegory, for example the story *Whale Rider*, page 47.

Allegories provide tools for the establishment of collective understandings and protocols for the demotic collective and, as already mentioned, the demotic ranks above the individual and individual identities may be subsumed into the tribe (Cajete, 2000, p. 287). Allegorical tools take the form of dance, music, story, humour, angst, survival or prevalence, food, clothing, speech and shared history (Cajete, 2000, p. 86). Allegory

is a feature in demotic genealogies and is an important part of whakapapa. The implication is that whakapapa is used for more than the collection and dissemination of genealogical information.

In the locus, where the individual maintains supremacy, allegory is treated similarly to the demotic. But allegories are placed into a field that also contains other remote objects, like individuals, events, places, and genealogy. There seems to be a degree of separateness between the objects that is reflected in the tools that have been developed to research and manage them. For example the organisation which has done most to secure genealogy information is The Genealogical Society of Utah, run by The Church of Jesus Christ of Latter-day Saints. The Society maintains the world's largest computer-compiled index of genealogical data within the International Genealogical Index, the Family Register and the Family History Catalog (Bromell, 1991). This system records an individual's name, their parents or spouse, their gender and relevant church events. While it can be used to trace demotic family lines, it is itself a record of individuals as loci. Therefore the information is regarded as opaque, in that it is difficult to see non-biological relationships easily and non-church events are variously disregarded.

2.3 Relationship between genealogy and history

Now that whakapapa has been given its context as an expression of the collectivist/demotic Māori culture it is necessary to bring an alignment between it, as genealogy, and understandings of what is meant as history. This is done because most people tend to see genealogy as a collection of dead people who did things, and history as a collection of equally dead facts. Foucault addresses this through the concepts of *Herkunft* and *Entstehung* — these are defined on pages 41 and 44, respectively where they are merged with the concepts of *kotahitanga* (unity) and *hei āhua* (the essence nature of something). Throughout the rest of this chapter a person learning their whakapapa is the Genealogist. No distinction is drawn between the intent of a person engaged in locus or demotic study. Part of the reason for this is that there is no word that distinguishes a person who learns or studies whakapapa, as there is in the western languages. And perhaps the reason for that may be inside the demotic understanding itself, that all people within the tribe should know their tribal history and therefore there is no specialisation that deals with it? The term *kaumātua* is normally applied to those who know the whakapapa, but that term is broad in its usage and is generally used to identify elders within a *marae*, *hapū* or *iwi*.

Foucault draws *Kotahitanga/Herkunft* and *Hei Āhua/Entstehung* together within Nietzsche's *Wirkliche Historie*, which he defines as the historical 'spirit' or 'sense' (2000, p. 379). In his explanation he makes various comparisons between history and metaphysics, in which the historical sense creates a loop of those things people would consider

immortal, inside the state of becoming; a curious juxtaposition between immortality and the distinctly mortal process of creation. *Wirkliche Historie* means things that were created must at some point decay.

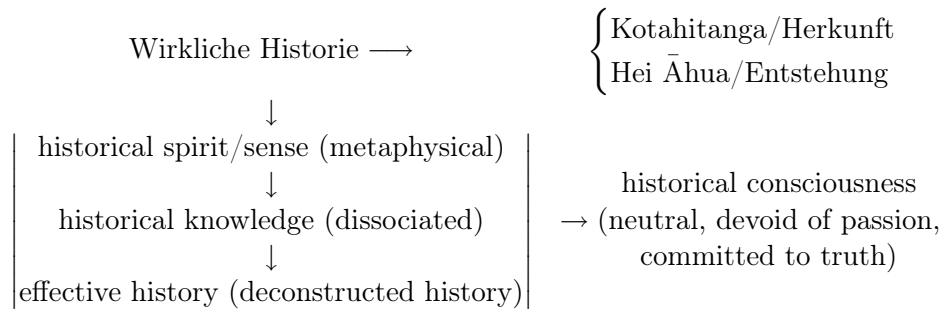
Foucault's 'historical sense' is mostly presented as a series of arguments in metaphysics (2000, pp. 379–382). But he appears to display a mistrust of the metaphysical approach in general and therefore offers a solution for those who find in themselves the need to evade it. He says that it can become useful for genealogy if the historical sense in the person "refuses the certainty of absolutes" (2000, p. 379). And by this he means that the person who wants to escape their metaphysical historical sense must always be ready to question the current and past presentation of what it is they are faced with. If the person is prepared to delve into the mysteries of seemingly unrelated events they may liberate elements thought concrete, or they may shatter truths people have accorded themselves.

Foucault's approach is personally uninvolved, dissociated, "capable of decomposing itself" (2000, p. 375) it strips people's possession over past events. What is left over Foucault calls 'historical knowledge,' which is different from 'historical sense,' where it relies on the externalisation of what the Historian finds (2000, p. 380). And so historical knowledge presents the trace of regimes that have affected the body of history. It bases itself on those things that are considered stable and he says that its objectivity is based on the ability of Historians to examine things outside time by extracting them from the loop of *Wirkliche Historie* (Foucault, 2000, p. 379).

Now, up to this point Foucault (2000, p. 384) has drawn the sense people seem to have for history, their historical sense, away from the body of historical knowledge — that which may be perceived as stable and can be confirmed by the existence corroborating evidence. But this body of historical knowledge is not necessarily useful for the Genealogist because it is absent of those things still held dear; sentiment, love, conscience and instinct. So the question arises, how can history be made effective for the Genealogist?

To answer this question Foucault identifies a process he calls 'effective history' (2000, p. 380). He makes a distinction between the history of Historians and history that is made effective. And, he says, history that is made effective is history without constraints. The process involves the deconstruction of history in various ways, for example by destabilising the views and understandings people hold for those things they value most. One would be obliged to tread carefully so as not to cause harm, but for history to be made effective the assumption is made that nothing is stable, that everything is in a state of constant change, even past events. For an illustration of this, see the example in Figure 2.4 on page 40.

The measure of whether history then becomes effective is determined by the amount

Figure 2.1: Relationships between symbols. *Litchfield*

that “discontinuity” (2000, p. 380) is introduced into the being of the person, depriving their self of stability. So Foucault begins to dismantle the perception of what it is was that the person thought was historical knowledge and replaces it with a sense of apprehension and uncertainty. In this way he appears to be establishing a framework similar to the state that Gurdjieff tried to cause in Ouspensky — a series of dialectic episodes between teacher and pupil so the pupil could free himself and perceive an unfettered reality. A reality freed from cultural and learned fixings (Ouspensky, 1977).

Foucault sees that historical traditions aim to break down events into a perfect continuous whole, like dripping water onto a bowl of sugar but effective history dries out the event to see where the cracks appear, to find the sharp edges. Therefore effective history looks closely at nearby things to find the mass of confusion that really exists there. The Genealogist seeks to make history effective.

A relationship between these elements is represented in Figure 2.1. What is shown is that Wirkliche Historie is at the root of a person’s historical sense, which is at the root of their historical knowledge, to their efforts to make history effective. These then combine to give the person historical consciousness. Wirkliche Historie is also at the root Kotahitanga/Herkunft and Hei Āhua/Entstehung, so that together they form the set of processes a person goes through as they seek to create their view of their world. Wirkliche Historie suggests that all things which have been created must at some point decay. So with that as the root of all understandings, all knowledge, histories, consciousness’, even the sense of attachment and unity through the recognition of emergence will at some point decay. These last two, Kotahitanga/Herkunft and Hei Āhua/Entstehung, join with the process of the Genealogist, whereas the historical consciousness is located with the processes of the Historian. These two are compared in the next section, as though they were actors whose roles were set on a stage of opposition.

2.4 The Historian vs. the Genealogist

Foucault uses the Historian and the Genealogist as metaphors to differentiate natures of approach. The Historian works at the levels of knowledge or effectiveness to amass understanding and perception about epochs or events. The Genealogist does these too, but they also take careful account of those things the Historian has little or no time for; sentiment, love, conscience and instinct. The term, Genealogist, is used to represent *kaumātua*, and identifies tribal elders. The *kaumātua*, therefore, is one who is able to understand and feel history, to recount facts or suffuse them with emotion, draw the allegorical meaning from the actions of ancestors, or to bring together apparently remote events so that meaning can be attributed to them.

In a sense the Historian in this tale represents the attitudes and behaviours of the locus and the Genealogist; those of both the locus and the demotic. But the Historian would find it hard to understand the demotic simply because the nature of approach for the Historian has its roots in writings of such Greek historians as Herodotus, who wrote extensively of what he saw and heard in his travels (Herodotus, 440 BCE/2000); Thucydides, who wrote of the Peloponnesian War (Thucydides, 431 BCE/2000); and, Arrian, who wrote about the racial rivalry between the ancient Macedonians and the Greeks (Godolphin & Borroum, 1942). The Historian calls upon their demigods of “objectivity”, “accuracy of facts” and “permanence of the past” (Foucault, 2000, p. 383) to create a world that is unchanging, concrete and sane so that motives and events can be interpreted. It is this superstructure of time, place, event and ego that creates for the Historian, a stumbling block and together they forge a lens through which the rest of the world is seen and coloured.

In Foucault’s view, both the Historian and the Genealogist share a beginning that is filled with confusion and impurity. But a characteristic of history is that there is no and choice thus the Historian would make the argument that this gives proof to their “tact and discretion” but in reality the Historian exhibits a “total lack of taste, a certain crudity that tries to take all liberties with what is most exalted, a satisfaction in meeting up with what is base” (2000, p. 383). This perception is common amongst Māori who have had to endure the interrogative approaches of researchers, expressed in their attitudes towards academics. For example, Roberts and Wills (1998, p. 43), in talking about tribal epistemology, say that indigenous knowledge in Aotearoa/New Zealand ought to be represented on an equal footing with academic enquiry into the epistemology of science. They recognise that Western culture is dominated by those whose aspirations match those of the Greeks, so that the way of science is not considered optional. Therefore indigenous researchers may be denied recognition for their own system and epistemology. Other researchers have gone as far as proposing methodologies that are more sympathetic to the tribal context, for example the work of Linda Tuhiwai Smith

(2001).

To restate the issue being discussed here, we see then that there is a distinction between the Genealogist and the Historian. The Historian focusses on a single solution in answer to the question of what went before, whereas the Genealogist does this and is drawn to content the Historian would believe does not carry the weight of validity. And here an important question is raised, how can historical data be validated? While this is a question that needs careful consideration, discussion of the various ways that historical data can be validated is outside the scope of this study. However, ultimately validation exists through the careful cross-referencing of known facts. This is discussed in greater depth later.

For Māori the question of validation is perceived differently. The truth of whakapapa is accepted according to the consistency of its recitation during hui wānanga, the gathering at which whakapapa is discussed. Wānanga is a process of learning and a gathering of experience at the hands of those who are learned and experienced. According to The Education Amendment Act, 1990 “a wānanga is characterised by teaching and research that maintains, advances and assists the application of knowledge and develops intellectual independence and assists the application of knowledge regarding ahuatanga Māori (Māori tradition) according to tikanga Māori (Māori custom)” (*Education Amendment Act*, 1990). It is the opportunity kaumātua have to discuss and compare what they believe to be the truth about their tribal origins, the events that led them to their present condition, and additions to the tribal record.

Hui wānanga proceeds with representatives from each family group reciting their particular whakapapa (Roberts & Wills, 1998). To get the details right requires a tremendous skill of recall and memory and it is right to say, as Foucault (2000, p. 370) does, that genealogy requires patience. In the knowledge of details collected over ages of discussion, argument and exchange there is a vast accumulation of stories, songs, remembrances to be shared and the lists of the dead to be retold so they may be kept alive within the fabric of the demotic collective (Royal Te Ahukaramu, 1993, pp. 86–89). This can only be done with “relentless erudition,” (Foucault, 2000, p. 370) the regular and constant repetition of whakapapa, karakia (chant or prayer) and waiata (song).

The Genealogist seeks historical items, or content, where they are not likely to be found. When found, the Genealogist needs to get to know them, then recognise them where and when they emerge again, each time in a different context. What may seem small at the point of its occurrence, or rash in the moment, can later be recognised as the turning point that caused a remarkable change in history. Genealogy is the accumulation of many such small points in time where whakapapa is the living truth of the errors of judgement, the residue of what resulted from them (Foucault, 2000, pp. 374–375). Then as events shape perceptions of the living, of what went before, so

too will the living shift how they treat their whakapapa.

Whakapapa therefore is concerned with the here-and-now of what it is that history has to offer. For the person coming to know their whakapapa they are placing layers upon layers; of animate and inanimate objects and subjects, in and out of time; with linkages between objects, subjects and layers (Roberts & Wills, 1998). All things have whakapapa and to know and have the whakapapa of someone or something is to have connection to their source of power, their mana. To have this degree of connection therefore means that one may be able to exercise control over them in much the same way that in early European cultures to know the true name of an entity or an animal gave one connection to its power, like knowing the true name of the God of the Jews. It is for this reason that a person will be reluctant to share their whakapapa with anyone but other whānau or iwi members.

2.5 Tīmatanga/Ursprung

The Genealogist sees in history a collection of small interludes which, when tied together, present a story. It is the story that holds true value, it is the story that presents the opportunity for those who live today, the experience and feeling of what was. But Foucault’s Genealogist does not include the “search for origins” (Foucault, 2000, p. 370) in their role, and whakapapa embraces its origins as part of itself. To clear the contradiction, remember that the term Genealogist includes those people who are engaged in the study of locus pedigrees and demotic whakapapa. So our Genealogist, rather than seeking for origination, instead embraces it as though it already exists.

Understanding of this can be found in Foucault’s definition of Nietzsche’s use of the word ‘Ursprung’ (Nietzsche, 1887/1974b, pp. 283–285), which is “an attempt to capture the exact essence of things” (Foucault, 2000, p. 371). It means that something can be identified by virtue of what occurred at its inception (its Tīmatanga), when it was and how it occurred. It suggests that history is a living thing and so the essence of something is always accessible through the media of artefact, waiata, karakia, story, aphorism or proverb (whakatauaki), and whakapapa. The task then is to separate one essence nature from the plethora of those that identify the demotic collective.

E kore au e ngaro	I will never be lost
He kakano i ruia mai i Rangiatea	I am the seed that was sown in Rangiatea

Figure 2.2: Aphorism expressing the sense of belonging. *Source: Edge (1998).*

To “capture the exact essence of things” (Foucault, 2000, p. 371) puts the concepts

of knowledge and understanding into context, for Māori to know something is to be able to locate it within a framework of time and space (Roberts & Wills, 1998, p. 45) where time is not regarded as the annual procession of events as they are retold. Whakatauaiki (aphorism) are used to pass tribal collective knowledge through successive generations, locating people, tribes, animals and artefacts in their proper place within the cosmos. Roberts and Wills, for example, use the whakatauaiki in Figure 2.2 on the preceding page to illustrate that a person who understands its meaning will always feel connected to the place of arising for all Māori, and is therefore the place from which all are connected and to where all return after their death. Similarly, whakapapa is used to locate, for other people, from where an individual is connected. The lines in Figure 2.3 tell others that this person's origins are related to a time and place. Time is recorded as the arrival of the waka, Kurahaupō, and place by connection to earth, water, demotic group (hapū and/or iwi) and family (whānau).

Ko Kurahaupō te waka	The canoe is Kurahaupō
Ko Whangatautia te maunga	The hill is Whangatautia
Ko Karirikura te moana	The ocean is Karirikura
Ko Te Rarawa te iwi	The tribe is Te Rarawa
Ko Te Ohaki te marae	The marae is Te Ohaki

Figure 2.3: Whakapapa excerpt from the Te Rarawa iwi.

They say that the person's essence is connected through the landmass of Whangatautia and the body of water called Karirikura. These are embodied elemental forces which directly influence the lives of those who surround them and are their place of *Tīmatanga/Ursprung*. Through time, the power through which the person is able to connect (their mana) is centred upon the time an ancestor made a connection to the essences of land and water. A distinct point determines the nature of the essence that is transferred in time — the event of the arrival of the ancestor to that place. From then on the charge is placed upon the ancestor's descendants to reconnect to the purity of the *Tīmatanga/Ursprung*. It is for this reason that whakapapa is treated with such sanctity, that it is tapu. Anne Salmond (1985) explains that knowledge is a sacred power (mana, also) that belongs to the demotic collective, although an individual may hold it for a period of time. The mana is strengthened and the collective sanity reinforced with the recitation of known references at regular intervals, where mental maps are constructed that enable the participants to share in the same knowledge and construct the same framework of understanding (Roberts & Wills, 1998).

The application of tapu is widespread and includes the sanctification of objects where people apply to animate and inanimate objects, the faculties of intention, mind

and will — a process Gregory Cajete (2000, p. 186) calls ‘ensoulment.’ This is where indigenous people express their relationship to the natural world they interact with. For example, he says that the ensoulment of nature is one of the most ancient foundations of human psychology. Alfred Gell (1998, p. 16) adds to the discussion with the example of a girl who establishes a relationship with her doll and affords the doll attributes and behaviours far beyond its inanimate capabilities. This affordance is extended to the adult marvelling at the statue of David. From there it is only a small step for an object to be given the faculty of agency, for that object to be deified beyond its *Timatanga/Ursprung*. It is through such processes of attribution that the demotic collective can cause association amongst themselves by acting as the collective/social agency for the deification of an object or place, or an event.

The root of this perception comes from the idea that things are most precious and essentially perfect at the moment of their birth. It is at the moment of their greatest perfection, that they emerged “dazzling from the hands of a creator or in the shadowless light of a first morning” (Foucault, 2000, p. 372). The truth is, for most origins, that they do not dazzle. Most origins are mundane, for example the Te Rarawa story of how Aotearoa/New Zealand got its name tells that Kupe left Hawaiki aboard his vessel (*waka*), the *Matawhaorua*, and travelled in search of the fish of his ancestor, *Te-Ika-a-Māui*. During the voyage he went in chase after a great octopus called *Te Wheke Muturangi*. During this chase Kupe’s wife, *Kuramārotini*, saw what we now call the Southern Alps while looking for land. What she saw was a clear indication in the form of a cloud, so she called “He ao! He aotea!, He aotearoa!” — “A cloud! A white cloud! A long white cloud!” It is from this that the name Aotearoa was given to this land (Matthews, 1998). The name was given through the recognition of a landmass, nothing more profound than that. But is it more important who named the land than the reason it was awarded the name? The answer is not made clear in this story so the burden of interpretation is placed upon the speaker, and that may vary according to the context in which the story is told (Foucault, 2000, p. 378).

The *Timatanga/Ursprung* of the practice of genealogy itself is less than perfect. According to Simon Fowler (2001), the modern practice of genealogy emerged from divergent intentions where on the one hand was a desire to demonstrate the noble roots of a family’s heritage and on the other, a quite fraudulent attempt to make more of the inauspicious beginnings of a family than they deserved. Earlier, the issue of validation was raised and so, again the question of what is truth or what is fact is an issue that constantly pricks at the Genealogist. Foucault’s (Foucault, 2000, p. 370) assertion that truth is not defined as a “fact,” provable by correlation with other facts, but that it is comprised of those errors that have changed the least during the passage of time and retelling, to become accepted as the only truth because they are bound to tradition,

takes into account the effects of chance on human affairs. In the previous story Kupe went to search for Te-Ika-a-Māui. He got distracted and went to chase after Te Wheke Muturangi. It was during this error in judgement that his wife, Kuramārotini, actually found what they were originally in search for. In this story the error lies with the captain who was so distracted by the chase that a clearly obvious indication of land was nearly missed. The truth contained in this whakapapa says that the wife maintained good sense, while the men got carried away with unnecessary activities — reliance on matriarchal sense and sensibility is a feature that permeates Te Rarawa and Ngati Kahu whakapapa (Matiu & Mutu, 2002).

A latter day comparison illustrates the point. Figure 2.4 on the following page provides a fascinating comparison between what may be considered as fact. Figure 2.4a was extracted from the book *Te Whānau Moana* by McCully Matiu and Professor Margaret Mutu. In it is shown a gathering around the newly reinstated memorial of Nepia Te Morenga and his uncle, Poroa. There is one person who is identified in the photograph, Mātini Matiu. Figure 2.4b appears to be the same image, and indeed it was taken on the same day, at the same time as the other. But there are some significant differences between the two images, in particular the absence of pakeha in Figure 2.4a. Maybe it is because they had absented themselves at that particular time, except that 15–20 images from this very important occasion were viewed on a proof sheet, as well as the accompanying negatives. All those viewed contained the two missing people, Jock MacDonald (who was instrumental in getting the monument repaired and reinstated) and Leslie Nepia (wife of Busby Nepia, standing to her left). It appears that Leslie has been cropped out of the image in the book and Jock has been removed completely.

The images record this episode and each may be interpreted differently. The outcomes that arose from the event have been far reaching, but certain aspects may not always be given acknowledgement due to the absence of key figures. So while genealogy, and therefore whakapapa, may not be concerned with the quest of *Tīmatanga/Ursprung*, every attempt is made to ensure that episodic moments are given access and to include the detail and “accident[s]” (Foucault, 2000, p. 371) that gave rise to *Tīmatanga/Ursprung*. Human frailties are not forgotten because genealogy is based on a platform of “values, morality, asceticism, and knowledge” (2000, p. 373) of *ahuatanga* Māori (Māori tradition) and *tikanga* Māori (Māori custom). At times genealogy will include stories that are uncomfortable; stories that were submerged, and given the opportunity to escape from the false morality of censorship. It was not as the product of truth that they should ever have been hidden away from the light of current assessment. So it is for the Genealogist to sift through various origins, like the many spellings of a single name, and to select from those that fit best with the truth. The Genealogist must cultivate recognition of the events of history. They become sensitive to its jolts



Figure 2.4: History is not fixed, as this example shows. Here are two images, both taken at the same time, where (a) is reprinted from a recent book (*Matiu & Mutu, 2002, plate 142*) while (b) is taken from an original photographed at the same time (*Photo permission of M. MacDonald*). There are certain obvious differences between the two.

and surprises, and they come to know in detail “unsteady victories and unpalatable defeats” (2000, p. 373). For the Genealogist it is these that form the basis of all important beginnings, generalities, misrepresentations, and the roots from which successive events emerge.

The Tīmatanga/Ursprung of most indigenous people is the projection of the archetypes they perceive in themselves, into objects, entities, phenomena or events, and places (Cajete, 2000, pp. 186–187). There is a geminisation, where they understood that the roots of human meaning were grounded in the same orders they perceived in the world around them; where they experienced nature as a part of themselves and themselves as a part of nature; where they were born of the earth of their place. It is this story that is the Tīmatanga/Ursprung of whakapapa, it is this that forms the basis for a fully internalised bond with that place, that time, that event.

2.6 Kotahitanga/Herkunft

Nietzsche wrote at a time when the scientific method was new and exciting. It was an escape from the traditions and superstitions imposed by millennia of religious dogma and creationist thought. It was a time when the rational mind was able to solve every problem. When anything that could not be observed, for successful measurement, was therefore deemed not to exist at all. It is not surprising therefore that Nietzsche should identify a process such as ‘Herkunft.’ Foucault (2000, p. 373) defined this as the equivalent of a person’s stock or descent, their pedigree. It is a person’s ancient affiliation to a group, sustained by the bonds of blood, tradition, or social status. Therefore kotahitanga is applied, where it conveys the meaning of unity or oneness, to many strands that come together to bring strength.

Foucault’s analysis of ‘Herkunft’ often involves consideration of race or social type, which can be directly related to the pedigree of an individual, place or artefact that lists their antecedents. This understanding is straightforwardly transferred to most applications of society and is used frequently when attributing people with status and power (Thornton, 2002). Kotahitanga/Herkunft is the representation of subtle, singular, and sub-individual marks that may connect and link a person to others, forming a dense network that is difficult to unravel (Foucault, 2000, p. 373). It does not include in its matrix those characteristics which set a person apart, nor does it include their sentiments, ideas or feelings (2000, p. 369) because what is being referred to here is the emergence of science and its rejection of such things. One may at this point reflect on Edge’s ‘atomic’ description on page 29, in which people are represented as atoms that make various relations, forming a dense mat. And perhaps one may begin to observe the genesis of Edge’s idea, its own antecedent.

Rather than defining itself as a superstructure for the construction of matrices,

Kotahitanga/Herkunft creates a lattice into which differences can be catalogued, set apart for sorting and combining. An example of how this has been applied in Europe showed estimates of inbreeding in four rural villages of the French Jura region. The figures were derived from people's pedigrees and the frequency of marriages between people with the same surname. 4899 marriages were compared between 1763 and 1972. The results indicated that before the second half of the 20th century the incidence of inbreeding differed (Vernay, 2000). In this case the method demonstrated the use of genealogy data and methods were used to predict where inbreeding might occur. It is not necessarily a predictor of human behaviour however.

By following the unique aspect of a trait or concept, a person's descent may permit the discovery of the myriad events that combined to form their present manifestation. For example, as family names spread out from their place of origin in England, they sometimes assumed new forms of pronunciation or spelling. Most incurred only slight differences and are often easily recognised, others changed a lot and it is harder to see how they relate (Hey, 2001).

The result is that today, those who are seeking to relate to individuals of the past often face daunting challenges when, for example, they need to transcribe old church records, or immigration documents, or ship manifests. Foucault (2000, p. 373) addresses this issue by pointing out that people have a tendency to wish to make associations of various kinds that suit their personal need for attachment and unity. The task for the Genealogist is to search through the "numberless beginnings" (2000, p. 374) to recognise where similarities exist and where they do not — this, as a skill, is learned through experience.

The analysis of descent is less involved personally and is a dispassionate process. It is a paradigmatically scientific process that allows for dissociated events to become reconnected to their proper place and as such suits the Historian well in their efforts to make history effective. But Foucault's genealogy is not simply a recounting of the evolutionary trail of a species, nor does it define a people's destiny (2000, p. 374), as in the case of the French Jura region. Genealogy interweaves events with places, people and time, with the result that the story told is not necessarily tied to succession (2000, p. 371). This means that events may be explained as the result of some agency by reflecting back. Alfred Gell (1998, p. 17) describes this as the idea that things happen because they were supposed to and that they were caused by an 'agency' (see Section 2.7 on page 44). His agency is a culturally prescribed framework for thinking about causation by way of some person-agent or thing-agent.

And here there is a tie with whakapapa, which presents lines of descent where everything, both animate and inanimate, is descended from the first void, Te Kore. This represents the supreme agency (see Figure 2.5 on the next page) and as a result,

all things are linked in one way or another and all things share something of the same whakapapa. Lines of descent illustrate a succession of causes/agencies, creating a story for all things. It is the acceptance of this that gives rise to the Māori concept of going into the future while looking back, which means that everything is a continuum, from past to present, to future.

<i>Te Kore</i>	the void, energy, nothingness, potential
<i>Te Kore-te-whiwhia</i>	the void in which nothing is possessed
<i>Te Kore-te-rauea</i>	the void in which nothing is felt
<i>Te Kore-i-ai</i>	the void with nothing in union
<i>Te Kore-te-wiwiā</i>	the space without boundaries
<i>Na Te Kore Te Po</i>	from the void the night
<i>Te Po-nui</i>	the great night
<i>Te Po-roa</i>	the long night
<i>Te Po-uriuri</i>	the deep night
<i>Te Po-kerekere</i>	the intense night
<i>Te Po-tiwhatiwha</i>	the dark night
<i>Te Po-te-kitea</i>	the night in which nothing is seen
<i>Te Po-tangotango</i>	the intensely dark night
<i>Te Po-whawha</i>	the night of feeling
<i>Te Po-namunamu-ki-taiao</i>	the night of seeking the passage to the world
<i>Te Po-tahuri-atu</i>	the night of restless turning
<i>Te Po-tahuri-mai-ki-taiao</i>	the night of turning towards the revealed world
<i>Ki te Whai-ao</i>	to the glimmer of dawn
<i>Ki te Ao-marama</i>	to the bright light of day
<i>Tihei mauri-ora</i>	there is life

Figure 2.5: Te Aho Tuatahi, Māori creation story. *Source: Himona (n.d.).*

Foucault says that “genealogy does not pretend to go back in time to restore an unbroken continuity that operates beyond the dispersion of oblivion; its task is not to demonstrate that the past actively exists in the present, that it continues secretly to animate the present, having imposed a predetermined form on all its vicissitudes” (Foucault, 2000, p. 374). The value of pedigree, and therefore part of the value of whakapapa, lies in the fact of its being unbroken, so that it does not become dispersed.

Events occur throughout the ages and cannot be predicted, leaving their marks on the scarred body of life (2000, p. 376). The Genealogist is then drawn to follow the meanderings of descent, placing markers where events have occurred, in apparent arbitrary places in time. They try to understand ‘the what’ and ‘the why’ of these events that have disturbed the flow of ongoing life (2000, p. 376). So, at times the truth

will present itself, at others one must search, placing a buffer between future generations and the errors of current and past generations (Nietzsche, 1881/1974a).

For the Genealogist the search for descent is not the “erecting of foundations” (Foucault, 2000, p. 374) instead the Genealogist seeks to turn over stones of knowledge that have lain for centuries to see what is on the other side, to overturn misrepresented truths, to break down the unified into Edge-like atomistic fragments, because the Genealogist is driven by the detail, the atomic, the heterogeneous milieu that is made manifest by their investigations. For them the marks of descent show through in the physicality of the modern person, how they behave, why they fall ill. The Genealogist is interested in the errors made by their forebears to see what is made remarkable in them now. Because the “body — and everything that touches it: diet, climate, and soil — is the domain of the [Kotahitanga/Herkunft]” (2000, p. 375).

2.7 Hei Āhua/Entstehung

Emergence, the moment of arising (Foucault, 2000, p. 376), means that for every conception there must have been an instance when place, time, physical properties and some kind of will or desire came together to cause it to be (as the result of some agency). Throughout his discussion in *Nietzsche, genealogy, history*, Foucault interweaves the distribution and attribution of power as a factor in the evolution toward or away from the moment of emergence, Hei Āhua/Entstehung. And later he extends emergence to include formulaic repetitions of events, such as traditions and protocols, as factors that led to and away from the moment.

In Māori cosmology there are instances when universal whakapapa has its moments of arising that are related in the deistic, cosmogonic and anthropogonic whakapapa: Te Aho Tuatahi, the whakapapa of Io; Te Aho Tuarua, the whakapapa of the world of stars; Te Aho Tuatoe, the whakapapa of human beings; Te Aho Tuawha, the whakapapa that leads to the present generations (Edge, 1998, pp. 72–75). It is from the common whakapapa, related in Figure 2.5 on the preceding page, that the trace of all living beings, beginning with the emergence of Io from the first formless void, is told.

Foucault suggests that Entstehung makes its appearance as the “principle and the singular law of an apparition” (Foucault, 2000, p. 376), that it comes out from a unity in which everything that ensues from the first moment is imbued by the initiating will and desire of the ‘apparition,’ hence coming under the influence of its law. Alfred Gell (1998, p. 16) adds to this concept when he uses the term ‘agency’ — which can be attributed to persons or things that are seen as initiating causal sequences. Fundamental to understanding agency is that it has intention and therefore it must also have mind and will (it has āhua, it has character and its form is created or makes appearance). It is more than the coming together of various physical elements measurable through time

and space.

An agent is one who causes events to happen within their sphere of influence, but cause is often misunderstood. The results from an agency that caused a sequence of events are unforeseen, unintended, even unwanted. This misunderstanding can be seen when people look at their current situation, determine that it is lacking and condemn the agency which caused this to be. For example, death is seen to be a time of pain and loss, and how many times have we heard or seen those who, in their grief, declaim God for lack of understanding their present state? In Māoritanga, to declaim the supreme being, Io, in this way would be tantamount to heresy, so the issue is addressed through the vehicle of a story.

Reed (Reed, 1983, pp. 20–21) relates the story of Hine-i-taurira, or Hine-titama (Girl of the Dawn), who was a daughter of the god Tane and Hine-ahuone. When Hine-titama grew to become a woman Tane took her as his wife, but she had no recollection of who her parents were, so she asked Tane about them. After fending off her questions, he finally admitted the truth that he was indeed her father. Hine-titama was deeply hurt and saddened by this and made the decision to leave Tane, but as he pointed out, his was a world of light and there was nowhere she could go to escape him. She determined to leave his world therefore and enter the world of shadows inside the great mother, Papatuanuku, by casting a sleep-inducing spell upon herself. Her parting words to Tane were for him to remain in the world of light, to pull their offspring up to the day, while she would go below to pull them down into the night. Then, when she got to the place of shadows her name was changed to Hinenuitepo (Great Woman of Night), where she exists to this time catching the living the spirits of her children, while still dwelling with her shame.

There are many overlays within the whakapapa of this story that include the pain of the shame associated with incest and the change in disposition of Hine-titama, the sunny girl, to the night hag, Hinenuitepo — the transition representing the death of her innocence. It is here that the link between those feelings associated with death and the place where the Hei Āhua/Entstehung of death itself is located. Knowing this offers comfort for those experiencing death and understanding for those who are closely related. The comfort is afforded with the knowledge that she who went before, the first one, is still there awaiting the return of her children. Foucault says that one should avoid looking at the present state of affairs and using that as the definition of what constituted the Hei Āhua/Entstehung of now. The story presents a remote ancestor and a god, both beyond reproach and untouched by our moral coda, whose acts of agency resulted in the fact of our own mortality. What causes a single death now is too far removed from the Hei Āhua/Entstehung, so that we are left with the story as explanation.

Every emergence, every new birth, contains untold possibility. The succession of lives and events is not smooth, the transition not continuous. Foucault (2000, p. 376) asserts that it is wrong to search for descent as an uninterrupted continuity. *Hei Āhua/Entstehung* is discontinuous, marked by the subjugation of successive events. It is the exercising of the greater and more powerful over the lesser and weaker. It is not a single thing, but rather a colloidal wash, like the waves of an incoming tide. And in this, Foucault says, is contained the point where his metaphysician would attempt to make the argument that all moments occur because they can be related back to some “obscure purpose” (2000, p. 376) and that they require realisation at the moment of their arising — their *Tīmatanga/Ursprung*.

Foucault’s genealogy is a process by which various systems of subjection can be re-established. He does not promote the concept of finding meaning from the accumulation of present day results, instead he advances the idea of investigating the “hazardous play of dominations” (2000, p. 376). As the procession of events recur throughout time, each caused by some kind of agency, they leave behind them a trace of dominations and subjugations which genealogy seeks to reconnect. An example of this analysis can be found in Brian Cusack’s (1991, pp. 63–64) analysis of Foucault’s work. He described how relationships within human organisations exist as a function of power and as such the imposition of the concepts of governance and punishment could be traced in the same way that bloodlines could be traced in genealogy. From this a researcher would be able to trace the descent of features within, for example, a democratic government throughout successive epochs.

In another example, Mason Durie (2001, p. 201) describes how genealogical records are an essential part of what he calls the “whānau record” and need to be preserved and protected. He says that computer based genealogical systems are being used more frequently, and because of this he suggests that incorrect distribution of information could compromise whānau property rights or open the whānau up to unwanted inspection. This is an issue that he says is an abuse of whānau property rights and therefore, he says, special legislation is needed to provide protection. The proposal for special legislation is not supported here because one can never legislate against human impulse, only the outcomes of people’s actions. There is a natural impulse for people to create a connection between themselves and their *Hei Āhua/Entstehung* and this is translated by some Māori as a requirement for those who wish to forge a link with their whānau to ‘come home’ to the marae. However, for many who live in distant parts it is not an option and so for them there is an expectation to be able to utilise electronic communication technologies. Durie (2001) even suggests that electronic mail may begin to replace hui as the forum for exchange.

This example provides a bridge between the recognition of influences on loci in

passing generations and places those within a holism inside which the demotic¹ can adopt the recurring event as one of its features, such as the story *The Whale Rider* (Ihimaera, 2002). In this story each generation produced a child named after Kahutia Te Rangi, the principal ancestor of Te Tai Rawhiti, who was expected to develop to become the leader of the tribe. Inside this small example one can see that Kahutia Te Rangi, as a leader was defined by his Hei Āhua/Entstehung, the event of his arrival on the back of a whale. His subjugation of the whale (which as a food source featured highly in various coastal Māori communities) was a feat to be matched by successive generations of leaders — so that his emergence at this moment in time represented for his people the principle and the standard by which they expected their leaders to govern, if they were themselves to be subjugated. As Daniel Gross (2001) said, it enables people to identify themselves in some essential way by not being able to directly identify with a specific historical event or some subject in a continuous narrative.

Hei Āhua/Entstehung heralds the entry of forces which erupt “from the wings to centre stage, each in its youthful strength” (Foucault, 2000, p. 377) and presents juxtaposed forces of apparent regeneration and degeneration (2000, p. 376). Foucault says that analysis of the Hei Āhua/Entstehung separates the manner of the struggle these forces “wage against each other. . . [or against] . . . difficulties as they arise” (2000, p. 376) on the one hand, with attempts to “avoid degeneration and regain strength by dividing these forces against themselves” on the other (2000, p. 376). The swings and balances of these forces can be represented as the shift from demotic collectivism in the Europe of principalities and widespread imperialism to loci within states and nations. For example, the emergence of locus individualisation in Europe saw the breakdown of power structures where traditional customs were vilified as feudal dregs (Buckley, 2002). In another example that illustrates the situation described, Thornton (2002) relates that during the period A.D. 500–1100, the early Middle Ages, Ireland as it is known now did not exist as a political unity. Ireland then was a series of independent over-kingdoms, or provinces. Each ruled by a single large macro-dynasty whose various segments or branches claimed a common ancestor, thought to have lived before 500 AD. This is strikingly similar to that related for whakapapa, and appears to be consistent with other forms of demotic collective. The breakdown of the demotic collective in Ireland has been well documented, through the intervention of foreign powers — Norman, English and French (Lydon, 1981) — subjugating existing ruling power structures.

While the intentions of those who invaded the Irish lands are open for debate, it

¹In Section 2.1 on page 28 the concepts of locus and demotic were defined where the locus describes the nature of relationship in which family members are related to an individual. In a sense, the world is focussed on that person and the relationships are defined such that they relate to the individual and their descendancy. The demotic on the other hand recognises that the definition of a relationship may be defined by factors other than blood ties. The demotic takes account of social and cultural strata, as well as societal affiliations and the origination of a group or individual.

may be true that the actions of the agents of that time had unintended consequences. It cannot be said, therefore, that recorded events indicate agency intentions (Gell, 1998, p. 16) because artefacts left after an event (the recordings) often represent snapshots of events themselves, revealing their outcomes rather than their moment of emergence.

In recent times people in societies that class themselves as indigenous have made much of their place on the land from which they arose (Cajete, 2000), defining their Hei Āhua/Entstehung. It appears that it has become a mark of honour to be recognised as having a demotic lineage. But one must recognise the uniqueness of the demotic whole, in a form characterised by *durability, uniformity, and simplicity*. When these have been given credence the demotic may “prevail in the perpetual struggle against outsiders or the uprising of those it oppresses from within” (Nietzsche, 1886/1968). To illustrate this, consider the period early to mid 19th century Aotearoa/New Zealand. During which time there presented a scene of extended civil and inter-tribal strife, the reasons and explanations of which are thoroughly documented in numerous sources and are not covered here (Ballara, 2003; Parsonson, 2003). While the conflict was largely over with by the latter half of the century, inter-tribal feelings of competition and animosity still existed. Roger Neich (1994) approached this apparent stand-off by looking at the development of painted art forms (kowhaiwhai) in Māori meeting houses found on marae. What he noted was that prior to the 1840s most painting in meeting houses consisted of the spreading of red ochre onto carved works, but after this time distinctive regional styles of kowhaiwhai had begun to emerge. These styles included previously unknown figurative and representational styles applied to panels of ancestors. This represented for the people a symbol of tribal pride and identity and is picked up by Gell (1998, p. 256). He said that the whole purpose of this emergence was for the iwi or hapū to crush the self esteem of rivals by expressing the superiority of their artistic skill and by exalting their ancestors in a way beyond the imagination of their foe. This evolution occurred during a 50 year period after which tensions began to subside and the appearance of these art forms also began to diminish, returning to the more traditional forms used earlier.

Nietzsche introduced another dimension in the statement “oppresses from within” (Nietzsche, 1886/1968; Foucault, 2000, p. 376). When a demotic collective has asserted its power upon its neighbours, and prevailed, it appears that individual differences begin to emerge within the collective. Foucault makes the suggestion that at times when there is an “intoxication of . . . abundance” (2000, pp. 376–377) the collective begins to divide against itself, which becomes its moment of weakening. This can take the form of domination from one to another, differences of values or the accumulation of things which, normally essential for survival, begin to have limited access. To restrict the appearance of this cultures have established protocols to ensure fair distribution of

resources, or limiting access to everyone to vital sources regardless of class, for example by placing tapu on food sources at certain times so they can regenerate.

In Māori society protocol forms a foundation upon which the culture is defined, and is highlighted with the application and development of marae protocol. Margaret Mutu (2002, p. 145) clearly states that marae remain the focal point of Ngāti Kahu communities wherein the protocols (tikanga) are fairly consistent from one marae to the next, so if the protocols are contravened deliberately then the person can expect to receive swift corrective action, although visitors are accorded a degree of tolerance. Then if such events happen too often the elders (kaumātua and kuia) will call a meeting for the purpose of learning and the passing on of knowledge (wānanga) to put the protocols back in place, to reassert the dominance of traditional values.

The Hei Āhua/Entstehung to which Foucault refers is not an abstraction. When something emerges it will have an affect, as already explained, which is often unexpected and at times unwanted. Through the influence of their power, these effects become engraved upon the body of the person and upon the demotic body. One of the striking features of Māori is the use of ta moko or body marking. Simmons (1997) discusses in detail the meaning and practice of ta moko. Within the demotic collective individuality is recognised, but as part of the ongoing story of the whole, in this way ta moko contains the narrative that describes the person's place in their collective and the demotic affiliations between the iwi, hapū and whānau. In this way the person can be accorded mana by way of their whakapapa and therefore carry forward their social standing.

Matiu and Mutu (2002, pp. 156–170) provide a broad discussion of mana in which she defines five types: the sacred power of the gods (mana atua); authority and power transferred through chiefly privilege (mana tūpuna); the power accorded to the Great Mother, Papatuanuku (mana whenua); the power acquired by a person during their life (mana tangata); and, the power accorded to the sea (mana moana). Most attributions of mana are passed on from previous generations, through the person's whakapapa, but those that were earned are regarded very highly and were recorded as additional markings, as moko, throughout the person's life.

The meanings of ta moko can be difficult to decipher, even for experts, because they vary from tribe to tribe and some meanings are local to distinct family groups, therefore interpretation requires participation from other members of the same group, be it iwi, hapū or whānau. When people die the knowledge they have is lost, except for that which was passed on the succeeding generations. So it is essential that knowledge is passed on in its entirety.

External to the body of the person, but no less part of the demotic, is the art of carving, Te toi whakairo. The forms inscribed have many meanings and are used to depict morals, laws, philosophies and whakapapa. The art itself was passed onto humans

by the gods and is therefore very tapu, so that master carvers (tohunga whakairo) maintain a place of high standing in the community (Nelson, 1991, p. 43). However there are a relatively small number of themes which Terence Barrow (1984, p. 32) describes as: tiki, human-like forms that at times are merged with animistic deities; manaia, combines the head of the bird with the limbs and body of a lizard; moko, lizards that closely resemble their reptilian form; marakihau, male sea creatures; and, pakake, whale forms more aligned to taniwha (monstrous creatures) than to actual whales.

Hei Āhua/Entstehung, because it transpires that emergence can contain those of others, “makes itself accountable for debts and gives rise to the universe of rules” (Foucault, 2000, p. 377). That is Hei Āhua/Entstehung becomes accountable for itself, in the same way that a person seeks to be accountable for the results of their own actions, regardless of whether those actions produced favourable or unfavourable outcomes. To reduce the likelihood of unwanted results rules are established, and rules beget rules, and rules beget traditions, and traditions beget customs. But rules are superficial and empty in themselves, unfinished and able to be changed according to need. The exercising of influence, in the establishment of rules, creates a succession of dominations. Foucault uses the term “violence” (Foucault, 2000, p. 377) to describe the nature of how rules affect those who come up against them. He sees that humanity is inherently violent so any rules created will themselves be instilled by violence. The rules therefore allow violence to be inflicted on violence, creating new forces capable of dominating those currently in power.

Foucault (2000, p. 377) says that rules in themselves do not actually stop violence, rather that they satisfy it. An uncomfortable fit is made with the practice of utu. Essentially utu means to make return for something or the due price of some thing or some action. Mostly it carries with it the idea of rebalance, to redress the balance. At other times utu is equated with revenge, such as this story from Nga Puhi. After female relatives were abducted and later consumed Hongi Hika and Te Morenga, in 1818, led separate forces through the Waikato and Hauraki regions, causing significant depopulation and demographic shifts (Ballara, 1991). After cutting a terrible swathe through the regions Te Morenga had decided sufficient price had been paid, so he and his forces went back north to Taiamai. Hongi Hika’s contemporaries expected him to take the throne as king but he was no conqueror and this was not a war of conquest, it was retribution. Afterward animosities still existed until the Māori king Tawhiao presented his youngest daughter, Mereana Haki Te Ura, to Te Morenga as a wife (Litchfield, 2003b), binding the two tribes together into a common goal. Either way, as Foucault (2000, p. 378) asserts, the violences are put inside rule systems, and the passage of dominations is perpetuated, from one to the next.

To define emergence, *Hei Āhua/Entstehung*, relies on more than the isolation of points of difference. Put into other contexts meanings of things will change because of “substitutions, displacements, disguised conquests, and systematic reversals” (Foucault, 2000, p. 378). And so, much is left to interpretation, to which Foucault would say “if interpretation is the violent or surreptitious appropriation of a system of rules . . . then the development of humanity is a series of interpretations” (2000, p. 378) inside of which is the understanding that rules have no essential meaning. Rules guide and impose direction, bending intentions to will, subjecting them to secondary rules. Whakapapa relies heavily on the speaker for interpretation and the rules of its transfer operate to impose order on past and present generations.

2.8 An application of symbols

Whakapapa provides a societal framework or history that contains tūpuna (ancestors), whānau (family), hapū (subtribe), iwi (tribe), and gods of various kinds, traditions, protocols and social strata. Foucault demonstrates how to see what is inside a history by severing its connection to its “memory.” He deconstructs history by removing from it links to the frameworks that comprise it and then reconstructing those to create a “counter-memory” (Foucault, 2000, p. 385) totally different from the original, but made up from the same individual parts. Like placing various objects — buttons, glitter, string and so on — in a precise order on a sheet of card, then flinging the card up in the air to see where the pieces should fall. To do this to whakapapa is like taking the constituent parts that comprise it, flinging those out onto the table and constructing new forms from that.

The result of deconstructing a historical framework presents a figure who is at first unrecognised because they are not in their context and so it is for those who are without their whakapapa. These people are “confused and anonymous” (Foucault, 2000, p. 385) not knowing what name to adopt or whether it is better to take on the identities offered through other media than the family. Perhaps this is the reason so many young Māori adopt pseudo-American cultural attributes like Hip-hop or Rap, or seek for recognition through religious adjuncts such as Rastafari. *Hei Āhua/Entstehung* signals the intrusive domination of alien forms and rhythms, accepted because they fill the void of ignorance and disconnection from their whakapapa with the result that *Kotahitanga/Herkunft* is broken or at least severely scarred.

But the person who has their connection through whakapapa sees these as masks, as cultural chimera. The person connected through whakapapa, which is itself a shifting framework, allows the masquerade to go on. They see that the participants in the charade adopt new masks, or that others amongst them will share their identities with their kindred (Foucault, 2000, p. 385–386).

In the sense that those who have been disconnected adopt roles which are at once alluring and alien to their *Timatanga/Ursprung*, whakapapa may be seen as the sanity inside the cavalcade of fashion and distinction. But whakapapa is not therefore representative of history or tradition, whakapapa becomes a “systematic dissociation of our identity” (Foucault, 2000, p. 386), meaning that whakapapa contains the uncomfortable truths and reality the disconnected seek to escape from through the adoption of their identity. It is that identity, weak though it is, that becomes a parody of the historical sense within the person whose connection is through whakapapa.

Whakapapa is opposed to the lives lived by the dispossessed. The gathering of whakapapa allows one to possess not just a singular immortal soul, but also the many mortal souls who have lived in their time and continue to live out of time. The promise of whakapapa is not to return to the void of Io at death, although the souls of the dead return to Papatuanuku, to the waiting arms of Hinenuitepo. And whakapapa, as a holism, does not seek to dissipate identity. Rather it becomes the crossing point of all those strands that cross each of us.

It is satisfied by the application of truth but that is not the same as having knowledge gathered from history. A truth can be traced back to its point of emergence, its *Hei Āhua/Entstehung*, but only if its whakapapa has been passed on in its entirety.

If whakapapa is presented passionately, the approach to it is not. Foucault calls this *historical consciousness* which is “neutral, devoid of passions, and committed solely to truth” (2000, p. 387). Yet when put under the microscope of self examination all the human emotions and impulses are found, complete. So again there is a curious juxtaposition where on the one hand the Genealogist is home to passions so that whatever they express is coloured by that same filter. And on the other, to remove oneself from the milieu of passion takes a tremendous application of will. Thus the gathering of knowledge in the historical sense is opposed to whakapapa, and is reflective of existing dominations, and therefore unjust where happiness is no motive and there is no right to truth because it is the result of contemporary interpretation.

In a sense, genealogy returns to the three modalities of history that Nietzsche recognised in 1874... :the veneration of monuments becomes parody; the respect for ancient continuities becomes systematic dissociation; the critique of the injustices of the past by a truth held by men in the present becomes the destruction of the man who maintains the knowledge... by the injustice proper to the will to knowledge.

(Foucault, 2000, p. 389)

2.9 Summary

In this chapter publications that relate to this study were reviewed. The chapter introduced the concepts of the Demotic and the Locus, as representations of the result of cultural evolutionary processes. The Demotic and Locus were placed within the context of genealogy and whakapapa and Foucault's descriptions of the personas, the Historian and the Genealogist, were introduced and compared against them, and each other. Foucault's concepts were adopted and used to describe Tīmatanga/Ursprung, Kotahitanga/Herkunft, and Hei Āhua/Entstehung which are symbolic of processes and core understandings of whakapapa. The symbols were then applied to whakapapa itself.

In the next chapter these concepts are used to prescribe the data gathering and analysis methods.

Chapter 3

Methodology

3.1 Discussion of methods

This section discusses how data collection and analysis methods were selected and implemented.

In the development of this methodology it is important to note that the participant/subject may take the lead during interactions (interviews, observations, and text source analyses). They may become an agent for their own theoretical basis, their teaching or learning, or other actions. This is not the same as *respondent validation* found in Action Research, in which the participants guide the study, with the researcher presenting their results back to the subject, the subject commenting on them and the researcher altering their findings to suit (Reason & Rowan, 1981). Rather, the approach taken immerses the researcher in the environment, making them subject to it and improving their opportunity to learn.

In Chapter 2 the field of whakapapa was identified within a framework outlined by Foucault in his essay, *Nietzsche, Genealogy, History* (Foucault, 2000). It is clear that there are cultural imperatives so that better understanding of the context of tribal genealogy is required because the locus model of familial relationships presents fundamental problems when it is applied. The locus does not allow for the complex relationships that identify a person, for example the definition of family or whānau includes ones immediate family (birth parents and siblings), hapū (extended family relations typically based on the location of a marae, or meeting house, and normally attributes its succession from a single ancestor or tūpuna), or iwi (tribal relations based on ones descendancy from a focal ancestor or tūpuna, or a significant event), and depending upon a person's birth they may belong to more than one whānau, hapū or iwi.

Since demotic relationships tend to be complex and fluid they evolve over time, whereas locus relationships are fixed at the time of birth. In both cases a person accrues attributes throughout their life, but the demotic may add familial relationships. To

model these complex relationships, and to understand their implications, necessitates the application of appropriate data gathering and analysis methods. But there is a perception that Māori feel they have been over analysed and are suspicious of researchers who come and go, taking but not giving. Therefore any method needs to be sensitive to the people and their context, it is not enough to simply go in with a questionnaire and ask for information that is often regarded as sacred or tapu. To retain a degree of separation during the data gathering phase may be regarded as rude and offensive because when one is welcomed into a circumstance it is inappropriate to then stand apart. Therefore the method needs to include an element of immersion within the context, to better understand it and to experience it from an insider's standpoint.

While the application of carefully phrased questionnaires or interviews are extremely useful for obtaining specific information, their use that may also prevent unexpected or unlooked for information from being taken seriously. From a purely quantitative research standpoint, carefully structured questionnaires are intended to elicit responses that can be quantified and analysed, from which inferences may be made. Such quantitative methods have their place in circumstances where the participant is already open to the questions being answered, but answers may be given to questions to mask reality. It was demonstrated in Section 2.5 on page 37 that people regard whakapapa as very private and at the same time it is intrinsic to tribal makeup. At the beginning of this study the kind of information required was suspected but not fully known, therefore it is proposed that unstructured interview methods are applied. These may then be analysed later to discern what kinds patterns emerge.

In Section 1.1 on page 18 it was stated that the aim of this research is to identify human and cultural factors that can be used as predictors in the design of a system and its subsequent development. The research method therefore must satisfy this requirement. The study concentrated on a small group considered as representative of the larger group of Māori. It is a group that retains knowledge of tribal genealogical structures, even though its members may not be consciously aware of how this knowledge is framed or transferred. It is understood, too, that every iwi differs in the details of how whakapapa are recalled or related, such variations are outside the scope of this study. The main focus was to identify factors that can be extrapolated to other groups or circumstances, in effect, that they may be generalisable. Later studies may then test these.

It was decided that purely quantitative methods would not provide the right kind of circumstance for investigating the environment because of suspicions from the potential participants. And since much of the knowledge about how the process of whakapapa functions is not obvious the narrow focus of a quantitative method may obfuscate important data. Therefore qualitative methods were considered to be more appropriate

and symbolic interactionism appeared to hold some degree of promise. Later it proved to be a good fit.

To extrapolate any findings as predictors quantitative methods were applied. They are not intended as a replacement or in preference to qualitative methods, but complement and reinforce them.

However the selection of method needed to satisfy the following criteria:

- Allow for immersive data gathering
- Use unstructured interview methods
- Include some method for discerning structure in social organisations
- Have deep interpretative methods
- Data gathered can be used in quantitative as well as qualitative analyses
- The focus is fairly well defined, but is still open to change

Initially, two qualitative methods presented themselves as likely methods: grounded theory and ethnography. Glaser and Strauss (1967) proposed the idea of theory ‘grounded’ in data, instead of being presumed at the outset of the study. The idea is that the researcher is immersed in naturally occurring events observed or experienced in a situation in order to gain first hand knowledge, in which the situation is a single static reality (Singleton, Straits, Straits, & McAllister, 1988, pp. 296, 298–299; Silverman, 2000, p. 62). Theory emerges from analysis of the data obtained, with care taken from the outset that presuppositions are minimised. The researcher brings with them orientating ideas, various ‘foci’ and some tools (Huberman & Miles, 1984).

Ethnography, whilst similar in its approach to grounded theory, varies in two important areas: a conceptual orientation is necessary in order to recognise the field one is studying (a criticism of grounded theory is that it is too loose); and, with a tighter design, one can be more selective about what is deemed important (Silverman, 2000, pp. 62–63) so that one does not become diverted into non-productive areas. Huberman and Miles are quite succinct about this when they say “the looser the initial design, the less selective the collection of data; *everything* looks important at the outset to someone waiting for the key constructs or regularities to emerge from the site, and that wait can be along one” (Huberman & Miles, 1984, p. 28).

In both cases, the use of stories from key informants is critical to the presentation of theses, and to obtain depth in analyses. Silverman (2000, p. 14) says that without the inclusion of stories a research may be considered empty and unhelpful, therefore part of the aim is to find stories that represent themes.

As a practitioner of whakapapa and member of the New Zealand Society of Genealogists it is reasonable to argue that I already have a quite sizeable breadth of experience in the field. I can form concepts, models, and theses from that existing body of knowledge. So, unlike the stereotypical anthropologist, mine was not the task of going into

Term	Meaning
Model	An overall framework for looking at reality (e.g. symbolic interactionism)
Concept	An idea deriving from a given model
Theory	A set of concepts used to define and/or explain some phenomenon
Research question	Defines topic for examination
Methodology	A general approach to studying research topics
Method	A specific research technique

Table 3.1: Basic terms in research. *Adapted from Silverman (2000, p. 77)*

unknown territories and quietly observing the natives and developing theories on social interaction based on those observations. Instead I was in the position where the theories were there but they needed validation before being applied to the design of a system. So grounded theory did not apply in this study since it depends on a lack of prior interaction, for the observer to retain a degree of impartiality. Instead the ethnographic method was used, which allows for an immersive approach. David Silverman, in his book *Doing Qualitative Research; A practical handbook* (Silverman, 2000), provides a template for conducting an ethnographic research and analysis (see Table 3.1). These are discussed in the following sections.

Figure 3.1 on the following page presents an outline of Silverman’s template in relation to the broad areas as they relate to this study. They are then elaborated on in Chapter 4.

3.1.1 Model

The model or paradigm provides an overall framework through which one can begin to understand reality. Any model usually has two elements, ontology and epistemology. In considering the ontology of whakapapa, current understandings were detailed in Chapter 2. The reality and basic elements of whakapapa touches all aspects of Māori life. Also covered in the chapter is a current view of the knowledge, its epistemology.

Silverman (2000:77) identifies a number of models, of these *symbolic interactionism* fits best. Symbolic interactionism has a long history in sociology and was led by Herbert Blumer (1900–1987) of the Chicago School, Erving Goffman and George Herbert Mead (1863–1931). It provides a framework in which there is an examination of how individuals and groups interact, with the focus on the creation and development of personal identity through interaction with others (*Symbolic Interactionism*, 2003).

Symbolic interactionism grew out from social constructionism, in which Peter L. Berger and Thomas Luckmann (1966) describe ways that one might discover how social

Model

Symbolic Interactionism (Blumer's model)

- i) human interaction
- ii) interpretation or definition rather than mere reaction
- iii) response based on meaning
- iv) use of symbols
- v) stimulus \rightarrow interpretation \rightarrow response

**Concepts**

That the transfer of whakapapa is a series of stimuli that are interpreted by the recipient, whose response determines what and how the next phase is conducted.

**Theory**

Silverman's suggestions:

- i) Context
- ii) Comparison
- iii) Implications
- iv) Lateral thinking

**Research question**

The process of getting to know a figure from history follows a sequence of events. See Section 3.1.4 on page 69.

**Methodology**

Qualitative analysis, using observations and naturally occurring data.

**Findings**

Application of processes for systems design.
Estimate of usefulness.

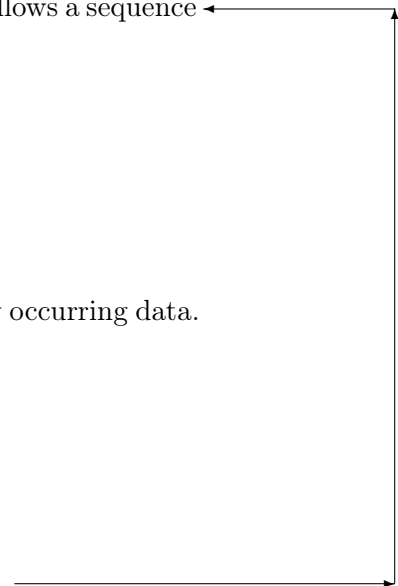


Figure 3.1: Research method applied in the study. *Adapted from Silverman (2000)*

reality and social phenomena are constructed, then institutionalised and eventually reduced to tradition. In social constructionism the focus is on describing institutions, actions, relationships between participants and power relationships and not on analysing causes and effects. Berger and Luckman say people build a reality based on their experience and their interpretation of knowledge, which is then reinforced by them reproducing their reality in what they do and say (*Social constructionism*, 2003).

The focus in symbolic interactionism is on subjective aspects of social life, rather than on large scale objective issues — this premise extends the work of Max Weber (1864–1920). Concentrating on face-to-face interactions and the meaning of events to the participants’ involved (the ‘definition of the situation’) moves the researcher’s attention away from societal norms and values, and towards social processes that are changeable and continually readjusting. As McClelland points out, “negotiation among members of society creates temporary, socially constructed relations which remain in constant flux, despite relative stability in the basic framework governing those relations” (McClelland, 2000). In regard to whakapapa, this perspective is vital to the understanding of how relationships are built and defined.

Humans are regarded as ‘pragmatic actors’ who are continually adjusting their behaviour to the actions of other actors. But humans are also ‘creative participants’ who construct their social world. They are not passive, conforming objects of socialisation. Even though they interpret other humans, actions and themselves as objects. This is made possible because humans can ‘interpret’ actions and other actors symbolically, and they can rehearse actions before committing to one.

As Blumer states:

The term “symbolic interaction” refers to the peculiar and distinctive character of interaction [that occurs], as it takes place, between human beings. The peculiarity consists in the fact that human beings interpret or “define” each other’s actions instead of merely reacting to each other’s actions. Their “response” is not made directly to the actions of one another but instead is based on the meaning . . . they attach to such actions. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another’s actions. This mediation is equivalent to inserting a process of interpretation between stimulus and response in the case of human behavior.

(Blumer, 1986, p. 180)

Blumer’s (1986:78–79) characteristics of this approach are:

Human interaction

Actions are always joined with mutual response and adjustment between the actor

and others who are involved. The self of a person, if it emerges, develops from both the individual and how others see them too. Therefore human interaction is concerned with joint acts that define the form and structure of individual lives and societies.

Definition

Involves the interpretation or definition of human interaction, rather than mere reaction. According to Blumer, the human doesn't merely react to circumstances as they arise. Any response is given after a period of self reflection and may be based on past experience or the synthesis of knowledge already held. In other words, the person interprets the circumstance and makes a response based on that interpretation. The interaction may be with an external object (animate or inanimate) or inside their selves (with their Other).

Response based on meaning

Change, adjustment, becoming. When a person interacts they will respond, based on their interpretation and the subsequent meaning they have given to that interaction. Which means that when a response is made it will not be the same as a response they may have made before. This is because each process takes into account any factors that are relevant at the time and the person will change to suit that. Which in turn means that they will need to make adjustment in themselves, or with their Other, to match the current interaction. So every response is on a continuum of becoming, for the individual.

Use of symbols

It is the humans' creative and extensive use of symbols to communicate that distinguishes them from other creatures. Now, it is important to note here that a symbol can be used to represent anything significant for the individual. For example, symbols can be animate or inanimate objects, concepts, emotions, people, states of mind, or any other phenomena.

Stimulus and response

Interpretation between stimulus and response. Taking the points above, a person receives a stimulus and interprets the meaning that it has for them. From that they can make their response.

3.1.2 Concept

Blumer (1986, pp. 153–160) discusses the development and application of concepts in social sciences in which he compares perception and conception. The process of perception relates to the process a person undertakes when they orientate themselves

with their environment. It is their perception that allows them to take some action, unless they are blocked in some way, and may be in any number of ways; physically, emotionally, psychologically, spiritually. But it is a blockage that will prevent them from achieving a desired goal and when they experience this, they are likely to perceive that they have been frustrated in some way, but that may be all. It doesn't allow for any solution, necessarily.

The conceptual process, on the other hand, allows the person to circumvent such obstacles. That is, if a person finds their activity frustrated and their perception insufficient, their conceptualisation allows them to re-orientate themselves, and undertake a different course of action. Their new concept feeds back into perceiving, reshaping or influencing perception. The process of conceptualisation involves the abstraction of phenomena so that what is observed can be applied in other circumstances. To better understand this, a concept can be thought of as an object that is formed when the person has established sufficient knowledge of their environment that they can create a generalised view of it. The generalised view is itself an abstraction of reality and informs them, via the process of perception, of what to expect in a circumstance and how to deal with it.

Silverman defines concept as "specified ideas deriving from a particular model" (2000, p. 78). For example, the idea of defining a situation with interactionism and the use of a documentary method of interpretation with qualitative analysis.

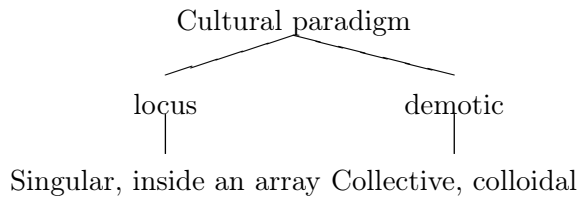
Foucault's (2000) discourse on genealogy provides a framework through which current understandings and writings relating to whakapapa are analysed. This has identified fundamental concepts used in the ethnographic analysis of the process of information transfer in whakapapa.

From the discourse of Foucault's writing and the subsequent framework, a conceptual analysis was undertaken. The details of these concepts are shown in Figures 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

Summary of concepts

The summary of concepts identifies specific objects contained within the process of whakapapa. As a theoretical model it is complete, but needs to be tested against a large number of real life examples.

- Two cultural paradigms have been identified; the locus and the demotic (see Figure 3.2 on the following page). In this, the locus opposes the demotic and represents the singularised nature of the person, whereas the demotic can be perceived as a colloid in which there exists a dense movement of particles. From outside the demotic appears stable, which can be quite deceiving.

Figure 3.2: Representation of cultural paradigms. *Litchfield*

- Whakapapa (Figure 3.3 on the next page) contains lines of descent and contains the pedigree of a person, artefact, event, or place. It is a connective thread that binds groups and is used to identify groups through deistic, cosmogonic and anthropogonic whakapapa.
Within and between groups, whakapapa identifies personal and group status, tracing successes, failures, subjections and injustices.
- Whakapapa is a collective memory and shared history. It is inclusive of all members of the group. As a memory it requires constant repetition through dance, music, story, body marking, carving, painting, aphorisms, interpretation of events and stories, allegory, metaphor, and so on. The correct usage and repetition of whakapapa is governed by protocols and traditions.
- Whakapapa is generally passed on during hui wānanga, which follow āhua-tanga Māori and tikanga Māori. It details origins, relates them to present conditions and consideration is given to additions to tribal records. The question of who speaks, and when they speak, is controlled by perceptions of mana. Mana is established through Tīmatanga/Ursprung, but mana belongs to the demotic collective and can be held by any person for a limited period.
- Foucault identifies two natures of approach, that of the Historian and the Genealogist (Figure 3.4 on page 64). The Historian attempts to establish knowledge based on understanding of the environment and developing perception about it. By this the Historian seeks to make history effective. Indeed these are so significant that they achieve something of a god-like status. The Historian relishes objectivity, accuracy of facts and the permanence and unchanging nature of the past. The Genealogist, whilst doing the same as the Historian, acknowledges sentiment, love, acts of conscience and uses their instinct. The Genealogist embraces the sense of origination and cultivates the events of history. In this way the Genealogist develops a historical awareness that is opposed to the Historian's historical consciousness.
- Tīmatanga/Ursprung (Figure 3.5 on page 64) is the process of seeking to capture the exact essence of something — what happened at its inception. It uses artefacts,

Whakapapa	Genealogist			
	Pedigree			
	Events			
	Connective thread			
	Group identification			
	Status →	Personal and group The trace of success/failure and subjection		
	Cosmology →	Universal time frame Creates linkage to all things		
	Inclusive			
	Collective memory			
	Demotic	Collective understandings Protocols		
	Allegory →	Tools include →	dance music story humour angst survival or prevalence food clothing speech shared history	
	Protocol			
	Knowledge →	Shared knowledge Details Discussion/argument Stories Songs Remembrances Lists of dead Relentless erudition — strengthens mana Whakapapa Karakia Waiata Interpretation Āhua-tanga Māori Tikanga Māori origins present conditions tribal additions process		
	Hui wānanga	mana →	Established through Tīmatanga/Ursprung Belongs to demotic collective but can be held by any person for a limited period	

Figure 3.3: Whakapapa symbols. *Litchfield*

Historian	knowledge → understanding → perception effective history locus interrogative demigods →	objectivity accuracy of facts permanence of the past
Genealogist	knowledge → understanding → perception effective history sentiment love conscience instinct kaumātua locus & demotic validation embraces origination cultivate recognition of the events of history	

Figure 3.4: Natures of approach — the Historian opposes the Genealogist; symbols. *Litchfield*

waiata, karakia, story, whakatauaki (aphorism or proverb), and whakapapa as keys for the interpretation of truth. The essence is usually translated as tapu — the sanctification of objects or ensoulment. The emphasis on what happened at the inception of something requires concentration on details and accidents.

- Tīmatanga/Ursprung often resolves itself as tribal archetypes. It is these archetypes that are imposed on artefacts, events or places to afford them a degree of intention, will and mind, so that they become an agency in their own right.

Tīmatanga/Ursprung	To capture the exact essence of something — what happened at its inception Keys → Interpretation Truth Tapu Details & accidents Archetypes	artefact waiata karakia story whakatauaki (aphorism or proverb) whakapapa
--------------------	---	--

Figure 3.5: Tīmatanga/Ursprung; symbols. *Litchfield*

- Kotahitanga/Herkunft (Figure 3.6) is the process of tracing one's lines of descent and the discovery of antecedents. This process identifies ancient affiliations and blood ties to groups and often comes up against traditions and traditional values. It identifies one's social status and power structures between social interactions. As such, agency becomes an important feature and in particular the succession of causes that result in the continuum of social development. So exchanges that occur scar the body of the social organism by virtue of their having happened.

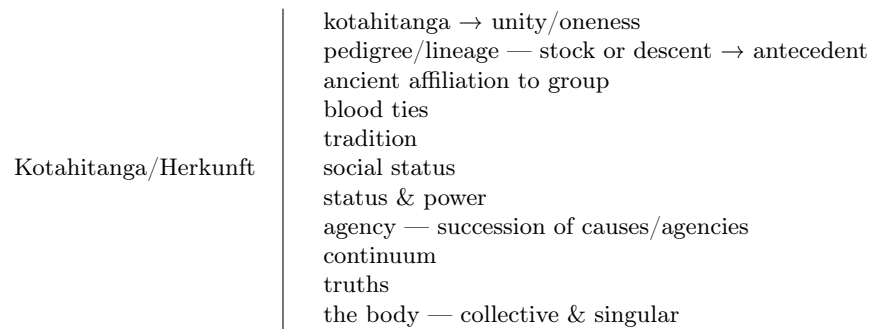


Figure 3.6: Kotahitanga/Herkunft; symbols. *Litchfield*

- Hei Āhua/Entstehung (Figure 3.7 on the next page) describes the emergence or appearance of things as the result of some agency. An agent is causative and has intention, and therefore mind, will and character.

It describes the distribution/attribution of power, especially through the application of tradition and protocol. Normally the supreme singular source of all power is identified through the cosmology of the group itself. All cosmologies relate the entry of dominations, the regenerative and degenerative forces that enforce subjugation after subjugation. Hence Hei Āhua/Entstehung is the investigation of the hazardous play of dominations and their unintentional results.

The means of application of oppression and control (from external, from outside the group, or internal, from inside) is by means of protocol, rules and mana. Rules are in themselves empty and their domination is a violence upon the lesser and weaker. It is through the vehicle of violence that rules impose direction.

3.1.3 Theory

In this section is a description of how and why data have been collected and how the concepts in the previous section may be applied, theoretically. This discussion, whilst based on those data, serves to illustrate the plausibility of the concepts and to justify their use in the analysis in the next chapter. This is based upon the understanding that theories define and explain some phenomenon by combining plausible concepts (Strauss & Corbin, 1994). Silverman (2000, pp. 84–85) adds to this argument with his assertion

Hei Āhua/Entstehung	Agency — causative, intention, mind, character	
	Distribution/attribution of power	
	Emergence/appearance	
	Formulaic repetition →	tradition protocol
	Cosmology	
	Subjugation — investigation of the hazardous play of dominations	
	Domination	
	Entry of forces →	regeneration degeneration
	Unintentional results	
	Oppresses from within (dominations) — controlled by protocol	
	Mana →	mana atua mana tūpuna mana whenua mana tāngata mana moana
	Rules →	dominations satisfies violence interpretation impose direction

Figure 3.7: Hei Āhua/Entstehung; symbols. *Litchfield*

that most people will not bring well-defined theoretical ideas to their research. So he offers a range of suggestions to assist the researcher to think in theoretical terms. These are used to frame the research question.

Context

The broad areas in this section are drawn from Section 3.1.2 and Appendix A.

How are data contextualised in the tribal setting, the whakapapa processes or sets of experiences? The question poses a difficulty in that the data are themselves extracted from the context of the tribal setting. It suggests that the theoretical expectancy of the analysis process requires the deconstruction of the context so that the minutia of the data can be examined. This is clearly related to the process of Foucault's historian, for whom the destruction of the context is itself base and crude. So in order to answer the question we must think of the context in a different way.

If one considers that the source of the data are the interviews, video footage¹ and

¹Note: The references to video data are retained despite their removal from the study and analysis, Refer to Section 1.3.

transcript and extracted texts then the context must be based upon the concepts outlined in the previous section. The video footage data are rooted in a demotic foundation, in which the participants are linked to each other through common ties of ancestry and location. The participants in the video footage did not know what their relationship was and so their conversation focussed on creating those demotic linkages. In this way they worked to build a context as their conversation evolved that was based on their whakapapa. This also began to indicate issues of which ancestors and relations had been more or less successful in various ways (as a basis for establishing a social hierarchy).

The retelling and reconstruction of their shared whakapapa gave the participants the opportunity to build a collective base of knowledge. Where an individual's knowledge was uncertain or missing, the process provided hooks to create new strands and fill holes. Generally speaking such knowledge would be passed on or compared during a hui, but the data for this study was focussed on a single conversation between three people who all shared the same ancestry. They had lived in different areas, had different life stories and had approached the issues of their genealogy in different ways over the years.

In the first of the interviews one of the participants reference is made to a map which was created by a family member (p. 150, l. 101)². His intention had been to reconnect himself to the essence of those who had populated the area at the time of his ancestors. This illustrates *Timatanga/Ursprung* and how an artefact can be used to represent tribal archetypes that are cemented in the fact of the object and the stories associated with it, and the stories about its completion.

It is interesting that the population distribution and tribal landholdings illustrated in the map are unlikely to be the same now. This difference serves to add poignancy to the artefact itself because it signals a bygone era and holds in relief the procession of subjugations throughout history. The stories associated with the movement of peoples in that area remain long after those who were directly affected are long dead, as though they were scars on the collective, demotic body of the tribe. This in itself then brings into question, just what was the agency that caused the creation of the map? Was it the desire to reconstitute the past, to reconnect? Was it that the injustices of the past still rancour? Or was it a step toward a spiritual completion for the person who made it?

The person who was interviewed in the second interview transcript had a very different journey (see page 155). Here is a person who is not certain about their approach. They seem to want for the sensitivity of the genealogist but are drawn to the way of the historian. And so the question that emerges is, why is that the case? At this point one may consider external features in the participant's environment, those factors that have

²For the sake of brevity all future line references will be referenced using the format (p. [pageNumber], l. [lineNumber]), for example (p. 150, l. 101).

influenced their perception so that their desire seems to be to make history effective, but that the effectiveness is measured in terms of how well documented it was so they exhibit a partially formed historical consciousness. Their appreciation, on the surface level anyway, seems to be somewhat devoid of empathy toward their tūpuna. However the transcript doesn't provide sufficient information for that kind of analysis, so any inferences must be drawn from the transcript itself.

Comparison

In order to validate the findings from data from a number of sources have been compiled. The sources include text extracts and interview transcripts and video transcription.

Professional historians have authored the text extracts. And as historians, they need to justify their assertions with the use of language such as "According to reliable sources. . ." (Parsonson, 2003) (p. 164, l. 1), and "... whose son Takaanui Tarakawa left a record of her life. . ." (Ballara, 2003) (p. 169, l. 7). Of course one is thankful that such works exist, where the historian's concentration on their demigods of objectivity, the accuracy of the facts and the permanence of the past provide a basis of faith in the written word. These particular historians have gathered a range of stories that relate to the lives of those people they are writing about and this presents for us, the reader, a person who has lived a life that was full and adventurous. The Historical Figures have depth and personality, and their stories can be corroborated by others, for the most part anyway.

In Figures 2.4a and 2.4b it was shown how the treatment and interpretation of recorded events in history have the power to change the course of the past. In that case the removal of pakeha may be considered a relatively small thing, it may be said that since these people were not blood relatives they did not really matter, or that they were never members of the iwi and so had no place in such an important gathering as this. Either way it has the effect of changing how others will see and understand those events because it dissolves from history the part that those pakeha had in the writing of it. Matiu and Mutu's book (Matiu & Mutu, 2002) is an extremely informative and well developed piece of work. It presents the stories of the whānau as they were told and these are illustrated with a large number of photographs. It is not a narrative piece so much as a recorded history, a snapshot from the perspective of the kaumātua.

Comparing the transcriptions with the text extracts presented some issues that needed to be overcome. This was achieved by applying them to the flexible and broad ranging set of concepts already described.

Implications

Ultimately the goal with the development project is to create a set of tools a researcher can use to collate and investigate tribal genealogy data. This part of the project concentrates on one small part of the whole, the identification of human and cultural factors in the whakapapa process (see Section 1.1 on page 18). The concepts described are sufficiently generic that they can be applied in a number of environments, which this study seeks to demonstrate by applying them to different kinds of data.

The success of the demonstration is shown by the added level of knowledge gained from the application of the *concept + data* \longrightarrow *understanding* process. This is further validated when the concepts are combined and from those, theories about the data emerge.

Lateral thinking

Ethnography is a discipline that allows for the combination of various qualitative methodologies to create the picture of an environment. When it is combined with other analysis processes such as regression and cluster analysis from the vast range of quantitative analyses a very powerful triangulated set or tools are developed.

In this study I am not at all interested in the partisan politics of positivism vs. social science. There are tools and methods in both camps that have suited my purposes in this study. I am certain they will continue to do so. In analysing the data, a range of methods have been applied. In particular, an ethnographic analysis of symbolic interactions, and qualitative analysis.

3.1.4 Research question

The research question has been framed as:

What are the human and cultural factors in the whakapapa process?

3.1.5 Methodology

Ethnography, asks the question of how people who interact with each other create the illusion of a shared social order, even when they don't fully understand each other and have differing view points. The most common method is for researchers to conduct minute analyses of ordinary conversations to reveal how such things as turn-taking and other conversational manoeuvres are managed. Other issues relate to power and status of the participants.

The research used video recording of interactions³, interview transcripts and textual extracts. These were analysed according to concepts, identified by Blumer's premises

³Refer to Section 1.3 on page 23.

of Symbolic Interactionism (Blumer, 1986, p. 2):

- That a human acts towards objects on the basis of the meanings that the things have for them. These objects can be artefacts, other people, social structures, morals, concepts, institutions, or anything else that arises out of the social interaction of humans.
- The meanings given to objects are derived from, or arise out of, social interactions between humans.
- A person uses an interpretative process to handle and modify the meanings of objects they encounter.

The study of social interaction was conducted through *participant observation*. To understand group life one may stand back and watch what is going on, then take those observations and try to make sense of them. This approach requires a degree of objectivity on the part of the researcher because their interpretation may be coloured by their own biases (they may not be aware that this was the case). Or the researcher may accept that they will be biased in one way or another and to counter the effect of that bias they use it. In other words, as a person goes into a group situation they change their approach to meet those of the others in the group (Blumer, 1986; Prus, 1996), and the others change to meet the newcomer. This meet/change effect cannot be prevented even in the case of a remote observer, so participant observation makes allowance for this by requiring that the researcher also engage in a process of self reflection. This demands a level of self honesty on the part of the researcher, to accept that their biases may produce wrong results and put into place self-disciplines that will prevent those.

For this study it was necessary to attain a degree of immersion in the life of the participants in order for the meanings of events, actions and the situation itself to be made clear. Part of the reason for this was that I had already been involved in the lived experiences of those being observed and had views about them (I could not be a remote observer), and also that it was necessary to gain acceptance within the group life to counter suspicion (the topics are considered to be tapu and are not normally discussed in public).

3.2 Method

3.2.1 Data gathering methods

This study used no prior instrumentation because of the paucity of existing studies specific to the nature of the study. Also, since the sample was to be very small an open question method was adopted (Silverman, 2000, p. 88) in the interviews.

The study seeks to answer the question, what are the human and cultural factors in

the whakapapa process? Principally, the ‘human and cultural factors’ are intended to aid systems design later.

The methods suggested by Silverman (2000, p. 89) are:

- Observation — to understand the context
- Textual analysis — to understand participants’ categories
- Interviews — use of open interviewing methods
- Transcripts — to understand how participants interact, through talk

3.2.2 Selection of informants

Domain experts were sought that fit the perception that they were experts in the field of whakapapa, but it was not necessary for them to use computers in their work. Rather they were to be people who hold a high level of tacit and overt knowledge about whakapapa. These were to be people who have organised the complex structures that make up tribal genealogies into useful and communicable forms. Experts may be further identified through reputation and regard from scholars and practitioners of whakapapa.

3.2.3 Data analysis

The analysis followed a series of phases (Section 4.1) in which the data was taken from the particular to the general. This is shown in Figure 3.8 on the following page, in which each of the phases the data was abstracted so that it could be more generally applicable. In this way the data underwent a transformation process in which it was analysed against the models symbolic interactionism and qualitative analysis. The phases identified are analysis of data (Sections 4.2 and 4.3), the meta-analysis of the data (Sections 4.2.3 and 4.3.3), the derivation of the inferences from the meta-analyses (Section 4.4), which were eventually summarised as factors that may influence the design of an information system (Section 5.2).

Symbolic Interactionism

The data collected were in three forms, video footage⁴, interview transcripts and extracts from online resources. In order to analyse these different data sources it was necessary to create a format that was more or less standardised, so that a fair comparison could be made between them, and to enable further analyses. The format chosen for the video footage⁵ and interview transcripts was in the form of a play, in which side comments and observations of the participants could be included as directions, as though for a script (see Appendices A.1 and A.2). This fits Blumer’s assertion that “[t]he possession

⁴See Section 1.3 on page 23.

⁵See Section 1.3 on page 23.

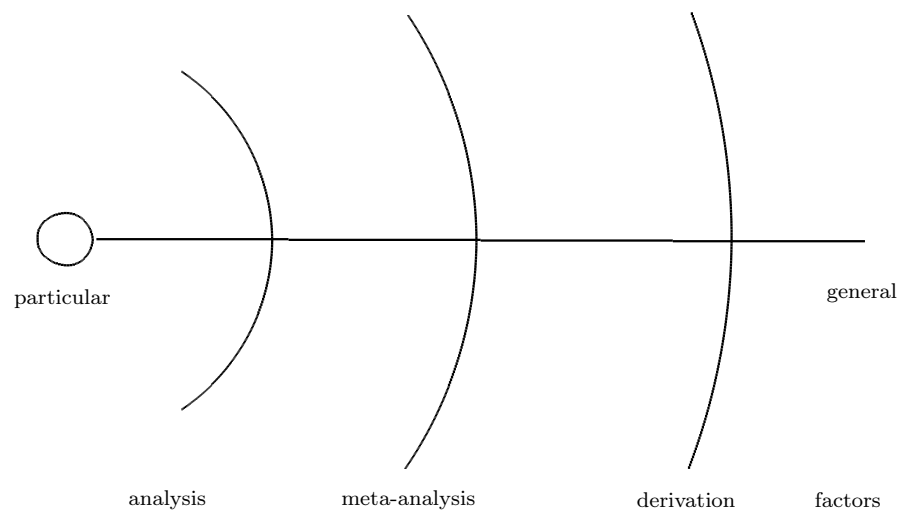


Figure 3.8: The phases followed on the analysis of data. The data is transformed from the particular to the general. *Litchfield*

of a self converts the human being into a special kind of actor, transforms his relation to the world, and gives his action a unique character” (Blumer, 1966, cited in; Prus, 1996, p. 71), in that the participants can be seen as more than just lines of recorded text, but that they each have their own distinct nature and the things they say and do are indications of that nature. The video transcription⁶ was backed up by the video footage, especially because even with minute observations much can still be missed and there is a point at which the transcriber needs to hold back on their comments because they can inadvertently introduce personal bias.

3.3 Summary

In this chapter was a discussion of the methods applied in the study. The process was described: model → concept → theory → research question → methodology → analysis → summary.

The data gathering methods used in this study included participant observation, unstructured interviewing for ethnographic analysis, and the acquisition of secondary sources for the qualitative analysis. For the primary data, informants were selected on the basis of their perceived expertise in the field of whakapapa. The data gathered has been placed in the appendices.

In the next chapter is the analysis of the data.

⁶See Section 1.3 on page 23.

Chapter 4

Analysis

4.1 Ethnographic analysis

Theoretical framework	Methodological framework
Context Comparison Implications	<p>That humans act towards objects on the basis of the meanings that the things have for them. These objects can be artefacts, other people, social structures, morals, concepts, institutions, or anything else that arises out of the social interaction of humans.</p> <p>The meanings given to objects are derived from, or arise out of, social interactions between humans.</p> <p>A person uses an interpretative process to handle and modify the meanings of objects they encounter.</p>

Table 4.1: Theoretical and methodological frameworks used in the analysis of qualitative data. *Adapted from Silverman (2000) and Blumer (1986).*

The sources are analysed against the methodological framework identified in Sections 3.1.3 and 3.1.5 and restated in the table above.

The analysis follows the phases:

1. Analysis of Interview 1 and drawing of inferences
2. Analysis of Interview 2 and drawing of inferences
3. Meta-analysis of interview analyses and drawing of inferences
4. Analysis of text source 1 and drawing of inferences
5. Analysis of text source 2 and drawing of inferences
6. Meta-analysis of text analyses and drawing of inferences

7. Analysis of video footage and transcript and drawing of inferences¹
8. Comparison between combined interview inferences and video footage inferences²
9. Generalisation of inferences and comparison with text extracts
10. Drawing of inferences based on all of the previous analyses

The analysis is conducted using the methods Symbolic Interactionism and qualitative analysis. In this section the content of the data are addressed, then in Section 4.4, “Derivation of symbols”, the results of the analysis are brought together with the research question that was tabled in Section 1.1, “Overview”.

For the time being it may appear that the study takes a departure from the research question. This is apparent only because the question is not mentioned directly, but the question informs the analysis process, acting as a filter to perception.

¹Refer to comment in Section 1.3 on page 23.

²Refer to comment in Section 1.3 on page 23.

4.2 Analysis of interviews

In this section two interviews are analysed (the interview transcripts are in Appendices A.1 and A.2). This analysis follows the process described in Section 3.2.3. In the analysis there is a broad description of events and these are interpreted against the framework described in Section 3.1.2. They are conducted by the same person, Mark, who has had little or no exposure to whakapapa or genealogy prior to the interviews. Mark is therefore dependent upon the interviewees to provide him with an understanding of the whakapapa process. The interviews are of a very different nature to each other, where in the first the interviewee has an approach that is closely aligned to the process of the genealogist illustrated in Figure 3.4 on page 64. The second is quite different and the interviewee is clearly disposed toward the approach illustrated by the historian. To make matters more complicated for Mark, in the second interview he is interrupted by a third person who was not included in the opening.

The second interview has Mark floundering for a while because his view of genealogy and whakapapa have been shaped by the strong impressions made by his first subject. Eventually he gets his stride and delivers questions that his subject can understand. However for some reason he still meets a degree of resistance from the person. His repeated questions are finally answered by the second subject, once they have been introduced to the reason why Mark is conducting his interview. Until then it appears that he is faced with some suspicion.

4.2.1 Analysis of Interview 1

1 The two participants in this conversation are working with an object that is whakapapa.
 2 To Paul (the interviewee) it is symbolic of the lives his tūpuna led, and it would appear
 3 that those lives are continuous, because he says he wants to be able to connect to
 4 them directly (p. 147, l. 9). Paul's understanding of whakapapa is not clearly defined
 5 and this inhibits Mark, who has little understanding of whakapapa and cannot see
 6 that whakapapa is itself an object that is distinct. Throughout the journey of the
 7 conversation it is Mark's task to begin to understand this.

8 The conversation starts as Mark is interviewing Paul. The quality of the questions
 9 that are being asked reflects how little Mark understands whakapapa. For example,
 10 when Mark asks Paul what he thinks whakapapa is (p. 147, l. 1) the question is extremely
 11 broad. Needless to say, Paul's response is in keeping with the question. His answer is
 12 somewhat broken and disjointed and in reading through the transcript it appears that
 13 Paul is attempting to find a suitable place on which to settle his answer.

14 At this point we will assume that Mark and Paul don't know much about each
 15 other. Mark has come into the conversation with the assumption that Paul already has

16 an understanding of whakapapa, that he understands what it is and how to relate it to
 17 others. So Paul's first statement is interesting and for the interview, confusing, when
 18 he says "Well, I think I am just a beginner. I am a learner, so I don't think I speak with
 19 any or much authority about it" (p. 147, l. 3). This should have come as a surprise for
 20 the interviewer and raised questions about whether they rank as a beginner. At this
 21 point, maybe the interviewer ought to have closed the interview.

22 In the following statements Paul intimates that he has already learned much, but
 23 as time has moved on he realises how much he has still to know. And an indication of
 24 the level at which Paul sees himself is reflected in the research question. On the one
 25 hand he says that he sees whakapapa as the "accumulated history" (p. 147, l. 6) of his
 26 ancestors and on the other he expresses a desire to have a more immediate and direct
 27 connection to his tūpuna with the words "communicate directly" (p. 147, l. 9). In effect,
 28 it appears that Paul is able to create in himself a historical sense and to make history
 29 real (*Wirkliche Historie*), that he can perceive the accumulation of history from his
 30 forebears and conceive how life may have been for them. But he wants his experience
 31 of history to not just be effective, he wants it to become an agency within his own life,
 32 now. He wants to have a spirit sense that the historical figures are with him, in the
 33 moment.

34 This subtlety appears to have evaded Mark who then asks, "...have you read
 35 about... or you have been told about their life experiences?" (p. 147, l. 11) This
 36 question assumes that all knowledge must come through an external third party, per-
 37 haps that the knowledge itself represents an object because Mark's question comes from
 38 the level which sees knowledge as separate and dispassionate (historical consciousness).

39 In his previous reply, Paul made a passing reference to genetic causation (p. 147,
 40 l. 8) as a means by which he could make that connection to his tūpuna. He quickly
 41 passed by this point to talk about how connection could be made on a spiritual level
 42 (p. 147, l. 8), which is taken up again in his reply to Mark's second question when he
 43 diverts his attention to the mundane practice of reading books and journals (p. 147,
 44 l. 14) to get "a few things" (p. 147, l. 14) from them because they offered "little bits"
 45 (p. 148, l. 17) of information. From this, we get the sense that Paul's approach is either
 46 highly selective or haphazard. Perhaps it is that his body of knowledge, his *epistēmē*,
 47 represents grains of sand that shift and move with the tide of life.

48 However, this line of thought, that of historical consciousness, almost leads Paul
 49 into a way of thinking about whakapapa that for him does not exist. He is talking
 50 about how his family has been reported in journals by, for example, French sailors and
 51 Samuel Marsden (p. 147, l. 15) and is about to say that he is not able to get much
 52 information about recent ancestors when he corrects himself (p. 148, l. 20). Here Paul
 53 begins to get clarity on what whakapapa means to him. It is starting to become clearer

54 in his own mind, and so he says, “There are two lines. I got through great grandfather
55 and one through my great grandmother...” (p. 148, l. 21). Paul had always been able
56 to differentiate between the strands of his lineage, but the questioning had obfuscated
57 this.

58 The issue of the questioning in this instance is important in relation to whakapapa.
59 The knowledge contained within the symbol of whakapapa is not necessarily linear, nor is
60 it a set of mutually exclusive facts that await a trigger to dislodge them. It exists within
61 a multidimensional framework (see Figure 3.3 on page 63) even though the method of
62 transmission from person to person may be linearised via speech, song, dance, prayer
63 or chant, or use various media via the printed page, presentation software, or more
64 traditionally via artefacts such as taonga (family treasures) and whakairo (carvings
65 with specific significance). So the kind of question may engender or impede discussion
66 of whakapapa, and it will indicate the depth at which the conversation ought to go. In
67 the previous example, Paul wanted to talk about his spiritual connection to his tūpuna
68 but the nature of the question led him away from that, and so he fell back to the level
69 the question had been pitched from.

70 At all levels there are important issues that can be related. Paul tells how Māori land
71 court proceedings contain the whakapapa of his great grandfather (p. 148, l. 22). He says
72 that the whakapapa lists the names of the people, in a line, and that it contains many
73 stories but he has not translated those as yet (p. 148, l. 25). On the other hand, he says
74 there is more known about his great grandmother because family members have already
75 begun collecting information together about this line (p. 148, l. 28). These people are
76 all working within a group and their knowledge is shared in a demotic framework, so
77 that as each person learns more, the whole group is enriched (p. 148, l. 29). More
78 importantly, Paul is able to learn from those who have the most experience, and within
79 whom history is perceived to be a living embodiment (p. 148, l. 31).

80 Mark’s next question appears to be an attempt to summarise the points that Paul
81 has just made into three objectifications: “the history,... their spirit, and their ef-
82 fects...” (p. 148, l. 34). It is true that whakapapa contains these elements, but there
83 are many more dimensions than these, which Paul begins to talk about in his reply. He
84 says that the old people are teaching him the shared whakapapa of the hapū, rather
85 than his specific lineage. He appears to trail off at this point and continues to talk about
86 the work of other people, those who are researching his family specifically (p. 148, l. 36).

87 Paul mentions that there more than one group who are doing research into his fam-
88 ily’s whakapapa (p. 148, l. 39), and that most effort appears to be into the English/Irish
89 links (p. 148, l. 40). He says people have been searching through records and establish-
90 ing a degree of historical consciousness about the life of his European ancestor, but that
91 they have not been so successful in finding information about his family (p. 148, l. 42).

92 This would suggest that the collective still do not have enough knowledge of him, as a
 93 historical figure, for them to establish an emotional link with him. So he still remains
 94 a remote ancestor, somewhat unknown. In their absence of direct knowledge they have
 95 taken the steps to deconstruct the person.

96 The question that Mark has asked is complex and requires references to at least
 97 three bodies of experience for Paul. Paul begins by talking about the old people who
 98 are teaching him, he talks about the research into his direct lineage and finally, in answer
 99 to Mark's enquiry about how these affect him, he refers to a family member who works
 100 as a healer (p. 148, l. 44). The pause at this point is significant (p. 148, l. 45). It
 101 suggests that Paul needs to consider his answer and in light of the nature of the answer
 102 we might assume that Paul was thinking about whether to tell Mark about the nature
 103 of his relatives work, that of a healer who "works with the wairua light" (p. 148, l. 45).

104 No indication is given here about how this relates to whakapapa and the opportu-
 105 nity to explore that further is lost because Mark's next question leads into a different
 106 direction. However we are left at a crossroads with Paul's last comment, "I don't know
 107 what will happen when I work with him" (p. 148, l. 46). Paul takes this disconnected
 108 issue up towards the end of the interview when he begins to talk more about his cousin
 109 that is teaching him alternative ways of life (p. 152, l. 184).

110 The re-emergence of Paul's discussion with his cousin is worth noting even though
 111 it has little to do with the process of whakapapa. But in it is contained something
 112 of the essence of what constitutes whakapapa, its *Timatanga/Ursprung*. This will be
 113 discussed further on, but for now the phrase "a te wā" (p. 152, l. 186) conjures the
 114 conception that all things are the result of some agency (its *Hei Āhua/Entstehung*) and
 115 that this influence has caused the circumstance to occur.

116 The next question (p. 148, l. 47) changes the direction of the interview. Up to
 117 now the *Kotahitanga/Herkunft* of whakapapa was being explored and perhaps can be
 118 summarised as a combination of demotic processes, in which there are shared knowledge
 119 that are being passed onto Paul via the old people, however his appreciation is primarily
 120 fixed in the locus of himself. This can be seen in his returning to the themes of his great
 121 grandfather and great grandmother's family lines, despite his admission that he has had
 122 these old people teaching him the rest of the family's whakapapa.

123 Paul makes mention of the processes undertaken by the family members who have
 124 travelled to England and Ireland. In this context he refers to their findings as those of
 125 the historian who is dispassionate and based in the demagogues of the historical process:
 126 objectivity, the accuracy of facts and the permanence of the past. Their efforts were
 127 to make their history effective for themselves and for the rest of the family. In some
 128 respects they succeeded in this because they were able to find traces of the European
 129 ancestor, but in others they had failed because they were not able to find much more

130 about his lineage.

131 Paul's appreciation of whakapapa is, at this point, somewhat paradoxical. On the
132 one hand he appears to place great store in the work of the family who have striven to
133 gain information using the historical process of validation by documentation. On the
134 other hand he seems to want to gain a more direct connection to his tūpuna via their
135 wairua and his own genetic makeup. This is not to say that these things cannot exist in
136 the same person, at the same time, rather that the nature of the mind is that it is able
137 to converse with all these issues at the same time, internally with itself and externally
138 with the interviewer.

139 Back to the next question then. Mark is asking what method the people who are
140 teaching Paul are using (p. 148, l. 47). Paul's first reference is to the nature of the
141 sessions, in which he says they are "pretty casual" (p. 148, l. 48). He did not appear
142 to be very impressed by this approach because of the amount of detail he goes into in
143 describing how many people came to each of the meetings. The drop off in numbers
144 appears to have affected Paul to the degree that he even remembers how many people
145 were there; "quite a few... in the first meeting" (p. 148, l. 49) and then "only ten"
146 (p. 148, l. 50) in the second. After that, Paul reports, they "didn't set another meeting,
147 so it kind of lost momentum" (p. 148, l. 50). When Mark tries to get more information
148 about this later Paul appears reluctant to go into it, saying that "maybe people didn't
149 want to know about that, or I don't know why they didn't come back again" (p. 149,
150 l. 81). He did point out that there was not much teaching in the first session, and that
151 it was taken up with people talking about themselves (p. 149, l. 79), he suggests that
152 this may be what turned people off the process. This probably reflects Paul's lack of
153 knowledge about such events, which generally start with people learning about each
154 other.

155 The content of the meetings are centred on demotic knowledge and understandings
156 required for the development of their Kotahitanga/Herkunft. Paul and the rest of
157 the participants are taught "basic karakia, prayers and basic openings" (p. 148, l. 52),
158 which is knowledge all in the demotic collective should have. It is the shared knowledge
159 that helps to bind the grouping together. These people are those who have missed
160 out on these basic understandings and need to be shown to them in a way that is for
161 them acceptable. So it is understandable that the old people chose not to conduct the
162 gatherings in a formal manner. It is possible that they did not want to frighten off
163 those who were unfamiliar with the ways of the Māori, and it is equally possible that
164 they wanted to see who was really serious by allowing for a process of attrition to occur
165 amongst the attendees, so that those who are left are those who have chosen to go
166 further.

167 During the meetings the people are taught the Tīmatanga/Ursprung through the

168 application of karakia and prayer. The body of knowledge they are being exposed
 169 to is the Kotahitanga/Herkunft, in which they “start off with the universe, describing
 170 New Zealand and the different groups, and where we fit in” (p. 148, l. 53). In this way
 171 ancient affiliations and blood groups are identified, social structures and the distribution
 172 of power are highlighted. Issues that have scarred the demotic body are raised, for
 173 example “how we got our name, <...>” (p. 149, l. 55). By starting “from the big, to
 174 [the] small” (p. 148, l. 53) the old people are able to introduce the Hei Āhua/Entstehung.
 175 They can relate those things that exist today within a framework of causation and
 176 agency, and as a succession of subjugations.

177 Paul makes mention of the process the old people underwent in their learning and
 178 compares that with how his group are being taught (p. 149, l. 57). He says that they
 179 were taught from a young age and were “taken in at night [into a] dark room [and]
 180 taught to memorise and recite” (p. 149, l. 57). He expresses a degree of regret at not
 181 being given the chance to learn by this method, as though he were missing out on
 182 something special when he says “I guess because we are older or there is no time and
 183 they now got older themselves” (p. 149, l. 58). Paul makes the important point that
 184 “they feel pressure to try and transfer some of those stories, some of that knowledge
 185 before they die and it’s lost” (p. 149, l. 59).

186 The method of teaching indicated by Paul involves the use of oral learning, so it
 187 is interesting that Mark then asks, “So now that they don’t do it orally, have they
 188 written it down” (p. 149, l. 62). It seems that Mark has heard issues which Paul did
 189 not say, although Paul intimated that this situation may occur at some future point.
 190 The assumption then, that the process of teaching oral history is no longer conducted,
 191 appears to be one that Mark has introduced from some other source that we are not
 192 aware of. So Marks body of knowledge is like a collection of static, discontinuous
 193 images in which there are some people who are learning things that are foreign to them,
 194 being taught by people who specialise in relating sets of facts which the learners must
 195 remember, by rote. This is perhaps reflective of Marks own learning experience, and
 196 which he has transposed into the context of the interview. We will need to look and see
 197 whether Marks perception shifts in any way as Paul talks more about his experiences
 198 in whakapapa.

199 Paul’s reply is an attempt to deal with this unexpected introduction. He says “some
 200 people have written some things down” (p. 149, l. 63) in order to create a space for
 201 this concept in his own mind. He returns back to his last point to relegate it by saying
 202 “but those two teachers haven’t” (p. 149, l. 63). Before Paul can move on he needs to
 203 settle his previous thoughts about the group meetings, to create for them a point of
 204 balance so that he can begin to deal with this new idea, of writing things down. Paul is
 205 moving from the Kotahitanga/Herkunft of the group learning environment and the way

206 in which the old people had been taught, to the Kotahitanga/Herkunft of how things
 207 appear to be done in this modern age. He therefore makes reference to a family book
 208 (p. 149, l. 64) in which objective facts are detailed.

209 Mark makes an attempt to link the family book in to his enquiry about genealogy
 210 (p. 149, l. 67). Paul doesn't know much about it and creates the impression that he
 211 is not concerned about that because he does not know where it is and has no access
 212 to it (p. 149, l. 70; p. 151, l. 144). Later in the interview Mark asks again about the
 213 family book but Paul is quite short with him, expressing that he doesn't know what
 214 is in a family book, and although he knows that Māori families use them he has not
 215 seen one (pp. 151–151, ll. 144–153). He feels that web based technology could help to
 216 solve the problem of access, in the same way that some of his family members have
 217 set up a web site (p. 149, l. 71)³. This presents a similar situation to that discussed
 218 earlier, where knowledge is shared within the community via a common medium and
 219 perhaps maybe an option for the containment of whakapapa. As an alternative method
 220 for whakapapa retention and distribution it utilises the processes of the genealogist, for
 221 whom the ways of the historian have been incorporated, with additional attributes of
 222 sentiment, love, conscience and the embracing of the originating essence within each
 223 object under consideration.

224 When Mark asks how Paul has been maintaining his whakapapa (p. 149, l. 84) Paul
 225 relates the various sources of information he is using and how they relate to his family's
 226 efforts. He separates his answer into two significant areas, his great grandmother and
 227 great grandfather's histories. He says that a large number of his relatives are already
 228 involved in researching his great grandmother's line, so he is leaving that to them. If
 229 he wants information he says he knows where he can get it (p. 149, l. 85). His great
 230 grandfather is not so well known and so he is concentrating on that side of the family,
 231 but he has not been able to find much information. Any information Paul has been able
 232 to find, he has collected as photocopies of land court meeting minutes (p. 149, l. 89).
 233 However, since much of it is in Māori Paul has been unable to read it.

234 Paul says that he has a whakapapa lineage, photos, historical references from early
 235 travellers and more recent accounts from modern authors (pp. 150–150, ll. 96–99). Of
 236 special interest to him is a map that a relative has drawn (p. 150, l. 101). The map
 237 shows a rendering of the current coastline in the in the region the family came from and
 238 uses traditional Māori names instead of the newer combination of Māori and pakeha
 239 names. Paul says the author got this information from a range of sources, land court

³In the recent NZSG journal, *The New Zealand Genealogist* (Constable, 2005), a concern was expressed by the President that there is a growing number of those who are reliant upon the Internet as their sole information source. The concern is centred upon the perception that there is a large amount of erroneous and misleading information that has been published. This opposes the comment by Mason Durie, in which he suggested that the Internet will eventually replace all other information sources (Durie, 2001).

240 records, local stories and old maps so that the map can be used as a key for the retelling
241 of stories. The map constitutes an artefact for the family and is a treasured item for
242 Paul.

243 As with any artefact, whose meaning is relative and contextualised, the map does
244 not contain stories itself. The map can be used by a storyteller as an aid or a prompt, so
245 Paul has not given this artefact the properties of agency as some are, and he recognises
246 the limitations in having it, that if “you don’t know the stories, you don’t know the
247 people” (p. 150, l. 106). And so Paul makes a suggestion that a map on a web based
248 system could be much more useful if, by passing a cursor over a hot-spot, a link to
249 information about that place came up (p. 150, l. 107).

250 Continuing the theme of the web site, Mark asks a question about where the people
251 who developed the family’s web site got their information from (p. 150, l. 110). Paul
252 mentions a new and different dimension to his whakapapa at this point. He says that
253 over time two strands emerged in the family, one rooted in their place of arising and the
254 other which was dispersed (p. 150, l. 112). It was the strand that had been dispersed that
255 was responsible for the web site development. These people appear to have lost their
256 oral connection at some point and have had to resort to the use of other technologies to
257 maintain their group cohesiveness. Those who stayed in the ancestral homelands appear
258 to be those who maintained the traditional methods for disseminating and maintaining
259 their tribal knowledge (p. 150, l. 116).

260 It is from those who stayed in the home region that some of the most pointed and
261 poignant stories have emerged, from their oral tradition. For example, Paul tells of
262 how his great grandmother reputedly killed his great grandfather (p. 150, l. 118). In
263 his retelling though, Paul mentions that he knows of two versions of the story (p. 150,
264 l. 119) and when Mark asks about the validity of this he says he is not even sure that the
265 story is true, except that it is commonly held to be so (p. 150, l. 125). This admission
266 should have opened a new line of enquiry for Mark, but unfortunately the opportunity
267 was missed. Instead Paul begins to retell the events of a conversation he had been
268 involved in, in which he was raising moral objections to the killing of someone on the
269 grounds that they were an adulterer (p. 150, l. 128).

270 The ensuing transcript in which Paul talks about the moral implications on the
271 death of his ancestor suggests that his perception of that person has grown beyond that
272 of the remote historian and that he has sought to engage with the life of those people
273 at the level of his conscience in order to justify those apparently heinous actions.

274 If we compare how Paul dealt with his family, which was dispersed, and the other
275 which was not, and the degree to which he gave the murder air-time. Paul could have
276 dealt with the issue of his family being dislocated and relegated it so that it did not
277 bear mentioning anymore, but his perfunctory tone in regard to his family’s diaspora

278 suggests some degree of avoidance, which in turn suggests that it has not yet been
279 settled. On the other hand the death of his great grandfather clearly rankles. It is a
280 point of violence that seems to have been used as a tool for the subjugation of family
281 members since.

282 After a diversion, discussed earlier on page 81 in which Mark probes for Paul's
283 knowledge of written family records, Mark changes tack and asks if Paul has used
284 genealogy software. It is interesting that Paul says that he has not, but that he is
285 considering using Family Tree Maker⁴ (p. 151, l. 155).

286 One is not certain why Mark asks his next question (p. 151, l. 157). It appears that
287 in his line of questioning the application of technology opposes traditional methods,
288 for maintaining and transferring whakapapa. Mark even suggests that the use of a
289 computer program would be better placed for the maintenance of whakapapa. The
290 scope to which questions relate is very large and Paul says that he is having some
291 difficulty in phrasing an answer (p. 151, l. 159). However Paul suggests that both
292 methods have their strengths and weaknesses with the statement "they might do some
293 things better and some things they can't do" (p. 151, l. 161).

294 When Paul says "in some ways I believe that the past is past, and it doesn't exist"
295 (p. 151, l. 162) he is effectively side-stepping Mark's question so he can talk about his
296 view of how facts can be interpreted or reinterpreted at will. Underlying this is the
297 notion that those things we consider to be of the past are not fixed, but that they serve
298 as vehicles in Tīmatanga/Ursprung, as the process of interpreting the truth to get at
299 the exact essence of something at its inception, which is then reflected in its present
300 state — hence Paul's notion of "now" (p. 151, l. 162). However the idea that one might
301 "reinvent the past to make [their] current present interesting" might seem self absorbed
302 and nihilistic unless the statement is taken in the context of the reply. In the next
303 breath Paul does say that he did not "totally believe that" (p. 151, l. 167), so we need
304 to ask what point he was trying to make in that statement.

305 He goes on to talk about the relationship he has with another ancestor, his Māori
306 great grandfather, a tohunga (p. 151, l. 167). Paul attempts to describe how the rela-
307 tionship works by drawing an analogy between the relationships a person might have
308 with a fairy tale character or a movie actor and the person. In his analogy, Paul says,
309 the character is part of the person because they represent attributes the person wants
310 to express. And it is for this reason that it is real (p. 152, l. 170), and for the person it is
311 the Tīmatanga/Ursprung. By connecting to the essence of the truth in a moment they
312 are able to get at the nature, the feeling, the sense and therefore the reality of what it
313 may have been like for an ancestor or is like for a contemporary. This is confirmed with
314 Paul's statement that "it brings up certain kinds of feeling. So that's good, I work with

⁴http://www.genealogy.com/soft_ftm.html

315 that” (p. 152, l. 176).

316 When Paul tries to draw a comparison between using a computer program and
 317 receiving instruction from an experienced teacher, he makes the point that being taught
 318 in the same way that the *tohunga* was taught “would be very, very rich” (p. 152, l. 182).
 319 He does not see that using a computer system would offer the same level of participation,
 320 although he concedes that this may be attitudinal (p. 152, l. 183). The question arrived
 321 at in this phase of the conversation is an important issue because it also asks the
 322 question of how a person may engage when they are using a computer based tool set.
 323 Can they achieve the same level of feeling or belonging that a person who has received
 324 first hand instruction? Must we admit that this is not an issue and that how a person
 325 feels about their knowledge and experience is the culmination of their own processes?
 326 To what degree does the teacher influence the learner about what they will feel once
 327 that learning process is complete?

328 Earlier, reference was made to Paul’s relative, the healer. Paul regards this per-
 329 son as a teacher who is teaching him about having a correct attitude tied up in the
 330 *whakatauaki*, “a te wā” (p. 152, l. 186). The *whakatauaki* incorporates the concepts
 331 of *Hei Āhua*/Entstehung, in which all actions and occurrences can be related back to
 332 some agency, and all agencies can in turn be related back to a single cosmological
 333 source. In this sense, the concepts of regeneration and degeneration have their place,
 334 because blame cannot be apportioned to any one person or thing, and even if it could
 335 be, the cause would become so remote as to beggar the notion of fault. On the other
 336 hand, power is passed down through chains of cause and effect and has its appearance
 337 at the five levels of *mana* and the universe of rules which control all behaviour (see
 338 Figure 3.7 on page 66). The succession of causes and agencies is then seen in the *Ko-*
 339 *tahitanga*/Herkunft in terms of a person’s social status, as it is apportioned by tradition
 340 and their blood ties. The proverb, or *whakatauaki*, therefore connects the holder to a
 341 tribal archetype that represents a figure who is willing to accept life on its terms, with-
 342 out resistance, because inside all things there is something that is good. And in this
 343 understanding of goodness is the notion that goodness itself emanates from the creator
 344 or god. This is confirmed by Paul’s recollection of a conversation he had with his cousin,
 345 in which his cousin said, “don’t worry, there is a good thing in there” (p. 152, l. 195).

346 Paul does not claim to fully believe the concept of “a te wā” because, as he says, “I
 347 don’t necessarily believe that there is a god who is looking after me” (p. 152, l. 198).
 348 Although he is trying to work it out and when Mark asks if “in some ways computer
 349 systems will be better and in some ways oral tradition will be better” (p. 152, l. 203)
 350 Paul’s response is to reaffirm his lack of surety by stating that “it’s only my feelings or
 351 assumptions” (p. 152, l. 205).

352 In the next question, Mark changes the focus back to genealogy and *whakapapa*.

353 He asks, “What do you think about recording these older people, and putting them in
 354 the systems” (p. 153, l. 206). The question draws inexorably toward the assumption
 355 that Paul’s interest lies in the use of computer applications for the maintenance and
 356 development of whakapapa. Paul has already expressed a desire to learn his whakapapa
 357 using the same traditional methods his teachers experienced, but he also accepts that
 358 this is not likely to ever happen. By the same token, Paul has not accepted that the use
 359 of computerised genealogy systems will fully meet his needs, especially on a spiritual or
 360 emotional level. With these issues in mind, Paul’s answer is suitably dichotomous, that
 361 is “Well, it could be great. But it wouldn’t be interactive, necessarily” (p. 153, l. 208).

362 Paul clearly sees the value of recording the old people, while they are still alive
 363 (p. 153, l. 226). But he also sees that recording people for replay removes the conver-
 364 sation from its context and they run the risk of becoming remote (p. 153, l. 220). The
 365 principal issues Paul raises are that the people retain a large store of knowledge and
 366 experience and there is much that they may not tell (p. 153, l. 208). So in choosing
 367 what to say the person is likely to respond to the enquirer, delivering a story within the
 368 context of the situation (pp. 153–153, ll. 210–220).

369 It is at this point that Mark is able to tie the two dimensions together. That the
 370 computerised system can become a compliment to the whakapapa process, rather than
 371 supplanting it (p. 154, l. 253). This becomes an important breakthrough point in the
 372 conversation because now both Paul and Mark are able to address the same issues. Paul
 373 affirms this by saying, “It could be a good help of course. Because if no one records
 374 these old people, then they are gone and that’s what lots of my old aunties and uncles
 375 are saying” (p. 153, l. 225).

376 When the question of who is learning the old stories comes up (p. 153, l. 229) another
 377 important issue comes to the surface, which is that it is Paul’s perception that young
 378 people are focussed on things other than their tribal knowledge (p. 153, l. 230). Paul is
 379 not certain about this point though because he has seen evidence of where young people
 380 want the knowledge and considers that the computer may prove useful in that context,
 381 as a medium they are used to and can access readily (p. 153, l. 233). As to what the
 382 computer system might contain, Paul considers stories to be paramount (p. 153, l. 240),
 383 although the question of who might access those stories remains unresolved (p. 154,
 384 l. 246).

4.2.2 Analysis of Interview 2

1 In this interview, Mark is talking to Hanna, who has had a different exposure to geneal-
 2 ogy than Paul, in the previous interview. Hanna’s experience appears to be more in
 3 line with the traditional concept of genealogy, with extensive use of books, documents
 4 and so on (p. 155, ll. 3, 9), so Hanna represents the persona, the Historian. It appears

5 from the transcript that some of the conversation was missed (p. 155, l. 7).

6 By now Mark has already talked to Paul about whakapapa and has an understanding
7 based on this. It is interesting that, while his opening questions are similar to those he
8 asked Paul, he draws from his knowledge that whakapapa is more than just a list of
9 names, that it contains other dimensions too (p. 155, ll. 12, 14). This deeper enquiry
10 is prompted by Hanna's comment that "Well, it is part of me its my... my ancestry"
11 (p. 155, l. 13), and when asked she says "Oh no, it is about stories and events" (p. 155,
12 l. 16).

13 This opening doesn't appear to satisfy Mark, who asks Hanna to clarify the differ-
14 ence between genealogy and whakapapa (p. 155, l. 17). From this we can surmise that
15 for Mark, genealogy is a list of names, the pedigree of an object or person, whereas
16 whakapapa contains those things and a great deal of sentiment, hidden meaning, spiri-
17 tual belonging and the recognition of power and place within a cosmological setting. For
18 Mark, whakapapa is tied to an oral tradition, which opposes itself to the book learned
19 process of genealogy (p. 156, l. 31) in which history is made effective and the genealogist
20 seeks a degree of consciousness, whereas they are both one and part of the same thing.
21 The question is, how much of this understanding does Hanna hold?

22 Hanna's answer, that when she does whakapapa, she is doing genealogy at the same
23 time (p. 155, l. 18) is both valid and misleading. It doesn't help Mark to understand
24 where Hanna is coming from, and since he is still working under the dualistic view of the
25 demotic versus the locus, Mark seeks redress with the question "how did you maintain
26 your whakapapa? Had you been taught orally..." (p. 155, l. 19). And now, we begin
27 to see where Hanna is focussed. She says that she has been helped by people, that she
28 has not received instruction using the oral tradition (p. 155, l. 21) and she shows Mark
29 an artefact, a list of names that she was given by a family member (p. 155, l. 21). It is
30 the artefact that becomes her focus, and is an issue that is raised again throughout the
31 interview.

32 Hanna's list of names comes from someone in the family who had obtained the
33 details from "the old people" (p. 155, l. 24), meaning that those people had learned
34 their whakapapa as part of the oral tradition (p. 155, l. 26). She doesn't have all the
35 tribal details listed in a whakapapa book when Mark asks her (p. 155, ll. 27-30). And
36 by her own admission, she has never thought of this before (p. 156, l. 35).

37 Mark makes a note in the transcription which will be important later, but we do
38 not know why he had made it, he notes "prob: she is not sure of the validity of data
39 which she has with her" (p. 156, l. 34). It suggests that Hanna is not confident of the
40 accuracy of her facts, which is a different attitude to Paul, who is more concerned about
41 the story.

42 This pause on Hanna's part creates an interesting void, which Mark seems compelled

43 to fill with the statement, “that might be helpful to you” (p. 156, l. 36). And Hanna can
44 only reply in the affirmative, since at this point they are both seeking a commonality,
45 a launching point at which they can develop their combined body of knowledge about
46 whakapapa. So Mark tries another tack, which is to present a potentially contentious
47 statement. He has learned that certain Māori people do not discuss whakapapa with
48 those who are outside their own whānau, so he asks “Whakapapa is considered to be
49 very personal and tribe don’t want to share their whakapapa. Is that true?” (p. 156,
50 l. 38). The tactic appears to work.

51 We now find out that Hanna is/was a member of the New Zealand Society of Ge-
52 nealogists (p. 156, l. 40) and her association with the Māori special interest group.
53 Apparently Hanna has experienced a degree of difficulty in this capacity through reti-
54 cence from other Māori groups who thought the Society group was trying to control or
55 take over from them (p. 156, l. 44). She doesn’t really understand the problem (p. 156,
56 l. 50), and explains that the special interest group was established to help people with
57 finding information about their family (p. 156, l. 43). Mark assumes her lack of surety
58 to be reluctance and changes the subject.

59 Mark asks, “Do you know why did they change from oral to written history?” (p. 156,
60 l. 52). Hanna, again is not certain about this issue and says that she thinks the reason
61 for the change in behaviour arose from the movement of young people away from their
62 marae, towards the city, and that this resulted in an absence of those the old people
63 could pass their knowledge on to (p. 156, l. 53). Sensing another area that may not be
64 fruitful, Mark changes tack, again.

65 When Mark asks, “Do you think it is better to have them on computers than to
66 have them on books?” (p. 156, l. 55), he may not have expected the kind of answer he
67 received. That is, Hanna makes the point that, whilst she likes the idea of the computer,
68 she doesn’t see it as permanent and in fact, in her view, someone could just as easily
69 change the content of a document to suit (p. 156, l. 57). And now we can begin to
70 position Hanna within the framework developed earlier (see Section 3.1.2 on page 60).

71 In her last statement, Hanna has pointed out that she values the permanence of
72 the written record, and like the Historian, Hanna sees that the past is permanent, not
73 subject to change. And we can also begin to see why she provides doubt about the
74 details she holds on record, she values the accuracy of facts and therefore the value of
75 those details is shown by whether or not they are accurate. Hanna apparently places
76 great store in the establishment of authorised bodies to look after the maintenance of
77 records and details (possibly suggests why she chose to join the Society and its special
78 interest group), this is evidenced by her telling of the Society conference at which a
79 representative from Ngai Tahu talked about a special unit they had established to
80 record all their tribal whakapapa (p. 156, l. 65). Interestingly, when asked about the

81 content of the conference (p. 157, l. 69) she can only recall that it had something to do
82 with computers (p. 157, l. 70).

83 Mark introduces information about which he is obviously already aware, that Hanna
84 is using the computer program Family Tree Maker (FTM) (p. 157, l. 74). He asks her
85 what she is using it to do, Hanna replies that she is using it to write a book (p. 157,
86 l. 77) and Mark reacts, a little surprised (p. 157, l. 78). So he asks if Hanna is using it
87 to compile genealogy data (p. 157, l. 80) and Hanna confirms that she has indeed used
88 it to write a book about a recent family reunion (p. 157, l. 81).

89 The idea that a genealogy application could be used for more than just collating
90 pedigrees and related data seems to have escaped Mark. His response suggests that
91 he is intrigued by this and asks for more detail (p. 157, l. 85). Hanna explains that it
92 contains information about her European ancestry (p. 157, l. 86), but we do not know
93 how many generations that comprises.

94 It seems that the listing is quite short because Mark asks, “you do not have any
95 records beyond that?” (p. 157, l. 88). So Hanna shows him a piece of paper with names
96 listed on it. She says that is all she has and that it had been written by an ancestor who
97 is apparently long dead (p. 157, l. 89, 91, 93). As an artefact it is significant because it
98 has been passed down through a number of family members, each of whom has passed
99 away. It is part of the Kotahitanga/Herkunft, it carries the markings and finger prints
100 of those who have themselves scarred the body of the family’s pedigree, in the same
101 way that they scarred the body of this piece of paper. So when Mark points out that he
102 can’t see any stories or events on the paper (p. 157, l. 95) Hanna corrects him (p. 157,
103 l. 96) by reading off some of the detail. She begins by reading some dates that appear
104 to make no sense (p. 157, l. 98) because they use only the last two numbers of the year
105 and would give a person an age of only one year at their death. Then Hanna realises
106 that there is a century between those two dates, one in the 19th century and the other
107 in the 20th (p. 157, l. 99). Then, considering how much she does not already know,
108 Hanna says, “I’ve got a lot of research to do” (p. 157, l. 100).

109 This small revelation, that Hanna has only a small amount of useful information,
110 leads Mark to ask, “How will you do the research” (p. 157, l. 101)? To which Hanna
111 says that she has a book on the North that she can use for information, and that she
112 might try going to a family marae and get information from there (p. 157, l. 102). But
113 Mark seems sceptical about this idea, he says “But she might give you something like
114 that” (p. 158, l. 106), indicating the piece of paper.

115 We have reached an interesting point. Up to now Mark has come from an under-
116 standing of whakapapa and genealogy that, as stated, oppose each other. His leaning
117 had been toward the process of whakapapa as a sentimented appreciation of the lives
118 of those who have lived. But now he is faced with a different kind of approach and

119 he is seeking for ways to reconcile that difference. His questions therefore, while they
120 may seem out of place reflect his mental switch over from the genealogical process as
121 whakapapa to that of the historian, who seeks validation of facts and security from
122 knowing that those facts can be verified by other facts. He asks, “And how will you
123 validate that information” (p. 158, l. 107).

124 The next portion of the conversation has Mark trying to gauge the depth of under-
125 standing that Hanna has for her subject. She admits that she has not done much of
126 the work herself (p. 158, l. 112) and that the book she said was produced from FTM
127 was actually published by a company of professional genealogists (p. 158, l. 118). So
128 Mark again raises the issue of what program Hanna will use to write her book (p. 158,
129 l. 120), and again she says she will be using FTM (p. 158, l. 121).

130 Mark continues to emphasise his understanding that whakapapa is composed of
131 stories and events when he says, “are you going to put events and stories in it?” (p. 158,
132 l. 122) — clearly his interview with Paul has left an impression on him. Hanna affirms
133 this so Mark presses on, asking if the program helps in the process of compiling the
134 stories and events (p. 158, l. 124). But then Hanna says it has, that she has already
135 done this (p. 158, l. 125), and directs Marks attention to a report she has generated
136 (p. 158, l. 125). We do not know what kind of report this is because Mark has not
137 identified it, but from Marks next question it is possible that it is a Register Report⁵.

138 Mark’s next question could have provided us with more information about what
139 Hanna is doing with her program, except that the interview is interrupted by the entry
140 of a third person. He asks, “So you can put events and pictures into it” (p. 158, l. 129).
141 To which Hanna defers her answer to Tama, her husband, “Yes, but I haven’t put any
142 photos in it yet, but you are going to do that Tama ain’t you” (p. 158, l. 132).

143 So before going on it may be worthwhile to take stock. When Mark began the inter-
144 view his perception of what constitutes genealogy and whakapapa had been informed by
145 his interview with Paul and whatever other research he had undertaken since that time.
146 His understanding included the concept that whakapapa is not just a list of names, but
147 that it is comprised of those human attributes that differentiate it from the scientific
148 process of objective, uninvolved, dispassionate historical consciousness. For Hanna, this
149 kind of process is what defines genealogy. For her, information must be validated by
150 the verification of facts that correlate with other facts.

151 During the interview Hanna has been stopped on two occasions because she has not
152 been able to resolve the petty differences between specifics, and so for her the process
153 must involve slow and careful grooming of detail. She has not altered her view that

⁵A Register Report is a brief summary of the data held about individuals within a genealogy system. It resembles the kind of register that might be used by a regulatory authority such as Births, Deaths and Marriages. It contains specific information about the person plus details of parents, children and siblings.

154 stories are facts, and they must therefore be attributable to some other event or set
155 of facts. Mark has begun to transform his perception of genealogy so that he can
156 appreciate Hanna's dilemma, while at the same time retaining his understanding that
157 genealogy nevertheless contains these other things.

158 Tama has entered the room and Hanna has placed him on centre stage by redirecting
159 Mark's last question toward him, and then answering it as well. She says, "he is got
160 a digital camera and he is going to put photos in it" (p. 158, l. 136). Mark appears
161 to resist this by asking Hanna if she is changing her preference for written historical
162 records, in favour of computerised tools — remember that Hanna had been disparaging
163 of computerised genealogy because she did not trust that the information might be
164 secure or correct/valid (p. 158, l. 137). When Hanna says she wants to use the computer
165 publish a book (p. 158, l. 139) Mark asks why (p. 158, l. 140).

166 Mark's question, "Why are you doing this" (p. 158, l. 140), seems naïve except
167 that, so far as he is concerned, FTM does not seem to be the right kind of tool to use
168 for publishing a book. His concerns are most likely increased when Hanna answers by
169 saying, "I want more of this" (p. 158, l. 141), meaning that she wants to be able to collect
170 more information. And again, we need to remember that Hanna values information,
171 just as Paul valued a story.

172 In this next section we have a contradiction. Mark had established that Hanna did
173 not have much in the way of information, and she said herself that she had only a little.
174 So when Mark asks Hanna where she is going to get the information (p. 159, l. 144) she
175 will need for her book he is apparently surprised when she says that she already has it
176 (p. 159, l. 145), that she has been doing it for 25 years (p. 159, l. 147). So we are left
177 with a question, why would Hanna claim that she did not have much information and
178 that she had a lot of work to do to get it when she apparently has 25 years worth of
179 information?

180 It is likely that this has caused some confusion for Mark, which surfaces after this
181 next series of questions. In an attempt to get past this impasse Mark changes the topic.
182 Does Hanna believe that Māori will accept the introduction on computerised technology
183 into whakapapa (p. 159, l. 150)?

184 In answer to the question, Hanna says she thinks so (p. 159, l. 152), and when
185 asked why (p. 159, l. 153) Hanna offers two reasons. She says that people do not learn
186 using the oral traditions anymore (p. 159, l. 154), and that young people are computer
187 literate and can cope with the requirements of computer systems (p. 159, l. 155). These
188 issues could possibly be explored and/or combined. Hanna offers no evidence of her first
189 reason, but in her second she recounts her experience at Hato Petera College, in which
190 the students appeared to have no difficulty in using computing technologies (p. 159,
191 l. 155).

192 Mark continues his line of questioning, asking for Hanna's opinion on what she
193 thinks could be improved in FTM to encourage more Māori to use it (p. 159, l. 158).
194 At least we think that is what he is asking since he doesn't say so explicitly. Her answer
195 then is somewhat out of kilter with his question because instead of continuing her last
196 statement she talks about how she needs to prove that her data are correct, she says,
197 "This is probably how I am going to handle it because you can't actually prove it"
198 (p. 159, l. 162). Thinking then that data validation is still an issue, Mark asks about it
199 (p. 159, l. 164).

200 Hanna replies that she has seen people waste time and effort on entering data, only
201 to have it disproved and she doesn't want to enter anything into her system unless she
202 knows that it is already correct (p. 159, l. 165). About this point, and those that were
203 previously made, we can say that Hanna appears to be working under a misconception
204 about the place that computer applications have in genealogy research. It seems that,
205 in her mind the application will be used to produce a book. For her, getting information
206 into the system presents itself as a difficult process and it is likely that she doesn't know
207 or understand how data can be changed once it is in place. So instead, Hanna thinks
208 she must get all the information together first, then validate it before entering it into
209 her computer program. And so she says, "that is why I want to make sure about the
210 few doubts I have before I commit anything there" (p. 159, l. 169).

211 In Mark's next question he asks, "Does that mean that computer based tools are
212 better than Māori tradition?" (p. 159, l. 171). Hanna's response is interesting. She
213 says, "Definitely. It has to be that way" (p. 159, l. 172), and that the young people need
214 this kind of approach. This may be correct and we have no evidence to support or deny
215 that. It may have been useful to know what age Hanna is. She did say earlier that she
216 is retired and so we can assume that she is probably in her 60's or older. That fact is
217 quite telling because from my own experience I have found that people in this age group
218 have been raised to believe that the Māori culture is dead or at least dying. Late in the
219 19th and early in the 20th centuries it was believed that all Māori would be extinct by
220 the mid-20th century and much effort was put into collecting artefacts and putting them
221 into museums, and so on. This belief was passed on to those young Māori who grew
222 up believing that tikanga Māori and kaupapa Māori were no longer valid and that their
223 race had become extinct (Binney, 1968; Brown, 2000; Carter, 1998; Edge, 1998; King,
224 1985; Lange, 1972; Salmond, 1985; Simon, 1992, 1998; Smith, 2001; Sorrenson, 1975;
225 Voyce, 1989; Walker, 1975). Extend this and we begin to understand some of Hanna's
226 comments, that she values western empirical methods more highly than dodgy Māori
227 ones, that she doesn't believe that anyone is capable of learning things by using the
228 traditional methods anymore, and that she doesn't think that the young are interested
229 in Māori things. This is evidenced by her statement, "The oral history is gone. Once

230 they [the old people] die off what happens then?” (p. 160, l. 183).

231 Mark, in trying to reconcile some of the contradictory statements that have been
232 made, asks, “people don’t want to share things. But if you put it on computers other
233 can view it” (p. 159, l. 174). Hanna concedes there seems to be a problem with this
234 (p. 159, l. 176) and refers back to her previous comments regarding the conference in
235 Christchurch (p. 156, l. 65; p. 159, l. 176). It would appear that she is getting beyond
236 her depth and calls upon her husband to help, and he can’t (p. 159, ll. 178, 180). So
237 when Mark presses the point, asking Hanna if she thinks that computers are a better
238 medium for saving information, she concurs (p. 160, ll. 185, 186). But her long pause
239 is telling. It suggests that Hanna may not be certain about what she is doing, now.

240 Again, Mark asks Hanna what improvements she would make to the computer pro-
241 gram, FTM (p. 160, l. 187). In reply, Hanna says that she would make no changes
242 to the application (p. 160, l. 190), but she does require it to be able to verify dates
243 for people and perform sanity checks. That is, to be able to determine that a person
244 will fall into an appropriate time frame for other events to sensibly occur, the example
245 Hanna gives is that a father born on a particular date should therefore be old enough
246 to have offspring on a successive date (p. 160, l. 192). She does not consider the origin
247 of the information as being relevant by her statement, “even if you say on the thing,
248 these are oral history” (p. 160, l. 192), so long as the data can be verified by other data.

249 Mark is satisfied that he has an answer to his question, and moves on. He asks,
250 “Do you think this computer system could be help in other sectors” (p. 160, l. 196). He
251 wants to know if the application can be extended beyond pedigrees. Hanna says that
252 she can, and has in fact done so (p. 160, l. 198).

253 Mark referring to his understanding that, for Māori, whakapapa is more than a list
254 of details and so oral traditions are important for it (p. 160, l. 201). His statement is
255 probably a little extreme when he mentions that Māori do not want a written history.
256 Hanna reiterates her view that as a cultural entity and as a race, Māori are on the brink
257 of extinction. She asserts her belief, “I mean I know they probably don’t want to, like
258 I said, there would be nobody left. It will be all lost if they don’t.” (p. 160, l. 203).
259 She refers again to the work being done in Christchurch, pointing out that this person
260 is recording tribal information through Canterbury University.

261 Mark engages Hanna’s husband, Tama by asking him for the contact information for
262 this person in Christchurch (p. 160, ll. 207, 208). This action changes the conversation
263 significantly because Mark is now interviewing two people and not just one. This new
264 person was not part of the original conversation and so their understandings will be
265 different to what Hanna and Mark have established between them. We will see too,
266 that Tama doesn’t know why Mark is there — they were not introduced. Tama appears
267 to know more about computers than Hanna, and the conversation veers towards the

268 intricacies of computer usage.

269 Mark asks Hanna if she feels the software presents any disadvantages (p. 160, l. 209).
270 It is likely that Hanna's level of use does not permit her to have a high level of discern-
271 ment, especially if we consider that her proposed use of the application is to produce a
272 book for publication. So when she says, "I don't see any disadvantage" (p. 160, l. 211),
273 this is hardly surprising. She backs up her statement by saying that the only use she
274 sees for the application is to be able to "verify things" (p. 160, l. 212). There is a con-
275 tradiction expressed here. Hanna has already said that she wants to add information to
276 her system only when it has been validated. Now she is saying that she wants to use it
277 to do the same thing, which infers that Hanna lacks understanding of the system and
278 she can use it for.

279 This previous question from Mark would be difficult for anyone who is not an ad-
280 vanced computer user. To answer such a question requires a degree of experience in a
281 range of applications so that one can begin to make educated comparisons based against
282 a specified need or desired outcome, and what a program is actually able to deliver. It
283 also assumes that the person has spent some time considering the process they will en-
284 gage in when they accumulate their data, but that is not normally the case. It would be
285 fair to assume that the average person collects enough material for them to be able to
286 sort and collate in some way. That sorting and collating process only eventuates when
287 they know what they are dealing with, and they can decide on the criteria at that point.
288 Until then, most material is likely to gather in boxes, folders and envelopes. To consider
289 in advance such issues as the advantages and disadvantages of a computer application,
290 the processes of accumulating, sorting, collating and output of data as information, and
291 the maintenance and storage of data within a system, requires a level of conceptual and
292 logical abstraction that is beyond most people unless they have been trained to think
293 like this. This is not to say that all people are in this situation because clearly there
294 are those who can, but such people do not fit the average mould.

295 Tama confirms that they had used another application prior to adopting FTM,
296 called *ftree*⁶ (p. 160, l. 214). Both Tama and Hanna agree that FTM is preferable to
297 what they were using before, but there are a large number of updates they need to get
298 at frequent intervals (p. 160, ll. 217, 219).

299 At this point Tama asks Mark what he is doing, and if he is doing market research
300 or something (p. 160, l. 219). Introductions are now being made belatedly, so there is a
301 degree of suspicion in his question. Mark answers that he is doing a usability study of
302 genealogy programs (p. 161, l. 221). Tama starts providing Mark with the information
303 he had been asking Hanna for. He tells Mark that he dislikes the way that the software
304 publishers charge for upgrades, especially when the upgrade includes fixes for errors in

⁶<http://www.vjet.demon.co.uk/ftree/>

305 the program itself (p. 161, l. 223). Then he says, in reply to Mark's question about
306 disadvantages earlier, that it is very hard to judge if individual applications are any
307 good because they are often very similar and people tend to make choices based on the
308 their own specific requirements, and so they are generally happy (p. 161, l. 224).

309 Hanna says, "I think if all you have got is a name then it is fine because that what
310 you got with oral history" (p. 161, l. 228), referring to the piece of paper with the list
311 names that she had shown Mark earlier. We are not too certain why she has said this,
312 but it is probably an indication of the nature of data she has used in the application.
313 Tama offers to clarify the point by adding, "You need some specific dates for FTM
314 because it really relies on dates for sorting and so on" (p. 161, l. 231), emphasising that
315 if this information is not available then the application might display data incorrectly
316 (p. 161, ll. 234, 235).

317 Tama tries to offer some clarity by saying that the application provides sanity check-
318 ing by determining if a person is old enough to be someone else's parent, for example
319 (p. 161, l. 236). And Hanna, probably talking to Tama, says that this is what she is
320 trying to say. She means that, if no date data is available then one needs to be very
321 careful about assigning relationships within a lineage (p. 161, l. 240).

322 So now Hanna and Tama have an agreement on the nature of the issue, and from
323 this point of balance Tama ventures, "Because it used to be numeric based, somehow"
324 (p. 161, l. 246). Together all three agree that a numeric indexing system would be
325 needed to keep track of people in the system (p. 161, ll. 247–252). So for the first time
326 all three people are at the same point in the conversation.

327 Tama points out that all genealogy systems already use indexing as part of their ver-
328 ification process (p. 161, l. 254) because most applications are the same, fundamentally
329 (p. 161, l. 253).

330 Mark, addressing Tama, asks "Some time back you talked about some specific needs.
331 What did you mean by that, what are your specific needs?" (p. 161, l. 257). It is
332 significant that Mark is asking Tama these questions. Probably he sees that he is
333 likely to get the answers he is looking for from this source. In Tama's reply Mark is not
334 disappointed when he talks about what he thinks people want to do. He says that
335 some people like lots of narration, some people want to include photographs or scans of
336 documents, whereas others just want to produce a family tree with names and dates on
337 it (p. 162, l. 259). Tama rounds off his view by saying that there are very few people
338 who have used more than a few applications, and even fewer that have used them to
339 draw a comparison between them (p. 162, l. 266).

340 Mark then mentions that this is the information that he was after, and specifically
341 what the Māori needs are (p. 162, l. 281). Tama points out that whilst the oral tradition
342 traces back to the canoes, these things cannot be related to a distinct time frame (p. 162,

343 l. 284), like you can if you need to find information in “official English records” (p. 162,
 344 l. 287). This is especially important for the land claims process, if a person needs to
 345 verify their movements (p. 162, l. 287) or the birth of a person (p. 162, l. 291) within a
 346 given time period they need to work from dates.

4.2.3 Meta-analysis of interviews 1 & 2

In this section symbols which are significant in each of the two interviews are compared and contrasted. From these, inferences are drawn.

For both subjects in the interviews, genealogy serves to resolve issues in themselves. For the purpose of this study it is not important what those issues are, what is important is how they have used the information they gathered. In this part of the analysis their experiences have been considered and elements important to the design of a system have been identified.

This second level of abstraction is necessary in order to aggregate understandings and perceptions that arose during the interviews. In the first level of abstraction the points which were observed could be seen when compared with other points, but they tended to adhere to their context. The second level removes them from their context and presents, instead, symbolic representations of ideas, processes, and concepts. In order to simplify the approach of identifying the significant symbols in these two sets of interactions, the symbol is listed and cross referenced against its appearance in the first level of abstraction.

Before beginning, the subjects represent very different approaches to the practice of genealogy. On the one hand there is a person for whom genealogy provides an access point through which he can begin to connect to the lives of his ancestors. To know and understand them on a personal level and to experience their Kotahitanga/Herkunft by connecting to their essence directly (see p. 75, l. 2). On the other is a person for whom genealogy presents a series of paradoxes that need to be resolved. As though she has set about solving the problems and injustices of her past by tracing the inexact patterns of history. As a result she is uncertain about what it is that genealogy means to her (see Section p. 86, l. 10) and so, when asked she says, “Well, it is part of me its my... my ancestry” (see p. 155, l. 13).

In a way these two people present the personas described in Section 2.4 on page 34, Foucault’s Genealogist and Historian. While the first interviewee has taken the time to get to know people within the tribe who have sacred or hidden knowledge and has sought to know them as agencies in his own life, the other thought about going to the marae, but never quite got there. Instead she has amassed a store of written and copied texts and lists that she can scour and cross reference.

The interviewer, Mark, struggles throughout both interviews. His path is one of

rapid learning and so some questions appear somewhat out of place. In the interviews there are periods in which the answers provided by the interview subjects cause him discomfort, at other times his questions cause discomfort in the subject. Either way, these periods open the possibilities for new areas to be explored. It is during these periods that real mileage can be made, and the conversational participants can learn most from each other (see Figure 4.1). According the model — symbolic interactionism — described earlier, the interviews go through definable phases in which each party learns from the other and uses that to modify their own responses. When they reach a point where all are ‘in synch’ with each other, they are at a point of resonance. It is then that the conversation is likely to pause or halt until someone makes a comment that causes a degree of dissonance. Figure 4.1 represents the transition from resonance to dissonance, back to resonance and although it may be shown as a linear transformation it may also be circular. In the figure, the curved lines represent the degree of harmony that exists, in this case, between three people. At the left they are in a resonant state in their conversation, for example they may have just met and greeted each other, then they enter a state of dissonance where they may be getting to know each other or checking each other out, once that phase has passed they enter a state of resonance again until the next dissonant phase begins. And so the cycles go on until the conversation is ended.

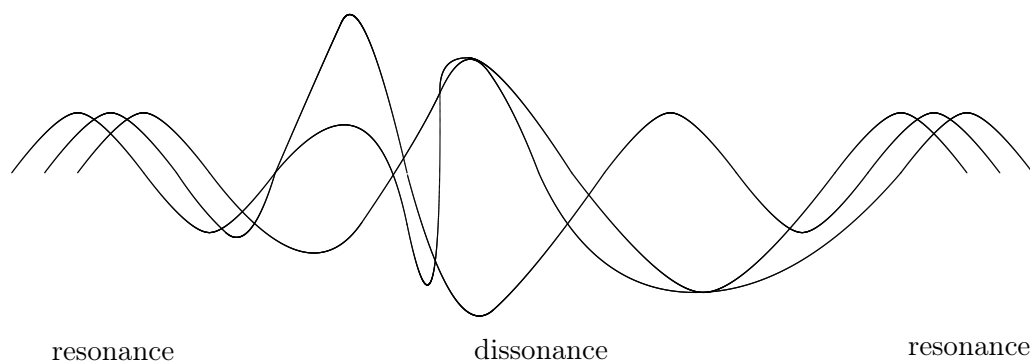


Figure 4.1: Conversation often runs through a series of discernible phases that follow the cycle of resonance → dissonance → resonance. Although the transition may be shown as a linear transformation in this figure, it may also be circular. Compare with Todorov (1977); equilibrium → disequilibrium → equilibrium. *Litchfield*

If the conversational participants find themselves in a position of dissonance they will work with each other to reach resonance again. Ultimately the participants seek to end the conversation on a point of resonance, that is, where they all agree on some point. It does not matter what that point is. For example, in the first interview the interview finished with Mark asking for Paul’s opinion of what he would like to see in

a computer based system (p. 153, l. 239). Paul's response is to reaffirm comments he made earlier (p. 153, l. 240), a point of dissonance. So Mark adjusts his position in an attempt to resonate with Paul (p. 154, l. 245) and phrases his final questions in an attempt to align with Paul's apparent position. In the second interview Mark finds a point of resonance when all three parties find agreement in the importance of data to an information system (p. 162, l. 293).

It would appear that with each new phase of resonance they have three options. They either:

1. Extend their knowledge, by seeking new information. This may involve changing the topic of the conversation, as in the previous phase
2. Deepen their knowledge by either:
 - (a) Confirming what they already have with new knowledge, or
 - (b) Adding greater levels or dimensions to their existing body of knowledge through a process of comparison against other sources of information, or putting in place new knowledge that agrees with/matches against what has been established
3. Enter a new phase of dissonance through disagreement, argument, new issues being raised, or changes in topic.

Note that in points 1 and 2 any attempt at extending or deepening knowledge will result in a degree of dissonance. But the resulting discord should not be enough to cause the conversation to end prematurely. It is a natural phase in which all parties need to resign themselves to accepting a new set of facts.

Symbols inferred from the interviews

In this section is a meta-analysis in which significant symbols are presented. The symbols emerged from the analysis of interactions in the two interviews in Appendix A, pp. 147 and 155, respectively. The symbols referred to are directly useful as indicators for the development of an information system and may be considered as human and cultural factors.

1. Whakapapa cannot be treated as a singularity. It is a set of processes, attitudes, emotions, and beliefs (p. 79, l. 131).
2. Having one's whakapapa means gaining direct connection to the Kotahitanga/Herkunft (p. 75, l. 2; p. 76, l. 25; p. 77, l. 77; p. 79, l. 133).
3. Information and knowledge about one's whakapapa can be used to gain perception (p. 76, l. 29).

4. Whakapapa is a process of trying to get connection to agencies, which gets at an object's very essence. Leading to perception, that in turn leads to conception (p. 76, l. 31).
5. Genealogy and whakapapa are processes for getting to know a historical figure on an intellectual, emotional and spiritual level (p. 76, l. 32).
6. When one perceives that whakapapa is part of themselves they retain it somehow (p. 86, l. 27).
7. There is a recognition that each person embodies their history and the history of their people (p. 76, l. 39).
8. Genealogy is the intellectual analysis of data (p. 76, l. 43) which can lead to a bias of list building and data collection.
9. The process of transferring whakapapa is not linear, nor is it a set of mutually exclusive facts that await a trigger to dislodge them (p. 77, l. 59; p. 79, l. 156). Compare with items 14 and 29.
10. Each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions (p. 77, l. 60).
11. Each object exists within a multidimensional framework (see Figure 3.3 on page 63) even though the method of transmission from person to person may be linearised via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance) (p. 77, l. 87; p. 79, l. 156; p. 79, l. 167; p. 86, l. 32).
12. Therefore, since each object exists in a multidimensional framework, but is transferred in a linear fashion, ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted.
13. Issues that have scarred the demotic body can be addressed (p. 149, l. 55). By starting from the big, to the small (p. 148, l. 53) the old people are able to introduce the Hei Āhua/Entstehung. They can relate those things that exist today within a framework of causation and agency, and as a succession of subjugations.
14. Semantics are an issue. It is not just the question itself that is important, it is what asks the question that is of equal importance (p. 77, l. 65). The kind of question may engender or impede discussion of whakapapa. Compare with items 9 and 29.
15. People tend to interpret information within a given frame of reference. The purpose for this may be to get at the essence of something, or to justify a position or stance (p. 83, l. 295). So, if one's approach to whakapapa is driven by passion and emotion, then what one seeks will be through passion and emotion (p. 83, l. 311).
16. Sources of data and information are diverse (p. 77, l. 70). The system needs to

accommodate a wide range of data and facsimiles of artefacts (p. 88, l. 97).

17. At times, information needs to be unlocked from their source, for it to be made effective (p. 77, l. 72).
18. Information is only useful when it can be shared and used to inform others, for example in a demotic environment (p. 77, l. 75; p. 79, l. 156; p. 81, l. 217).
19. The process of demotic learning involves more than just oneself. Often it means learning about the shared history of others within the collective that one does not know directly or even have any affinity with (p. 77, l. 84; p. 79, l. 156). Having said that, many people work on behalf of others because they choose to, voluntarily (p. 78, l. 126).
20. Often, references have indirect links to other objects or items of information (p. 78, l. 97). These links may or may not be explicit.
21. The individual is expected to create their own interpretation of knowledge, although the basis of it is shared (p. 78, l. 117). Therefore approaches to the use of information need to satisfy the locus (p. 78, l. 124).
22. There is a pervasive anxiety that information, knowledge, stories and life experiences need to be captured before those who hold them die and they are lost (p. 80, l. 177; p. 85, l. 373).
23. Information Systems of various kinds have always been used, originally they were artefacts and places, then writing (p. 81, l. 209; p. 81, l. 212). Today the range of technologies that can be incorporated is expanding (p. 81, l. 215). A person will tend to select a form of technology that suits their style, whether that is a computer, paint brush, chisel and so on (p. 84, l. 319).
24. An Information System is used to share knowledge, construct stories, as a collection point for whakapapa lineage, photos, historical references from early travellers and more recent accounts from modern authors, and land court records, local stories and old maps (p. 81, l. 217; p. 81, l. 217; p. 81, l. 228; p. 81, l. 234; p. 81, l. 239).
25. The Information System could be used as a prompt in story telling (p. 81, l. 236; p. 81, l. 239; p. 82, l. 243).
26. Perceptions may be divergent (p. 82, l. 252; p. 82, l. 254; p. 82, l. 260).
27. Whakapapa tends to be considered as information to be stored, organised and categorised, rather than a living embodiment (p. 82, l. 254; p. 82, l. 260; p. 90, l. 169). The system needs to form a set of tools that can be used to collect information and allows the person to validate it once it has been added, rather than trying to validate it before then (p. 91, l. 200).
28. The truth in stories is often variable and may be real for those by whom it is told (p. 82, l. 262; p. 89, l. 132; p. 90, l. 154). So stories may themselves be

justifications for subjugations imposed on others, or used to mitigate the effects of injustices and violences (p. 83, l. 279; p. 88, l. 99).

29. Recording people for replay removes the conversation they are engaging in from its context and they run the risk of becoming remote (p. 85, l. 363). People retain a large store of knowledge and experience and there is much that they may not tell in a situation that is forced or uncomfortable. So in choosing what to say, the person is likely to respond to the enquirer by delivering a story within the context of the situation (p. 85, l. 373). Compare with items 9 and 14.
30. There is a perception that young people are not interested in learning things ‘the old way’. Instead they want to get their knowledge via new media (p. 85, l. 377; p. 90, l. 185).
31. The historical consciousness of a person demands a high degree of accuracy (p. 86, l. 39; p. 87, l. 76).
32. Facts are validated when they can be compared to other facts that have already been validated (p. 87, l. 74; p. 89, l. 149; p. 92, l. 246). This belief is based on the assumption that the past is fixed and not subject to change, whereas it may be subject to interpretation (p. 87, l. 72). It is therefore necessary for a system to have the ability to cross reference objects in diverse ways (p. 89, l. 152).
33. It is necessary to review information often and carefully (p. 93, l. 284).
34. It is important that privacy of information can be attained and it may be necessary to have a logging system to track changes that are made to data (p. 87, l. 47; p. 87, l. 67).
35. A system may be used for purposes other than those it was designed for (p. 88, l. 87).
36. A system needs to be able to verify dates for people and perform sanity checks (p. 92, l. 242; p. 94, l. 313; p. 94, l. 317).

Questions arising from the interviews

During this phase of the analysis a number of questions emerged. These questions are listed here for future reference, but may not be within the scope of this study, therefore no direct attempt has been made to answer them here.

1. How will knowledge be passed from the system?
2. What is the process of learning (p. 80, l. 177)?
3. Is the learning of processes important (p. 80, l. 204)?
4. Does new technology oppose whakapapa or its values (p. 83, l. 286)?
5. Is new technology better placed to maintain whakapapa (p. 83, l. 288)?
6. Can a person who has only ever used a computer to learn whakapapa achieve the same level of feeling or belonging that a person who has received first hand

instruction, say from a kaumātua (p. 84, l. 323; p. 85, l. 356)?

7. Must we admit that the level of feeling is not an issue and that how a person feels about what they have attained is the culmination of their own experience, and therefore irrelevant in the face of an information system that is intended to be used by a range of people (p. 84, l. 323)?
8. To what degree does the teacher influence the learner about what they will feel, once the learning process is complete (p. 84, l. 323; p. 85, l. 356)?
9. Before the modern era that we recognise as history existed (i.e. in the period called prehistory), the western date paradigm did not exist. As a result, physical and social anthropologists, historians and archaeologists spend a huge amount of time assigning dates and periods to past events. So:
 - (a) Why do this with whakapapa?
 - (b) Should not the system be capable of using the whakapapa paradigm?
 - (c) If so, what are the essential data elements and how can they be conveyed?
 - (d) Are the essential data elements open to translation and error, and does it matter?

4.3 Analysis of text sources

In this section the text sources in Appendices B.1 and B.2 are analysed using qualitative analysis.

The texts are extracts from the New Zealand Dictionary of Biography (Ballara, 2003; Parsonson, 2003). They contain biographical information about two people, Samuel Marsden and Te Ao-Kapurangi⁷. These extracts were selected because both subjects interacted with Nepia Te Morenga⁸, and because they were written by two different people who would therefore present alternative writing styles. For the purpose of this study the choice of text is relatively unimportant, and so selection was made to maintain the theme throughout the study.

Both extracts follow a similar format; basic facts are detailed in the opening paragraphs, then events in which the subject was involved are recounted. Within each paragraph, there is an opening sentence that summarises its content. Then the remainder of the paragraph details, justifies or otherwise offers related information. In many cases this may mean tying various facts and together, or detailing the progression of an event. As an example, Parsonson often starts each paragraph with some comment to both introduce the subject and summarise the content that follows. After that he offers a moderate level of detail.

Both authors are historians writing for the Ministry of Culture and Heritage. Their works are inspected as representative of Foucault's Historian (Foucault, 2000; Gross, 2001)⁹. The Historian attempts to establish knowledge based on understanding of the environment, and developing perception about it (See Section 3.1.2). The process shown in Figure 2.1 on page 33 shows how the Historian seeks to make history effective by becoming dissociated from the subject of their study and rejecting any metaphysical associations between the subject and other elements: people, events, artefacts, and so on.

The Historian seeks to maintain a state of historical consciousness, which is totally neutral, devoid of passion and committed to the telling of truth. The Historian relishes objectivity, the accuracy of facts and the permanence and unchanging nature of the past. And so they will reject sentiment, love, and their own instinct in favour of verifiable facts. The Historian sees it as their duty and right to delve into the lives of others. This is clear in Parsonson's (2003) article, in which the first four words state, "According to reliable sources'..." (p. 164, l. 1). It appears that Parsonson's discourse is as much with his set of facts as it is with the reader. Clearly he has amassed a large sum of information

⁷See the articles "Marsden, Samuel 1765–1838" and "Te Ao-kapurangi 1818–1830" (*The Dictionary of New Zealand Biography*, 2003)

⁸See whakapapa on page 15.

⁹On page 62 two natures of approach were identified, the Historian and the Genealogist (see also, Figure 3.4 on page 64).

from which he is able to infer something of Marsden's intent, state of mind, influence on others, how they were influenced by others, and his impact on the development of a new nation. This can be compared with Ballara's article, for whom it appears that resources were limited and so less was able to be said of her historical figure's intent or state of mind.

4.3.1 Analysis of Marsden by Parsonson

1 In this section is an analysis of Parsonson's treatment of the historical figure, Marsden,
2 in his article *Marsden, Samuel 1765–1838* (Parsonson, 2003). The analysis uncovers
3 Parsonson's style and purpose for the writing. Later, in Section 4.3.3 these factors are
4 compared with the results of Ballara's article in Section 4.3.2, to arrive at a set of human
5 and cultural factors that may influence the design of an information system.

6 If we compare Parsonson's analysis of the life of Marsden with the research question
7 on page 69 what we see is that he has undertaken a genealogical process, in that the
8 body of knowledge about and by Marsden provides a historical figure for analysis. In
9 his analysis Parsonson demonstrates that he has a historical sense about Marsden when
10 he describes Marsden's birth and early years (pp. 164–164, ll. 1–15) and how Marsden's
11 attention was caught by the Māori (p. 164, l. 19). Later we will see that Parsonson
12 makes the attempt to present Marsden as an effective historical figure by according
13 a degree of acceptability to various of Marsden's apparent attributes or activities (for
14 example, p. 164, ll. 11 & 12). He also uses a device with which to give the historical
15 figure more depth by summarising the content of each paragraph before known facts are
16 itemised (for example p. 164, l. 16, in which Marsden is shown to have multiple roles as
17 a chaplain, magistrate and landowner). Marsden's life is well documented, appearing
18 in a large number of original records in New Zealand, Australia and England, so basic
19 information about him and his activities are readily accessible. One of the principle
20 sources of information are Marsden's own journals, which have been transcribed and
21 published (Elder, 1932).

22 It appears that the purpose of Parsonson's writing is to present sufficient of Mars-
23 den's life to create an impression of the life of the person without the encumbrance of
24 too much ancillary comment or justification. However in presenting relatively sparse
25 facts and information the author has run the risk of creating a historical figure that
26 is ephemeral and indistinct. In concentrating on the *major achievements* in Marsden's
27 life, the author runs the risk of presenting a one-trick pony. One for whom many other
28 great achievements and events are disregarded and may therefore be relegated to the
29 realm of collective ignorance.

30 Some of the feeling of the age is presented in Parsonson's writing style, which is rela-
31 tively formal by today's standards, but would be considered informal in the nineteenth

century. For example, “He took up residence at Parramatta in July, and concerned himself with the welfare of orphan children and female convicts” (p. 164, l. 10), and “...he also consented to serve as a magistrate (gaining a reputation for severity) and as superintendent of government affairs” (p. 164, l. 13).

The rendering of facts, which begin to take on more of a storyline in their telling, relate important early influences on the New Zealand career of our historical figure (p. 164, ll. 16–165, l. 38). These details lead to an understanding of Marsden’s later activities and their motives. Parsonson then begins to include his own perceptions about Marsden’s apparent successes (p. 165, l. 39), starting on a positive note, talking about his sermon conducted on Christmas Day at Rangihua¹⁰ (p. 165, l. 40), after he had persuaded Ngati Uru and Ngapuhi to make peace (p. 165, l. 39). One is not certain why Parsonson should describe the congregation as “well-drilled” though (p. 165, l. 43), but we could construe that Marsden or his supporters had some influence over the make up and attendance of the congregation. At the ceremony, Ruatara translated for Marsden, which indicates how close they had become, so that Marsden had faith in Ruatara’s ability to translate accurately.

After the significations of his success in the new land, Marsden conducted his now famous walk throughout his extended parish (p. 165, l. 45). He was accompanied by Ruatara and Hongi Hika (p. 165, l. 46) and later Te Morenga (p. 165, l. 47). There are several interludes throughout this period, and it appears that Marsden was himself at his peak of endurance and health. These events also point to the cleverness by which Marsden selected his guides (Hongi and Te Morenga). These men were not merely tribal leaders, they were hardened warriors and very highly regarded by those in their own and neighbouring iwi. These ariki (paramount leaders) were also in their ascendancy and so it was in their interest to align themselves with this Englishman, who was able to present himself well, orate and who had influence over his own people, the missionaries.

During his walks Marsden noted the poor condition of many of the inhabitants (p. 165, l. 51). By this time there had been decades of inter- and intra-tribal warfare. The poor living standards, and the number of deserted villages they passed, suggested to Marsden that his work would be more than just religious, but that his pastoral care would involve creating an economy for the people too, both for the settlers and the Māori. To this end he tried to establish viable communities and farms, such as Waimate North, given to him by Te Morenga (p. 166, l. 84), amongst others.

Despite Marsden’s early success, he was let down by the poor performance of others. He was particularly affected by the “inveterate jealousy of the hapu, their tendency to violence and revenge, their attachment to tapu and to their own gods” (p. 165, l. 52). Parsonson indicates that Marsden’s early successes were not assured (p. 165, l. 51), with

¹⁰Rangihua appears to be where Ruatara comes from. Marsden had met Ruatara in England in a “sick and neglected state” (p. 165, l. 43)

69 the death of Ruatara (p. 165, l. 54), the poor conduct of European and American crews
70 (p. 165, l. 54) and the apparent inability of his missionaries to work together (p. 165,
71 l. 60). Parsonson compresses several significant sets of events into one paragraph and
72 one is left wondering what was the cause of Ruatara's death, why were the triggers for
73 the apparent behaviour of the crews and what were the causes of the troubles between
74 his missionaries. Indeed one may ask if the missionaries were sufficiently qualified to
75 act as missionaries, or were they merely seeking to fulfil their need for personal wealth
76 and establishment, such was the case with Thomas Kendall (Binney, 1968)¹¹. These
77 issues were obviously important, with long lasting results, because even two years later
78 they were affecting his work (p. 166, l. 62).

79 From this point in his essay Parsonson's tone appears to change. He presents Mars-
80 den's attempts at enforcing his authority as somewhat futile. For example, Hall, one
81 of Marsden's missionaries refused to stop selling firearms to the Māori, but even those
82 who agreed reneged on their promise (p. 166, l. 64). Parsonson uses an illustration of
83 Marsden's leadership style, where he tries to lead by example (p. 166, l. 69) by defying
84 the governor of New South Wales, Lachlan Macquarie, and took in increasing numbers
85 of Māori where he was staying in Parramatta and taught them essential trades. At the
86 same time Marsden kept the vessel *Active* busy, crossing the Tasman back and forth
87 from Rangihoua (p. 166, l. 73). The change in tone conveys some of Marsden's rising
88 sense of frustration at being kept away from his work in New Zealand.

89 It would appear that Marsden's concerns were well placed because in the next para-
90 graph (p. 166, ll. 76–83) Parsonson relates the increasing problems that Marsden experi-
91 enced with his missionaries, within the context of describing his efforts to wrest control
92 of the venture from corrupt Europeans. At the same time he was establishing new, and
93 hopefully more profitable (in terms of stability and morality) ventures at Kerikeri with
94 land obtained from Hongi (p. 166, l. 85), Taiamai with land obtained from Te Morenga
95 (p. 166, l. 87), and Paihia for the Reverend Henry Williams (p. 166, l. 88).

96 It is from this point that Parsonson reveals some of his interest in Marsden's life.
97 One can see evidence of his fascination with Marsden's extensive journeys throughout
98 the North Island, for example, "He wanted to see the country and its people, and his
99 remaining journals describe in vivid detail his long journeys, often in rugged, heavily
100 bushed country where no European had ventured" (p. 166, l. 92). This shows too,
101 how Marsden made efforts to extend his influence and enforce his imprint, for example,
102 "Above all, he had come to teach and to preach" (p. 166, l. 97) and, "Wherever he
103 went he talked, often far into the night, on all manner of subjects" (p. 166, l. 97).
104 It would appear that Parsonson is less impressed by Marsden's role as an evangelist,
105 leaving remarks about this point to the end of a paragraph that represents a number of

¹¹Note that, as with Te Morenga, Thomas Kendall was a great great grandfather of mine.

106 significant episodes in Marsden's life and work (p. 166, l. 99 and p. 167, l. 101).

107 Despite Marsden's efforts in New Zealand, his detractors in England appear to
108 have grown in influence against him and Parsonson relates these events with a degree of
109 sympathetic approval of the misunderstood man (p. 167, ll. 103–110). So when Marsden
110 makes a successful and forthright reply (p. 167, l. 111) Parsonson's mood lifts, and for
111 the first time Marsden is actually happy (p. 167, l. 113).

112 With this new found lightness Marsden is possessed of greater vigour, so that his
113 "brief visits to the Bay of Islands were packed with action" (p. 167, l. 117). Again,
114 Parsonson compresses a large amount of significant material into one paragraph which
115 have the combined effect of Marsden consolidating his winnings. The effort to get to
116 this point took its toll on Marsden's life (p. 167, l. 127), but even through the recovery
117 period after illness he insisted on pursuing his dream (p. 167, l. 129).

118 After he had recovered sufficiently from his illness Marsden resolved to make one
119 more trip to visit his people. One can see the pride Marsden must have felt on his last
120 trip to New Zealand (p. 167, l. 130) which, as Parsonson says, "assumed the proportions
121 of a triumphal procession" (p. 167, l. 131). But for Marsden the trip was not so much
122 a visit but a further opportunity to work (p. 167, l. 131). Again, Parsonson reflects his
123 own interests by mentioning Marsden's aims of spreading religion throughout the North
124 as an after thought (p. 168, l. 140).

125 In brief terms Parsonson describes the manner of Marsden's death. It may be brief
126 because it was Marsden himself who was the inveterate journaliser, not his daughter or
127 other family members. So fewer records exist during the period and following Marsden's
128 death than preceded it (p. 168, l. 145).

129 Parsonson expresses admiration for Marsden's honourable approach to dealing with
130 people, even during times of personal attack or conflict, so when he says, "Marsden
131 was much misunderstood in his generation and just as often misrepresented" (p. 168,
132 l. 148) he is highlighting the unjust ways in which those in power abused it. Parsonson
133 identifies some of what he considers as Marsden's primary strengths, among them are
134 his guilelessness, honesty, generosity, strong work ethic, Christian pity, and in fact he
135 represents one whose every action presented a model Christian (p. 168, ll. 149–155).
136 His only fault appears to be a tendency towards defensiveness (p. 168, l. 155).

137 In the final section of his essay Parsonson takes account of Marsden's influence on
138 the development of New Zealand. There are three significant areas that Parsonson
139 recognises as important (in these points can be discerned something of Parsonson's
140 purpose in writing this account):

- 141 • He points out the degree that Marsden had on the conversion of Māori to Chris-
142 tianity (p. 168, l. 157)
- 143 • The establishment of agriculture in New Zealand (at a time when virtually all

- 144 industry was exploitive) (p. 168, l. 158).
 145 • His support and support of the notion that annexation of New Zealand by the
 146 British was the right course of action (p. 168, l. 160, and p. 168, ll. 167–173)

4.3.2 Analysis of Te Ao-kapurangi by Ballara

1 In this section is an analysis of Ballara’s treatment of the historical figure, Te Ao-
 2 kapurangi, in her article *Te Ao-kapurangi 1818–1830* (Ballara, 2003). The analysis
 3 uncovers Ballara’s style and purpose for the writing. Later, in Section 4.3.3, these
 4 factors are compared with the results of Section 4.3.1 to arrive at a set of human and
 5 cultural factors that may influence the design of an information system.

6 This article challenges the western mind from the outset. Its starting place in time
 7 occurs before the heavy influence of European culture, therefore there are no verifiable
 8 facts or written records to attest to the birth date or origins of Te Ao-kapurangi. The
 9 nearest that the Historian can tentatively assert is that she was born “probably in the
 10 late eighteenth century” (p. 169, l. 1). However she shows more confidence in relating
 11 known facts, those of Te Ao-kapurangi’s parentage, her descendancy, tribal affiliations
 12 and so on (p. 169, l. 1) and is able to draw a brief picture of her, indicating her status
 13 in the tribe (p. 169, l. 3), marital status (p. 169, l. 5) and information about her
 14 children (p. 169, l. 6). This confidence stems from Ballara’s primary source, Te Ao-
 15 kapurangi’s grandson, Takaanui Tarakawa, who left a record of her life (p. 169, l. 7).
 16 Interestingly, and possibly due to the primary source of information, we know only
 17 that Te Ao-kapurangi was married more than once because we are told that her first
 18 husband is “Rauru of Tapuika” (p. 169, l. 6). Later in the essay Ballara mentions other
 19 partnerships, but the mention of this marriage positions it as one of importance, rather
 20 than chronological.

21 Te Ao-kapurangi enters the history books in 1818 when she was captured by Hau-
 22 raki (p. 169, l. 9), who became her second husband after they had a child together
 23 (p. 169, l. 12). In this paragraph Ballara combines a number of important and dis-
 24 tinct events that culminated in Te Ao-kapurangi’s arrival in the Ngapuhi region of the
 25 Bay of Islands (p. 169, l. 11). These include the series of events in which Ngapuhi
 26 and Te Rarawa, led by Te Morenga, travelled to the East Cape and their subsequent
 27 vengeful and bloody rampage across the North Island, through the Waikato to Raglan,
 28 and finishing at Ngaruawahia in 1820. These acts caused one of the largest population
 29 shifts in New Zealand history and resulted the total depopulation of some areas. The
 30 repercussions of these episodes resonate through to today where even now Ngapuhi are
 31 regarded with some suspicion by some iwi.

32 As Ballara continues her story we see that our historical figure gets further involved
 33 in Ngapuhi struggles for greater power against their neighbours often under the guise

34 of utu (p. 169, ll. 14–18). And here Ballara introduces another significant event in the
 35 life of Te Ao-kapurangi, revealing her deeper connection to her originating hapū, Ngati
 36 Awa (p. 169, l. 18). In this event Ballara relates how Te Ao-kapurangi tried use the
 37 power held over her husband, Te Wera (was Hauraki), to save the lives of her kinsfolk
 38 (p. 169, l. 25). Sensing this, Hongi reasserts his greater authority by putting in place
 39 a not-quite-impossible-but-difficult requirement, that only those relatives who could fit
 40 between her thighs would be spared (p. 170, l. 36).

41 In this event are a number of important power and political ploys. It could said
 42 that Hongi's demand that only those who could fit inside Te Ao-kapurangi's thighs was
 43 an indication of the low value he placed on her, her life and those of her relatives. To
 44 suggest that they would crawl between her thighs to save their own lives meant that
 45 they were no better than animals, mating with their kin. And that for her to invite
 46 them to do so made her no better than an incestuous whore. Given that she was a slave
 47 and captive in the first place made her virtually worthless in the eyes of her captors. To
 48 make things worse for this woman, Hongi decreed that she must be present at the battle
 49 (p. 170, l. 36). In other words, she would have to witness the death of those relatives
 50 she had not been able to save. Perhaps from this too we see some of the disgust Hongi
 51 held for this woman who had been accepted into an influential strata of the tribe, to
 52 then ask for the lives of the tribe's enemies.

53 This woman had used her mana and skill to gain influence throughout the tribe.
 54 Clearly she was gifted with a clever wit because in response to Hongi's challenge to
 55 her new found authority, instead of having people climb between her thighs, she instead
 56 climbed to the top of the wharenui, stood astride the ridge-pole, and invited her relatives
 57 to squeeze inside the building (p. 170, l. 39). Seeing this the Ngapuhi, always bound to
 58 their sense of honour and probably through their sense of humour, respected the turn
 59 of events and did not kill those people (p. 170, l. 41). As a result the event is recalled
 60 in the memory of the Te Arawa people by the aphorism, "Ano ko te whare whawhao a
 61 Te Ao-kapurangi" (p. 170, l. 44), and places it forever as a tradition, giving the event
 62 legendary status.

63 The event described here is complex and involves a number of key players, each with
 64 their own status and agenda. Seemingly, Te Ao-kapurangi set out to save herself and her
 65 child, then her relatives. Her husband, Te Wera, is portrayed as a good but weak man,
 66 weighed by his guilt for allowing their child to be burned (hence his change of name to
 67 Te Wera). So he allows her to address the other chiefs. Her argument is persuasive and
 68 the chiefs, who play a secondary role in this event, change their minds about the degree
 69 of destruction they wish to inflict on the besieged settlement and allow her to save her
 70 relatives. Recall that in tikanga Māori, oratory is a prized skill and if one is allowed the
 71 opportunity to use it then all who hear may be persuaded by what is said.

72 There is one stickler for the tribe's original intent, Hongi. While he sees the tide
 73 turning in favour of this woman's argument, he must reinforce his will upon the other
 74 chiefs. Kaupapa Māori dictates that a hapū's involvement in any war party is voluntary
 75 and the assembled chiefs did not need to be there, except according to their own sense
 76 of honour. Hongi will have sensed the change and needed to move to stem the flow. So
 77 rather than dismissing her argument outright, he accepted it, as did the other chiefs,
 78 but placed conditions upon how she might exercise her privilege — the episode of the
 79 thighs — with an emphasis similar to how he regarded her and her status.

80 In the meantime Te Ao-kapurangi's relatives seem to have been forewarned because
 81 when she arrived at the site of the battle she moved immediately to the wharenuī and
 82 climbed onto its roof, whereupon her relatives crowded within it. Even those few who
 83 did not manage to get there in time were able to gain entry during the darkness of night
 84 (p. 170, l. 46). So there is evidence of some kind of conspiracy.

85 The event became an equaliser. From this we see that utu was met from all sides.
 86 Those who were responsible for the first injury were overcome, those who were innocent
 87 but caught up in the event were spared, those who felt aggrieved were repaid in blood
 88 and perhaps most important, a new cycle of utu was averted due to the smart thinking
 89 of this woman. The result was a long lasting and permanent peace between Te Arawa
 90 and Ngāpuhi (p. 170, l. 50).

91 After this period Te Ao-kapurangi descends into obscurity (p. 170, l. 55). Even the
 92 fact of her death is not recorded anywhere (p. 170, l. 56), although it may be held in
 93 the tribal store of knowledge, passed from generation to generation, as part of their
 94 whakapapa (p. 170, l. 56).

95 From this text we see that the style is contemporary, compared with Parsonson's
 96 essay on Marsden. Is it because the events are so far removed from our present day that
 97 to present the principal events requires this kind of treatment? Or is this a reflection
 98 of the writing style of the Historian herself, in which such subtleties as these influence
 99 the reader's regard of the principal players?

100 Whatever Ballara's purpose in writing this essay was, one purpose can be found for
 101 it, which is to tie the lives of other important figures together, linking names, events,
 102 times and places, one to another, to tell an even grander story. Another purpose for
 103 the essay is as a case study of the process of utu and how whakatauaiki are established
 104 into the collective demotic mental framework.

4.3.3 Meta-analysis of text source analyses

In this section is an meta-analysis of Sections 4.3.1 and 4.3.2. In the meta-analysis significant symbols from the sections are presented. The symbols may be considered as human and cultural factors, except that they will need to be compared with the model

derived from the discussion of Foucault's Historian and Genealogist in Chapter 2. The comparison is then conducted in Section 4.4.

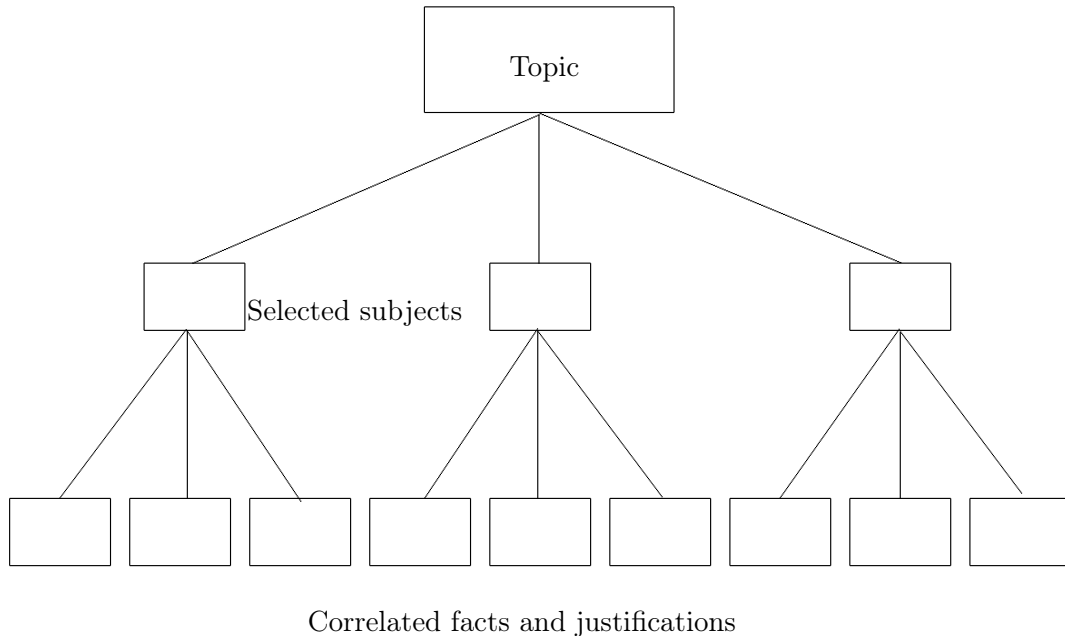


Figure 4.2: The process of subject select applied by the Historian. *Litchfield*

1. The Historian follows a format, which may represent a common writing style of historians. Figure 4.2 illustrates the relative elements within an essay. In the way this is shown it can be used as a model for the creation of reports from an information system. In detail though, the figure shows:
 - (a) The Historian has selected a topic about which they will write
 - (b) Correlated facts are selected according to the Historian's biases (p. 103, l. 27)
 - (c) The Historian is dependent upon the volume and quality of information to hand (p. 103, l. 17)
 - (d) Selected facts relate to events and recorded details. The justifications of these facts must relate to all others if they are to be considered as valid or verifiable (p. 103, l. 21)
 - (e) In considering the elements above, the Historian represents Foucault's Historian. They make the historical figure effective by establishing a degree of historical consciousness. In their investigations and subsequent passing of judgement upon the material and the figure themselves, they may think they are being sensitive when in fact they display a distinct lack of taste in their insinuations (p. 103, l. 22).

2. The Historian, once they have established the content of their discourse, sets about structuring it (p. 103, l. 11):
 - (a) Basic facts are detailed in the opening paragraph
 - (b) Events in which the historical figure played a part are recounted
 - (c) Some summary or perception of the life of the historical figure is related, from the standpoint of the Historian
 - (d) Within each paragraph the opening sentence offers a summary of the paragraph's content
 - (e) The remainder of the paragraph presents details, observations or justifications of the opening sentence.
3. The Historian is a judge of their historical figure, whether they admit to it or not. This is evident when they choose to show them in a positive or negative light (p. 104, l. 39)
4. The Historian makes the attempt to present the historical figure as being effective by illustrating known aspects of their personality (p. 103, l. 30; p. 105, l. 96)
5. If there is little known of the personality of the historical figure, rather than opening themselves to conjecture, the Historian reflects on the event itself, or those of other people with whom the historical figure associated (p. 104, l. 36; p. 107, l. 16; p. 107, l. 21)
6. The Historian seeks to maintain a state of historical consciousness (p. 103, l. 6; p. 107, l. 6)
7. The Historian relies on the assumption that facts are unchanging, and so they will reject their own feelings and instinct in favour of them (p. 107, l. 20)
8. The Historian sees it as their right to delve into the lives of historical figures and, if necessary, juxtapose figures and/or events to make a point (p. 106, l. 129; p. 107, l. 32; p. 108, l. 41)
9. The Historian is able to hold discourse with their facts (p. 106, l. 137; p. 108, l. 41; p. 108, l. 53; p. 108, l. 63)
10. The aim of the Historian is to select sufficient of the facts about a historical figure they have available, with which to create a perception of that person, place or event (p. 106, l. 141; p. 106, l. 143; p. 107, l. 145)
11. Therefore the Historian will relegate or reject facts as they see fit (p. 105, l. 85)
12. To give the historical figure more depth the Historian will link related events, places and other historical figures (p. 104, l. 39; p. 104, l. 45; p. 104, l. 48; p. 105, l. 76; p. 105, l. 83; p. 107, l. 21; p. 107, l. 25; p. 108, l. 37; p. 108, l. 41)
13. And, the Historian may combine more than one set of facts about people, places or events in order to clarify the progression of another event (p. 107, l. 21; p. 105, l. 89; p. 106, l. 107; p. 109, l. 100)

14. The Historian may use writing styles and styles reminiscent of the period to create a perception of the person, place or event (p. 104, l. 32; p. 104, l. 34)
15. It is impossible for any person to totally remove themselves from an historical account, therefore there will be elements of personal bias (p. 106, l. 129)
16. Therefore, since much of our society is established on a basis of power and politics these influences are reflected in what the Historian will choose to write about, or use as examples to justify an occurrence (p. 106, l. 137; p. 109, l. 85)
17. A role of the Historian is to convey the relative importance of people, places and events (p. 106, l. 137; p. 108, l. 63; p. 109, l. 72)
18. The Historian can relate the emergence of legend and tradition by retelling events (p. 109, l. 102)
19. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story (p. 109, l. 102)
20. The Historian has control and power over the historical figure, so how they are represented will affect one's perception of them (p. 106, l. 130; p. 106, l. 132; p. 106, l. 136; p. 109, l. 86; p. 109, l. 91)

4.4 Derivation of symbols

In this section the inferences that were drawn from the interviews and text sources are brought together and compared. Points that are similar, such as in their meaning or result, are combined to reduce the list down to a series of identifiable human and cultural factors. Implications for further studies and/or development are identified too. The purpose of this process is to derive symbols or objects that may be generalisable, that is they can be used as factors in the development of an information system.

To compare the inferences, they are classified against the conceptual model that was illustrated in Figure 3.3. These results are shown in Table 4.2. The columns in Table 4.2 contain the following information:

Model Symbol These are the symbols that were shown in Figure 3.3 and previously described in Chapter 2. They represent concepts that are used in the process of whakapapa. As concepts they are used to construct frameworks through which whakapapa can be built, maintained and transferred.

Interview symbol From the analysis of the interviews 33 inferences were made. When those inferences are cross referenced against the concepts in Figure 3.3 the resulting matches are shown in this column. The interview inferences are detailed on pages 97–100.

Text source symbol As with the previous column, the 20 inferences drawn from the analyses of the text sources are cross referenced with the concepts in Figure 3.3 and the resulting matches are listed. The text source inferences are detailed on pages 110–112.

Derived symbol In the process of generalisation of the inferences from the analyses, the inferences are compared and where possible merged. The result of these are noted on pages 118–129. These symbols represent human and cultural factors used within the whakapapa process.

Table 4.2: The inferences drawn from the interviews and text sources are generalised and compared against the conceptual model identified in Figure 3.3.

Model symbol	Interview symbol	Text source symbol	Derived symbol
Pedigree	2, 7, 11, 12	1e, 8, 10, 12, 13, 16	p. 118
Genealogist	8, 9, 16, 23, 30	15, 16, 17, 19	p. 119
Event	10, 11	1d, 2b, 5, 8, 10, 12, 13, 16, 17, 18	p. 119
Connective thread	1, 4, 7, 12, 19, 20	15, 18, 19	p. 119
Group identification	2, 7, 19	8, 12, 13, 16, 17, 18	p. 120
Status/Personal and group	2, 7, 12	16, 17	p. 120

Continued on next page/..

../Continued from previous page

Model symbol	Interview symbol	Text source symbol	Derived symbol
Status/Subjecton	12, 13	15, 16	p. 121
Cosmology/Universal time frame	1, 4, 10	19	p. 121
Cosmology/Linkage	4, 7, 10, 11	19, 20	p. 121
Inclusive	5, 7, 12, 22	3, 4, 8, 12, 14	p. 122
Collective memory	7, 9, 12, 22	1c, 14, 18, 19	p. 122
Demotic	2, 7, 10, 11, 12, 13, 18, 22, 27	18, 19	p. 123
Allegory/Collective understanding	3, 5, 12	15, 18, 19	p. 124
Allegory/Protocols	8, 10, 11	18, 19	p. 124
Allegory/Tools include/Shared history	5, 7, 10, 11, 28	<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div>1e, 3, 4, 5, 8, 13, 15, 16, 17, 18, 19, 20</div> </div>	p. 124
Allegory/Tools include/Music	9, 10, 11		
Allegory/Tools include/Story	10, 11, 25, 28		
Allegory/Tools include/Humour	10, 11		
Allegory/Tools include/Survival or prevalence	10, 11, 28		
Allegory/Tools include/Food	10, 11		
Allegory/Tools include/Speech	9, 10, 11		
Protocol	4, 13	18, 19	p. 126
Knowledge/Shared knowledge	2, 10, 11, 18, 19	12, 19	p. 126
Knowledge/Ahuatanga Māori	4, 7, 10, 11	4, 14, 16	p. 126
Knowledge/Tikanga Māori	8, 10, 11, 19	19	p. 126
Knowledge/Origins	4, 10, 11	1a, 1d, 4, 10, 13, 17	p. 127
Knowledge/Present conditions	10, 30	10, 12, 13, 15, 16, 17	p. 127
Knowledge/Tribal additions	7, 9, 10, 11	7, 18	p. 126
Knowledge/Mana	10, 11, 12	7, 16, 17, 20	p. 127
Knowledge/Details	5, 8, 10, 11, 17, 24, 31, 32, 33	2, 4, 5, 7, 9, 10, 12, 13, 17	p. 127
Knowledge/Discussion or argument	10, 19, 26, 33	1b, 1d, 1e, 2c, 2e, 3, 5, 6, 8, 9, 10, 12, 13, 14, 15, 16, 17, 19, 20	p. 128
Knowledge/Stories	4, 10, 11, 17	2e, 4, 5, 9, 12, 14, 18, 20	p. 125
Knowledge/Remembrances	3, 10, 11	1b, 1e, 2e, 5, 6, 10, 12, 13, 18	p. 127
Knowledge/Lists of dead	3, 8, 10, 11, 22	1b, 1d, 2e, 6, 7	p. 127
Knowledge/Erudition	10, 11	1e, 2, 4, 5, 9, 10, 14, 18, 19	p. 127
Knowledge/Karakia	4, 10, 11	1e, 20	p. 127
Knowledge/Interpretation	3, 5, 10, 11, 15, 20, 21	1b, 1c, 1d, 1e, 2c, 3, 8, 10, 16, 17, 18, 19, 20	p. 128
Hui wānanga	3, 4, 5, 8, 10, 11, 16	1c, 1d, 8, 10, 16, 17, 18, 19, 20	p. 129

Figure 4.3 shows is a graphical representation of the relationships that exist in Table 4.2. The centre column is a list of the Model symbols extracted from Figure 3.3. On the left hand side are the Interview symbols that were inferred from the analysis of the interviews. On the right hand side are the Text Source symbols from the text source analysis. These are then related to the Derived symbols shown as page numbers next



Figure 4.3: Representation of relationships between Model symbols, Interview symbols, Text source symbols, and Derived symbols.

to the Model Symbols in the centre column. The relationships between the symbols are shown as lines which link the various symbols to each other.

In the figure can be seen shows the concentration of relationships that appear within Table 4.2, but because of the nature of tabular data, is not obvious. It appears that there are three major points of concentration within the data: On the left relationships are concentrated around points 10 and 11 on page 98; on the right points are concentrated around points 1c–1e on page 110 and 13–20 on pages 111–112.

From the meta-analysis of the interview transcripts, points 10 and 11 state, respectively: “Each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions (p. 77, l. 60)”; and, “each object exists within a multidimensional framework (see Figure 3.3 on page 63) even though the method of transmission from person to person may be linearised via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance) (p. 77, l. 87; p. 79, l. 156; p. 79, l. 167; p. 86, l. 32).” These suggest that the ideas contained within those symbols are important for the design of the information system. Both these points highlight that each object may be related to multiple other objects, and it they exists in a recursive relationship with other objects.

Points 1c–1e state: “The Historian is dependent upon the volume and quality of information to hand (p. 103, l. 17)”; “selected facts relate to events and recorded details. The justifications of these facts must relate to all others if they are to be considered as valid or verifiable (p. 103, l. 21)”; “in considering the elements above, the Historian represents Foucault’s Historian. They make the historical figure effective by establishing a degree of historical consciousness. In their investigations and subsequent passing of judgement upon the material and the figure themselves, they may think they are being sensitive when in fact they display a distinct lack of taste in their insinuations (p. 103, l. 22).” The process indicated here suggests that the Historian is both partly dependent upon the quality and quantity of information to hand, and that they have the power to choose. The Historian can apply their power of choice with an assumed air of magnanimity, which may be construed as tactless by those who are included or excluded from history. The motivation of the Historian is to verify the quality of their data, to validate their facts. It is not to massage the feelings or emotions of those about whom their investigations impact.

Points 13–20 state: “And, the Historian may combine more than one set of facts about people, places or events in order to clarify the progression of another event (p. 107, l. 21; p. 105, l. 89; p. 106, l. 107; p. 109, l. 100)”; “the Historian may use writing styles and styles reminiscent of the period to create a perception of the person, place or event (p. 104, l. 32; p. 104, l. 34)”; “it is impossible for any person to totally remove

themselves from an historical account, therefore there will be elements of personal bias (p. 106, l. 129)”; “therefore, since much of our society is established on a basis of power and politics these influences are reflected in what the Historian will choose to write about, or use as examples to justify an occurrence (p. 106, l. 137; p. 109, l. 85).”; “A role of the Historian is to convey the relative importance of people, places and events (p. 106, l. 137; p. 108, l. 63; p. 109, l. 72)”; “the Historian can relate the emergence of legend and tradition by retelling events (p. 109, l. 102).”; “Therefore cultural patterns are carried forward, by implication and through the retelling of the same story (p. 109, l. 102).”; and, “The Historian has control and power over the historical figure, so how they are represented will affect one’s perception of them (p. 106, l. 130; p. 106, l. 132; p. 106, l. 136; p. 109, l. 86; p. 109, l. 91).”

As with the previous summary, these points relate to the process the Historian is engaged in when they compile facts and write their histories. The Historian, who is charged with the responsibility of putting history into context, will refer to available facts in order to create the context. Another tool for creating context is to write in a style that conjures the spirit of the age, the *zeitgeist*.

However the Historian may try to cover themselves in facts, stories and styles, they must realise that they cannot remove themselves from the narrative process and the Historian therefore exercises the influence of their political leanings over whatever choices they make. This may be seen in what people, places or events the Historian chooses to include or exclude, in the exercising of their power over these as objects, and creating new histories or historical perspectives. On the other hand the Historian participates in the persistence of tradition or societal injustice by continuing to retell the story of their emergence, their *Timatanga/Ursprung* and *Hei Āhua/Entstehung*.

The derived symbols that follow are the result of the merger of the significant symbols detailed in Sections 4.2.3 and 4.3.3, whilst considering them through the lens of the model in Figure 3.3.

The process of deriving these symbols involves gathering each of the symbols in Figure 3.3 and comparing them with the interview and text sources. These items are aggregated to produce a statement about each of the figure’s symbols. The statement provides explanation and interpretation about the symbol, and each of those statements are listed here as derived symbols. It is these derived symbols that represent human and cultural factors in the whakapapa process.

In relation to the development of an information system, the system is required to create, maintain, manage and remove objects which can be used to represent people, places, events, artefacts, relationships, knowledge, stories, chants, aphorisms, and any other object not-previously considered for use. The objects are defined such that the object described is a symbolic representation of at least one human and cultural factor

in the whakapapa process.

4.4.1 Pedigree

The symbol Pedigree does not lend itself directly to application as an object because while pedigree relates to the path of descendent from generation to generation, in relation to the demotic concept of whakapapa it is infused with further meaning than that. Whakapapa traces the evolution of a demotic collective within which the existence of groups emerge and are defined according to significant events or more frequently, as the descendants of significant ancestors. Individuals are recognised or described in the form of story, song, dance or artefact. Whakapapa forms a thread that creates a fabric of connection within groups and carries forward the successes and failures that define status within them. It places the person into a framework that includes not only themselves and their family group, but the rest of the universe from the beginning of time. It is a collective memory that recalls debt and grievance. Whakapapa is inclusive and having one's whakapapa means gaining direct connection to the Kotahitanga/Herkunft of the demotic collective to which one belongs. When a person considers their pedigree, as part of their whakapapa, they recognise that they are the embodiment of their history and the history of their people.

A single strand of generations can be represented as a series of related objects, in which each object exists within a multidimensional framework. Inter-generational knowledge, experience, wisdom and learning is passed via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance). Since each object exists in a multidimensional framework, ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted.

Often pedigrees are dealt with in a manner that is remote and unemotional. Such an approach is representative of the style of the Historian. The Historian seeks to make historical figures who are identified by pedigrees as effective, this is accomplished by establishing a degree of historical consciousness. The aim of the Historian is to select sufficient of the facts about a historical figure they have available, with which to create a perception of that person, place or event. To give the historical figure more depth the Historian will link related events, places and other historical figures. And, the Historian may combine more than one set of facts about people, places or events in order to clarify the progression of another event. Therefore, since much of our society is established on a basis of power and politics these influences are reflected in what the Historian will choose to write about, or use as examples to justify an occurrence.

4.4.2 Genealogist

The Genealogist symbol represents both the person who undertakes genealogy and the processes they use. Within an information system the Genealogist is represented by an object that is linked to any other objects with which they may interact and is therefore a central reference point. Genealogy, on the other hand is a non-linear process that can be defined as the intellectual analysis of data which can lead to a bias of list building and data collection.

Genealogy often requires excursions down byways of information gathering, only to find those routes are dead-ends, otherwise treasures may be uncovered that link to other apparent or unused facts, or previous knowledge is deepened. It is very much concerned with minute attention to small details and variations.

The genealogy process starts with a small set of known facts that need linking to other facts to build a whole set of knowledge. In this respect the process is quite distinct from whakapapa, in which the person aggregates knowledge, wisdom and experience.

4.4.3 Event

Event objects are a core feature of system, as with the Genealogist. Each event that is recorded may contain links to other objects and is defined by attributes that may include date data, name, event description and so on. The validity and justification of events occur when they can be linked to other objects.

Events in which a historical figure played a part are recounted. If there is little known of the personality of the historical figure, rather than opening themselves to conjecture, a Historian reflects on the event itself, or those of other people with whom the historical figure associated.

4.4.4 Connective Thread

A Connective Thread is the living sense of connectedness and belonging that one experiences when they know they belong to a group and is the sense one experiences when considering their whakapapa. Therefore whakapapa cannot be treated as a singularity, it being a set of processes, attitudes, emotions, and beliefs. It is a process of trying to get connection to agencies, which gets at the very essence of the object of a person's interrogation. The penetration of meaning leads to perception, which leads to conception.

Relating these concepts to the development of an information system, the Connective Thread is represented by relationships defined between objects. For relationships to have semantic meaning they are required to retain attributes of their own so that a user can make assertions about their application or use. Often, references have indirect links to

other objects or items of information. These links may or may not be explicit.

Within whakapapa there is a recognition that each person embodies their history and the history of their people. Since each object exists in a multidimensional framework, but is transferred in a linear fashion, ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted.

The process of demotic learning involves more than just oneself. Often it means learning about the shared history of others within the collective that one does not know directly or even have any affinity with. That is, members of a demotic group are expected to maintain links to their whakapapa by, for example, making regular trips to their place of Hei Āhua/Entstehung. Having said that, many people work on behalf of others because they choose to, voluntarily.

4.4.5 Group identification

Intrinsic to the concept of the demotic collective is the understanding that communities consist of a body of members and that those members belong to the group. This is reinforced when a person recites their whakapapa, they first identify their group affiliations before identifying themselves, individually. So, having one's whakapapa means gaining direct connection to the Kotahitanga/Herkunft. This concept identifies a recursive relationship between a person and their demotic group, but that a person may also be affiliated with several groups. And, the nature of the relationships are defined by assertions made by the person, which is their pedigree.

4.4.6 Status/Personal and group

Status is often assumed, given knowledge of the power relationships that exist with a demotic group. However within whakapapa, status can be assessed by various measures that relate to the Hei Āhua/Entstehung of the human race (the Māori), the accumulated status of predecessors (pedigree), actions undertaken by the person during their life and the perceptions of their peers. In general terms status is assessed as mana. As a measure in an information system this may prove a difficult issue to quantify since often the mana of a person is perceived by those present at hui wānanga. Therefore a system will be dependent upon the application of assertions.

When a person is in possession of their whakapapa, it means they can gain direct connection to the demotic Kotahitanga/Herkunft. There is a recognition that each person embodies their history and the history of their people. Therefore, since each object exists in a multidimensional framework, but is transferred in a linear fashion, ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted. Since much of our society is established on a basis of power and politics these influences are reflected in what the Historian will choose

to write about, or use as examples to justify an occurrence. A role of the Historian is to convey the relative importance of people, places and events.

4.4.7 Status/Subjection

In any binary power relationship there is the party who holds power and one who is subjected to it. In this simplistic example subjection is illustrated as a fundamental attribute of Status and offers a point at which assertions can be made to identify the nature of any relationships that may have been identified.

Relationships can be made between any kind of object, say between a historical figure and a valued artefact (taonga). When a person takes on the responsibility for caring for taonga they become subject to the rules/protocols prescribed for it. This may be termed as the burden of responsibility, in that the person has been given the honour of caring for it for a period of time where subjection comes at a cost.

Power relationships traverse objects in a multidimensional framework wherein ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted. Issues that have scarred the demotic body can be addressed.

By starting from the big to the small the old people are able to introduce the Hei Āhua/Entstehung. They can relate those things that exist today within a framework of causation and agency, and as a succession of subjugations. It is impossible for any person to totally remove themselves from an historical account, therefore there will be elements of personal bias. Since much of our society is established on a basis of power and politics these influences are reflected in what the Historian will choose to write about, or use as examples to justify an occurrence.

4.4.8 Cosmology/Universal time frame

Whakapapa is a set of processes, attitudes, emotions, and beliefs in which the person seeks to get connection to agencies, which gets to the very essence of all things. Each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story.

4.4.9 Cosmology/Linkage

Linkages referred within this symbol are not the same as those defined for the Connective Thread, which is a living sense of belonging and connectedness. In this case, Linkage, as whakapapa, is a process of trying to get connection to agencies. How this may be represented in an information system is dependent upon the nature of the links used.

Each person embodies their history and the history of the demotic group to which they are affiliated and each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions. However, each object exists within a multidimensional framework even though the method of transmission from person to person may be linearised via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance). Therefore cultural patterns are carried forward through the retelling of the same story.

4.4.10 Inclusive

There is a recognition that each person embodies their history and the history of their people. Therefore, since each object exists in a multidimensional framework, but is transferred in a linear fashion, ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted.

Genealogy and whakapapa are processes for getting to know a historical figure on an intellectual, emotional and spiritual level. The Historian is a judge of their historical figure, whether they admit to it or not. This is evident when they choose to show them in a positive or negative light. The Historian makes the attempt to present the historical figure as being effective by illustrating known aspects of their personality.

The Historian sees it as their right to delve into the lives of historical figures and, if necessary, juxtapose figures and/or events to make a point. To give the historical figure more depth the Historian may link related events, places and other historical figures. The Historian may use writing styles and styles reminiscent of the period to create a perception of the person, place or event.

There is a pervasive anxiety that information, knowledge, stories and life experiences need to be captured before those who hold them die and they are lost.

4.4.11 Collective memory

The symbol Collective Memory represents a concept in which knowledge, wisdom and experience are shared within a demotic community. The sharing is such that those who are of the community live within the expectation that all know certain truths and that those truths are inviolate. The truths represent the community's whakapapa, kaupapa and tikanga. In relation to an information system, the concept of the Collective Memory is positioned above, or outside of the information system itself. The information system becomes a tool for the recording and application of shared wisdom, knowledge and experience. There is the risk that the system may be perceived as tyrannical or foreign because it does not treat the shared knowledge with dignity, sympathy or sensitivity.

Also, much that is stored within the Collective Memory is seen as sacred and to be protected (*tapu*), but placing it outside the demotic community and into an electronic storage medium may seem to contravene that sacredness.

The symbol can be described by certain features: There is a recognition that each person embodies their history and the history of their people; the process of transferring *whakapapa* is not linear, nor is it a set of mutually exclusive facts that await a trigger to dislodge them; ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted.

4.4.12 Demotic

The demotic, described in Section 2.1 on page 28, was defined as a societal structure that can be observed in tribal societies. In the demotic each person is subject to their own choices (not disregarding significant cultural, traditional or social pressures to conform) and the culture is therefore quite fluid. The demotic is a collection of people who are part of the same ‘family,’ each wanting something similar and often facing in different directions. Periodically they will all face the same way, say out of a need for self preservation or the anticipation of gain through profit. But mostly they do not, because in the end family is the most important.

Adjacent to the demotic is the locus where the individual is positioned at the centre of an array of relationships identified by a set of points or lines. To this array events are added, but the individual is ranked above them. The points and lines within the array have their position satisfied or identified by one or more specified conditions — what it is that defines a mother, father, sister, brother, child and so on. So, the locus represents the individual in a family, made up from loci or other individuals. Families or groups of loci are then gathered as subsets — families, extended family groups or communities — within the super set of an event, organisation, nation or cultural identity.

The demotic story is retained in *whakapapa*. Having one’s *whakapapa* means gaining direct connection to the *Kotahitanga/Herkunft* and in this way issues that have scarred the demotic body can be addressed. Within the demotic is a recognition that each person embodies their history and the history of their people. Each member of the demotic community, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions.

The *Hei Āhua/Entstehung* is introduced in *whakapapa* by relating the universal/cosmological dimension and bringing the scope down to the local. In this way those things that exist today are located within a framework of causation and agency, and as a succession of subjugations.

Information is only useful when it can be shared and used to inform others, for example in a demotic environment.

4.4.13 Allegory/Collective understanding

Allegory offers a powerful set of tools for the transmission of knowledge and wisdom throughout the demotic collective. When it is applied through whakapapa historical figures gain a life and depth and can be seen to have impact on the daily lives of those who are present.

While genealogy and whakapapa are processes for getting to know a historical figure on an intellectual, emotional and spiritual level, each object exists in a multidimensional framework. Whakapapa is transferred in a linear fashion, but with the application of allegories a web of knowledge is created in which the living can see themselves as a living part, so ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story.

4.4.14 Allegory/Protocols

Protocols (tikanga Māori) require justification and this can be delivered through allegory. Meaning is provided by linking protocols with their Hei Āhua/Entstehung. The Historian can relate the emergence of legend and tradition by retelling events. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story.

4.4.15 Allegory/Tools include/Shared history

History that is shared within a demotic community is performed through storytelling, aphorisms and allegory. An information system presents a set of tools that can be used to retell stories, in which the meaning is allegorical.

The truth in stories is often variable and may be real for those by whom it is told. So stories may themselves be justifications for subjugations imposed on others, or used to mitigate the effects of injustices and violences. Any story contains objects; people, events, artefacts, concepts, emotions, or values. Each object may be characterised by many dimensions and exists within a multidimensional framework. The method of transmission of story content may be linearised via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance).

4.4.16 Allegory/Tools include/Music

The meaning in a story may be passed by more than the words used to tell it. The human response to a story may be triggered by other senses and reactions, for example

by the use of rhythm and tone. Specific musical renditions may vary from occasion to occasion and so the exact meaning is passed on in the immediacy of the performance. That immediacy may be lost when this is applied in an information system if it is used to replay recorded performances.

4.4.17 Allegory/Tools include/Story & Knowledge/Stories

An information system presents a set of tools that can be used to retell stories, in which the meaning is allegorical.

The truth in stories is often variable and may be real for those by whom it is told. So stories may themselves be justifications for subjugations imposed on others, or used to mitigate the effects of injustices and violences. Any story contains objects; people, events, artefacts, concepts, emotions, or values. Each object may be characterised by many dimensions and exists within a multidimensional framework. The method of transmission of story content may be linearised via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance).

4.4.18 Allegory/Tools include/Humour, ... /Food

Humour and the use of food play an important part in the living embodiment of allegory. Their timely application can be used to mitigated violences and subjugations that would otherwise signal the reopening of old wounds on the body of the demotic Herkunft. Otherwise Humour and Food represent the coming together and interconnectedness of the demotic collective through commonly accepted objects that are symbolic of the meaning of the demotic Ursprung.

4.4.19 Allegory/Tools include/Survival or prevalence

The past, present and future considerations of the survival or prevalence of a demotic group are told in story form, and held in allegory. Since these stories come from history they may be interpreted for other circumstances. Allegory may be reinterpreted to achieve different meanings and so what is considered as real applies to those by whom it is told. In an information system such stories can be stored, but their interpretations ought to be stored as assertions rather than as the story itself.

4.4.20 Allegory/Tools include/Speech

Oratory is an important tool for conveying the meaning of allegory. It is difficult to replicate this with the written word, and a recording may miss the impact of timing

or emphasis presented in the immediacy of the moment. However, an information needs to maintain the ability to store recordings. By adding metadata to recordings, responses or recollections from when the recording was made can add more meaning to the presentation.

4.4.21 Protocol

The Kotahitanga/Herkunft of Protocol is maintained through the retelling of whakapapa. Whakapapa is a process of trying to get connection to agencies, which gets at an object's very essence and by starting from the big, to the small the old people are able to introduce the Hei Āhua/Entstehung. They can relate protocol (tikanga Māori) within a framework of causation and agency, and as a succession of subjugations.

4.4.22 Knowledge/Shared knowledge

Knowledge, when treated as a commodity, becomes a tradable item. In this respect knowledge becomes objectified and runs the risk of becoming separated from those elements that make it a major part of whakapapa; the Kotahitanga/Herkunft and Hei Āhua/Entstehung.

Having one's whakapapa means gaining direct connection to the Kotahitanga/Herkunft. The sense of unity that exists within this symbol is strongly reinforced by the sharing of knowledge throughout the demotic community. Part of the process of living within the community means that knowledge, whether sacred or mundane, is filtered through the group, to specific points within it. The process of demotic learning involves more than just oneself. Often it means learning about the shared history of others within the collective that one does not know directly or even have any affinity with.

4.4.23 Knowledge/Ahuatanga Māori ... /Tikanga Māori, ... /Tribal additions

"A wānanga is characterised by teaching and research that maintains, advances and assists the application of knowledge and develops intellectual independence and assists the application of knowledge regarding ahuatanga Māori (Māori tradition) according to tikanga Māori (Māori custom)" (*Education Amendment Act*, 1990). It is the opportunity kaumātua have to discuss and compare what they believe to be the truth about their tribal origins, the events that led them to their present condition, and additions to the tribal record. Information systems can be a suitable forum for the exchange of knowledge, with due care given to its application.

4.4.24 Knowledge/Origins

All things have whakapapa and to know and have the whakapapa of someone or something is to have connection to their source of power, their mana, in effect their Tīmatanga /Ursprung — something can be identified by virtue of what occurred at its inception (its Tīmatanga), when it was and how it occurred. Whakapapa is a process of trying to get connection to agencies, which gets at an object's very essence, its Hei Āhua/Entstehung. This process of learning leads to perception, that in turn leads to conception, and may be facilitated through the application of an information system.

4.4.25 Knowledge/Present conditions

Whakapapa is not static, to the extent that historical figures are regarded as living embodiments of allegorical meanings. So, when one considers the present conditions within a demotic group the range includes past, present and future occurrences that may affect the demotic state. For example, there is a perception that young people are not interested in learning things 'the old way'. Instead they want to get their knowledge via new media. Whether or not this is true in all cases, the perception still leads to the development of systems or media that are designed to appeal this group of people, who respond, leading to further developments — perhaps this may be regarded as a self fulfilling prophesy.

4.4.26 Knowledge/Mana

Knowledge and mana are sacred powers that belong to the demotic collective, although an individual may hold it for a period of time (Salmond, 1985). Mana is strengthened and the collective sanity reinforced with the recitation of known references at regular intervals, where mental maps are constructed that enable the participants to share in the same knowledge and construct the same framework of understanding (Roberts & Wills, 1998). A repository that is external to the demotic collective may be regarded with some suspicion because it is outside the traditional way of doing things, especially if it is not seen to follow correct protocol.

4.4.27 Knowledge/Details, .../Remembrances, .../Lists of dead, .../Erudition, .../Karakia

Hui wānanga proceeds with representatives from each family group reciting their particular whakapapa (Roberts & Wills, 1998). To get the details right requires a tremendous skill of recall and memory and it is right to say, as Foucault (2000, p. 370) does, that genealogy requires patience. In the knowledge of details collected over ages of discussion, argument and exchange, there is a vast accumulation of stories, songs, remembrances

to be shared and the lists of the dead to be retold so they may be kept alive within the fabric of the demotic collective (Royal Te Ahukaramu, 1993, pp. 86–89). This can only be done with “relentless erudition” (Foucault, 2000, p. 370), the regular and constant repetition of whakapapa, karakia (chant or prayer) and waiata (song). A repository that is external to the demotic collective may be regarded with some suspicion because it is outside the traditional way of doing things. On the other hand, a system that stores these so they may be played back can facilitate the invigoration of knowledge outside the constraints imposed by hui wānanga.

4.4.28 Knowledge/Discussion or argument

The process of demotic learning involves more than just oneself. Often it means learning about the shared history of others within the collective that one does not know directly or even have any affinity with so perceptions may be divergent. It is therefore necessary to review information often and carefully.

Where correlated facts relate to events and recorded details that are selected according to the Historian’s biases. Their justifications must relate to all other facts if they are to be considered as valid or verifiable. For example, where a summary or perception of the life of a historical figure has been related from the standpoint of the Historian they may juxtapose figures and/or events to make a point. In this regard the Historian is able to hold discourse with their facts.

Much of our society is established on a basis of power and politics, and these influences are reflected in what the Historian will choose to write about, or use as examples to justify an occurrence. A role of the Historian is to convey the relative importance of people, places and events. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story.

4.4.29 Knowledge/Interpretation

To define emergence, Hei Āhua/Entstehung, one relies on more than the isolation of points of difference. Put into other contexts, meanings of things will change because of “substitutions, displacements, disguised conquests, and systematic reversals” (Foucault, 2000, p. 378). And so, much is left to interpretation, to which Foucault would say “if interpretation is the violent or surreptitious appropriation of a system of rules . . . then the development of humanity is a series of interpretations” (2000, p. 378). From this it can be said that rules have no essential meaning. Rules guide and impose direction, bending intentions to will, subjecting them to secondary rules.

Whakapapa relies heavily on the speaker for interpretation and the rules of its transfer operate to impose order on past and present generations. Information and

knowledge about one's whakapapa can be used to gain perception and that is determined by the quantity or quality of what a person holds.

Knowledge stored within an information system can make it open to interpretation, but that process may be outside the dictates of kaupapa Māori or tikanga Māori.

4.4.30 Hui wānanga

Wānanga is a process of learning and a gathering of experience at the hands of those who are learned and experienced. It is the opportunity kaumātua have to discuss and compare what they believe to be the truth about their tribal origins, the events that led them to their present condition, and additions to the tribal record. Knowledge gained from hui may become additions for an information system, but it is unlikely that an information system may replace the process itself.

Hui wānanga proceeds with representatives from each family group reciting their particular whakapapa (Roberts & Wills, 1998). To get the details right requires a tremendous skill of recall and memory. In the knowledge of details collected over ages of discussion, argument and exchange there is a vast accumulation of stories, songs, remembrances to be shared and the lists of the dead to be retold so they may be kept alive within the fabric of the demotic collective (Royal Te Ahukaramu, 1993, pp. 86–89). This can only be done with “relentless erudition” (Foucault, 2000, p. 370), the regular and constant repetition of whakapapa, karakia (chant or prayer) and waiata (song).

4.5 Summary

In this chapter was an analysis of the data that had been gathered for the study. The analysis was in three parts: An analysis of the interview data, followed by a meta-analysis of the results; an analysis of textual sources, followed by a meta-analysis of those results; and, the derivation of symbols that represent concepts, processes and understandings important in whakapapa.

29 symbols were derived that were first identified during the discussion of Foucault's Genealogist and Historian in Section 2.3. In the next chapter these symbols are used to identify human and cultural factors that will influence the design of an information system.

Chapter 5

Conclusion

5.1 Summary of introduction, concept development and analysis method

The research question this study has set out to answer is: What are the human and cultural factors in the whakapapa process? But in consideration of the question it is necessary to identify factors that would explicitly direct the future application of an Information Systems design and development project.

The study arose from a personal interest in which it became necessary to record whakapapa information for research, distribution and protection against loss. However when the recording process was started it quickly became obvious that information important to the data was not able to be recorded adequately. The reason for this apparent difficulty was that existing genealogical systems do not cater for non-western family types, or for complex relationships that are not solely based on pedigrees. This then raised the question above.

The assumption has been made that a system ought to reflect the natural occurrence of what goes on at the point of transfer of information, knowledge or wisdom, rather than just being an elaborate filing system. It is also assumed that it is not sufficient to limit the application of this approach to surface level (interface) design issues, because it is the underlying system itself that limits the capture and dissemination of tribal genealogical data. This study, therefore, is concerned with those issues that may affect the design of the system's data structure.

After considering the question for some time (Section 3.1) it was decided that the best way to answer the question is through the application of an ethnographic method of enquiry (Section 3.1.5). The model selected is symbolic interactionism (Section 3.1.1) because it allows consideration of what actually goes on when people engage in the transfer of genealogical information.

The development of the method required more, careful, in-depth thought to ensure that important and unforeseen issues would not be missed in the analysis. That is that the method be sufficiently open to allow unplanned issues to be recognised and not be dismissed (Section 3.1.1). In this regard the method must allow for immersive data gathering, use unstructured interview methods, include some method for discerning structure in social organisations, have deep interpretative methods, gathered data can be used in quantitative as well as qualitative analyses and, the focus is fairly well defined, but is still open to change or interpretation.

5.2 Human and cultural factors

In relation to the development of an information system, the system is required to create, maintain, manage and remove objects which can be used to represent people, places, events, artefacts, relationships, knowledge, stories, chants, aphorisms, and any other object not-previously considered for use. The symbols identified are reduced to objects that represent human and cultural factors in the whakapapa process.

Sources of data and information are diverse and so the system needs to accommodate a wide range of data and facsimiles of artefacts. Each object may be related to multiple other objects that exists in a recursive relationship with the object.

Information Systems of various kinds have always been used in a broad sense of meaning, originally as artefacts and places. In stories that are retold attachments link them to the Demotic collective. Over time writing added to this richness by offering a medium of abstract retention. Those stories could then be preserved and retained, which allowed for the evolution of new stories.

Today, the range of technologies that can be incorporated is expanding. A person tends to select a form of technology that suits their style, whether that is a computer, paint brush, chisel and so on. There is a perception that young people are not interested in learning things ‘the old way’. Instead they want to get their knowledge via new media.

The Historian is charged with the responsibility of putting history into context, so they will refer to available facts in order to create context. Or they may write in a style that conjures the spirit of the age, the zeitgeist. The Historian may try to cover themselves in facts, stories and styles, but they must realise that they cannot remove themselves from the narrative process and the Historian therefore exercises influence of their political leanings over whatever choices they make. This may be seen in what people, places or events the Historian chooses to include or exclude in the exercising of power over them as objects, and creating new histories or historical perspectives. On the other hand the Historian may participate in the persistence of tradition or societal injustice by continuing to retell the story of their emergence, their *Tīmatanga/Ursprung* and *Hei Āhua/Entstehung* or reopening old wounds in the *Kotahitanga/Herkunft*.

The study has set out to identify human and cultural factors that will explicitly direct the future design of an Information Systems design and development project. The research question has been framed as: What are the human and cultural factors in the whakapapa process?

In Table 5.1, factors that are important to the accurate representation of data in an information system are presented. These factors summarise the symbols that were derived in Section 4.4, so if more information is required about each factor in this table, then the corresponding symbols in that section can be read. The exact section and page reference is listed at the end of each item's description.

Table 5.1: Summary of human and cultural factors that have been derived from Section 4.4 on page 113.

Factor	Description
Pedigree	Pedigree does not lend itself directly to application as an object because while pedigree relates to the path of descent from generation to generation, in relation to the Demotic concept of whakapapa it is infused with further meaning than that. Whakapapa is a trace through major events within which the existence of groups emerge and are defined according to significant events or more frequently, as the descendants of significant ancestors. <i>Section 4.4.1 on page 118</i>
Genealogist	The Genealogist symbol represents both the person who undertakes genealogy and the processes they use. Within an information system the Genealogist is represented as an important object linked to other objects with which they may interact and is therefore a central reference point. Genealogy, on the other hand is a non-linear process that can be defined as the intellectual analysis of data which can lead to a bias of list building and data collection. <i>Section 4.4.2 on page 119</i>
Event	Event objects are a core feature of the system. Each event that is recorded may contain links to other objects and is defined by attributes that may include date data, name, event description and so on. The validity and justification of events occur when they can be linked to other objects. Events in which a historical figure played a part are recounted. If there is little known of the personality of the historical figure, rather than opening themselves to conjecture, the Historian reflects on the event itself, or those of other people with whom the historical figure was associated. <i>Section 4.4.3 on page 119</i>
Connective thread	A Connective Thread is the living sense of connectedness and belonging that one experiences when they know they belong to a group and is the sense one experiences when considering their whakapapa. Therefore whakapapa cannot be treated as a singularity, it being a set of processes, attitudes, emotions, and beliefs. It is a process of trying to get connection to agencies, which gets at the very essence of the object of a person's interrogation. The penetration of meaning leads to perception, which leads to conception. Relating these concepts to the development of an information system, the Connective Thread is represented by relationships defined between objects. For relationships to have semantic meaning they are required to retain attributes of their own so that a user can make assertions about their application or use. Often, references have indirect links to other objects or items of information. These links may or may not be explicit. <i>Section 4.4.4 on page 119</i>

Continued on next page/..

../Continued from previous page

Factor	Description
Group identification	Intrinsic to the concept of the Demotic is the understanding that communities consist of a body of members and that those members belong to the group. This is reinforced when a person recites their whakapapa, they first identify their group affiliations before identifying themselves, individually. So, having one's whakapapa means gaining direct connection to the Kotahitanga/Herkunft. This concept identifies a recursive relationship between a person and their Demotic group, but that a person may also be affiliated with several groups. And, the nature of the relationships are defined by assertions made by the person, which is their pedigree. <i>Section 4.4.5 on page 120</i>
Status/Personal and group	Status is often assumed, given knowledge of the power relationships that exist with a Demotic group. However within whakapapa, status can be assessed by various measures that relate to the Hei Ahua/Entstehung of the human race (the Māori), the accumulated status of predecessors (pedigree), actions undertaken by the person during their life, and the perceptions of their peers. In general terms status is assessed as mana. As a measure in an information system this may prove a difficult issue to quantify since often the mana of a person is perceived by those present at hui wānanga. Therefore a system will be dependent upon the application of assertions. <i>Section 4.4.6 on page 120</i>
Status/Subjection	In any binary power relationship there is the party who holds power and one who is subjected to it. In this simplistic example subjection is illustrated as a fundamental attribute of Status and offers a point at which assertions can be made to identify the nature of any relationships that may have been identified. Relationships can be made between any kind of object, say between a historical figure and a valued artefact/taonga. When a person takes on the responsibility for caring for taonga they become subject to the rules/protocols prescribed for it. This may be termed as the burden of responsibility, in that the person has been given the honour of caring for it for a period of time where subjection comes at a cost. <i>Section 4.4.7 on page 121</i>
Cosmology/Universal time frame	Whakapapa is a set of processes, attitudes, emotions, and beliefs in which the person seeks to get connection to agencies, which gets to the very essence of all things. Each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story. <i>Section 4.4.8 on page 121</i>
Cosmology/Linkage	Linkages referred within this symbol are not the same as those defined for the Connective Thread, which is a living sense of belonging and connectedness. In this case, Linkage, as whakapapa, is a process of trying to get connection to agencies. How this may be represented in an information system is dependent upon the nature of the links used. Each person embodies their history and the history of the Demotic group to which they are affiliated and each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions. However, each object exists within a multidimensional framework even though the method of transmission from person to person may be linearised via speech, song, dance, prayer or chant, or use of media such as the printed page, presentation software, or more traditionally via artefacts such as taonga (family treasures) and whakairo (carvings with specific significance). Therefore cultural patterns are carried forward through the retelling of the same story. <i>Section 4.4.9 on page 121</i>

Continued on next page/..

../Continued from previous page

Factor	Description
Inclusive	<p>There is a recognition that each person embodies their history and the history of their people. Therefore, since each object exists in a multidimensional framework, but is transferred in a linear fashion, ancient affiliations and blood groups can be identified, and social structures and the distribution of power can be highlighted.</p> <p>Genealogy and whakapapa are processes for getting to know a historical figure on an intellectual, emotional and spiritual level. The Historian is a judge of their historical figure, whether they admit to it or not. This is evident when they choose to show them in a positive or negative light. The Historian makes the attempt to present the historical figure as being effective by illustrating known aspects of their personality. <i>Section 4.4.10 on page 122</i></p>
Collective memory	<p>The symbol Collective Memory represents a concept in which knowledge, wisdom and experience are shared within a Demotic community. The sharing is such that those who are of the community live within the expectation that all know certain truths and that those truths are inviolate. The truths represent the community's whakapapa, kaupapa and tikanga. In relation to an information system, the concept of the Collective Memory is positioned above, or outside of the information system itself. The information system becomes a tool for the recording and application of shared wisdom, knowledge and experience. There is the risk that the system may be perceived as tyrannical or foreign because it does not treat the shared knowledge with dignity, sympathy or sensitivity. Also, much that is stored within the Collective Memory is seen as sacred and to be protected (tapu), but placing it outside the Demotic community and into an electronic storage medium may seem to contravene that sacredness. <i>Section 4.4.11 on page 122</i></p>
Demotic	<p>The Demotic is a societal structure that can be observed in tribal societies. In the Demotic each person is subject to their own choices (not disregarding significant cultural, traditional or social pressures to conform) and the culture is therefore quite fluid. The Demotic is a collection of people who are part of the same extended family, each wanting something similar, often facing in different directions. Periodically they will all face the same way, say out of a need for self preservation or the anticipation of gain through profit. But mostly they do not, because in the end family is the most important. <i>Section 4.4.12 on page 123</i></p>
Allegory/Collective understanding	<p>Allegory offers a powerful set of tools for the transmission of knowledge and wisdom throughout the Demotic. When it is applied through whakapapa historical figures gain a life and depth and can be seen to have impact on the daily lives of those who are present. <i>Section 4.4.13 on page 124</i></p>
Allegory/Protocols	<p>Protocols (tikanga Māori) require justification and this can be delivered through allegory. Meaning is provided by linking protocols with their Hei Āhua/Entstehung. The Historian can relate the emergence of legend and tradition by retelling events. Therefore cultural patterns are carried forward, by implication and through the retelling of the same story. <i>Section 4.4.14 on page 124</i></p>
Allegory/Tools include/Shared history	<p>History that is shared within a Demotic community is performed through storytelling. An information system presents a set of tools that can be used to retell stories, in which the meaning is allegorical. <i>Section 4.4.15 on page 124</i></p>

Continued on next page/..

../Continued from previous page

Factor	Description
Allegory/Tools include/Music	The meaning in a story may be passed by more than the words used to tell it. The human response to a story may be triggered by other senses and reactions, for example by the use of rhythm and tone. Specific musical renditions may vary from occasion to occasion and so the exact meaning is passed on in the immediacy of the performance. That immediacy may be lost when this is applied in an information system if it is used to replay recorded performances this absence can be alleviated through the application of assertions as metadata. <i>Section 4.4.16 on page 124</i>
Allegory/Tools include/Story & Knowledge/Stories	An information system presents a set of tools that can be used to retell stories, in which the meaning is allegorical. <i>Section 4.4.17 on page 125</i>
Allegory/Tools include/Humour, .../Food	Humour and the use of food play an important part in the living embodiment of allegory. Their timely application can be used to mitigated violences and subjugations that would otherwise signal the reopening of old wounds on the body of the Demotic Herkunft. Otherwise Humour and Food represent the coming together and interconnectedness of the Demotic collective through commonly accepted objects that are symbolic of the meaning of the Demotic Ursprung. <i>Section 4.4.18 on page 125</i>
Allegory/Tools include/Survival or prevalence	The past, present and future considerations of the survival or prevalence of a Demotic group are told in story form, and held in allegory. Since these stories come from history they may be interpreted for other circumstances. Allegory may be reinterpreted to achieve different meanings and so what is considered as real applies to those by whom it is told. In an information system such stories can be stored, but their interpretations ought to be stored as assertions rather than as the story itself. <i>4.4.19 on page 125</i>
Allegory/Tools include/Speech	Oratory is an important tool for conveying the meaning of allegory. It is difficult to replicate this with the written word, and a recording may miss the impact of timing or emphasis presented in the immediacy of the moment. However, an information needs to maintain the ability to store recordings. By adding metadata to recordings, responses or recollections from when the recording was made can add more meaning to the presentation. <i>Section 4.4.20 on page 125</i>
Protocol	The Kotahitanga/Herkunft of Protocol is maintained through the retelling of whakapapa. Whakapapa is a process of trying to get connection to agencies, which gets at an object's very essence. By starting from the big, to the small the old people are able to introduce the Hei Āhua/Entstehung. They can relate protocol (tikanga Māori) within a framework of causation and agency, and as a succession of subjugations. <i>Section 4.4.21 on page 126</i>
Knowledge/Shared knowledge	Knowledge, when treated as a commodity, becomes a tradable item. In this respect knowledge becomes objectified and runs the risk of becoming separated from those elements that make it a major part of whakapapa; the Kotahitanga/Herkunft and Hei Āhua/Entstehung. Having one's whakapapa means gaining direct connection to the Kotahitanga/Herkunft. The sense of unity that exists within this symbol is strongly reinforced by the sharing of knowledge throughout the Demotic community. Part of the process of living within the community means that knowledge, whether sacred or mundane, is filtered through the group, to specific points within it. The process of Demotic learning involves more than just oneself. Often it means learning about the shared history of others within the collective that one does not know directly or even have any affinity with. <i>Section 4.4.22 on page 126</i>

Continued on next page/..

../Continued from previous page

Factor	Description
Knowledge/Ahuatanga Māori .../Tikanga Māori, .../Tribal additions	“A wānanga is characterised by teaching and research that maintains, advances and assists the application of knowledge and develops intellectual independence and assists the application of knowledge regarding ahuatanga Māori (Māori tradition) according to tikanga Māori (Māori custom)” (<i>Education Amendment Act</i> , 1990). It is the opportunity kaumātua have to discuss and compare what they believe to be the truth about their tribal origins, the events that led them to their present condition, and additions to the tribal record. Information systems can be a suitable forum for the exchange of knowledge, with due care given to its application. <i>Section 4.4.23 on page 126</i>
Knowledge/Origins	All things have whakapapa and to know and have the whakapapa of someone or something is to have connection to their source of power, their mana, in effect their Tīmatanga/Ursprung — something can be identified by virtue of what occurred at its inception (its Tīmatanga), when it was and how it occurred. Whakapapa is a process of trying to get connection to agencies, which gets at an object’s very essence. This process of learning leads to perception, that in turn leads to conception, and may be facilitated through the application of an information system. <i>Section 4.4.24 on page 127</i>
Knowledge/Present conditions	Whakapapa is not static, to the extent that historical figures are regarded as living embodiments of allegorical meanings. So, when one considers the present conditions within a Demotic group the range includes past, present and future occurrences that may affect the Demotic state. <i>Section 4.4.25 on page 127</i>
Knowledge/Mana	Knowledge and mana are sacred powers that belong to the Demotic collective, although an individual may hold it for a period of time (Salmond, 1985). Mana is strengthened and the collective sanity reinforced with the recitation of known references at regular intervals, where mental maps are constructed that enable the participants to share in the same knowledge and construct the same framework of understanding (Roberts & Wills, 1998). A repository that is external to the Demotic collective may be regarded with some suspicion because it is outside the traditional way of doing things. <i>Section 4.4.26 on page 127</i>
Knowledge/Details, .../Remembrances, .../Lists of dead, .../Erudition, .../Karakia	Hui wānanga proceeds with representatives from each family group reciting their particular whakapapa (Roberts & Wills, 1998). To get the details right requires a tremendous skill of recall and memory. In the knowledge of details collected over ages of discussion, argument and exchange there is a vast accumulation of stories, songs, remembrances to be shared and the lists of the dead to be retold so they may be kept alive within the fabric of the Demotic collective (Royal Te Ahukaramu, 1993, pp. 86–89). <i>Section 4.4.27 on page 127</i>
Knowledge/Discussion or argument	Each object, whether it is a person, event, artefact, concept, emotion, or value may be characterised by many dimensions. The process of Demotic learning involves more than just oneself. Often it means learning about the shared history of others within the collective that one does not know directly or even have any affinity with so perceptions may be divergent. It is therefore necessary to review information often and carefully. <i>Section 4.4.28 on page 128</i>

Continued on next page/..

../Continued from previous page

Factor	Description
Knowledge/Interpretation	To define emergence, Hei Āhua/Entstehung, relies on more than the isolation of points of difference. Put into other contexts meanings of things will change because of “substitutions, displacements, disguised conquests, and systematic reversals” (Foucault, 2000, p. 378). And so, much is left to interpretation, to which Foucault would say “if interpretation is the violent or surreptitious appropriation of a system of rules ... then the development of humanity is a series of interpretations” (2000, p. 378) inside of which is the understanding that rules have no essential meaning. Rules guide and impose direction, bending intentions to will, subjecting them to secondary rules. Whakapapa relies heavily on the speaker for interpretation and the rules of its transfer operate to impose order on past and present generations. Information and knowledge about one’s whakapapa can be used to gain perception. People tend to interpret information within a given frame of reference. The purpose for this may be to get at the essence of something, or to justify a position or stance. <i>Section 4.4.29 on page 128</i>
Hui wānanga	“Wānanga is characterised by teaching and research that maintains, advances and assists the application of knowledge and develops intellectual independence and assists the application of knowledge regarding ahuatanga Māori (Māori tradition) according to tikanga Māori (Māori custom)” (<i>Education Amendment Act</i> , 1990). Wānanga is a process of learning and a gathering of experience at the hands of those who are learned and experienced. It is the opportunity kaumātua have to discuss and compare what they believe to be the truth about their tribal origins, the events that led them to their present condition, and additions to the tribal record. Knowledge gained from hui may become additions for an information, but it is unlikely that an information may replace the process itself. <i>Section 4.4.30 on page 129</i>

5.3 Appropriateness of the factors

In this chapter the study was summarised prior to the identification of human and cultural factors. The question remains, how would these factors be applied in a design sense?

By way of a hypothetical example, the use of the factors may best be illustrated with a story. There is an over arching belief in Māoritanga that whakapapa is tapu, that it is a sacred thing that is not bandied about, traded with, or treated with disrespect. So for an information system to purport to be a repository for whakapapa, there is the risk that all these things can occur. So the system’s designer needs to refer to ways in which tapu can be maintained, but still allow for the information to be stored and accessed with relative freedom. Consulting Table 5.1, the designer sees that tapu is an aspect of the Collective Memory, and so access would be granted to those who already have the right to share (the whānau), however they may need to include the facility for karakia to be uttered when accessing the system be providing a reminder or even the words on a screen. The designer may also provide a hierarchical system of access,

in which access is granted to items of information but not others, depending upon the rules and traditions laid down by the hapū or iwi.

The human and cultural factors listed in Table 5.1 provide understanding of how whakapapa is viewed from within the Demotic context. They illustrate how the process of whakapapa is undertaken and what is important to the Genealogist and why. When the systems designer undertakes to design an information system they ought to remain cognisant of these factors, as influences over their decisions. As a guide to the systems designer, they operate at a deeper level than at the conscious, providing abstract notions from which the designer can better engage with the Genealogist.

In this regard, the application of ethnographic methods was somewhat problematic. Ethnographic methods provide for an in-depth analysis of qualitative data that can be used to derive personas. When these are applied to interface design techniques the result can provide the end user with tools necessary for their work, but the application of such methods requires experience and skill, otherwise the systems design process fails (Blomquist & Arvola, 2002).

It has been said that when ethnographic methods are applied, they ought to move from the fieldwork phase, where observations are detailed, to the identification of themes, to explanations of why occurrences are made manifest (Katz, 2001, 2002). In this study the question of why observations manifest themselves gains relevance for the systems designer when they need greater understanding of their project, to see how decisions influence the end user. Michael Myers (1999) points out that ethnographic research is well suited to providing the information systems researcher with valuable insights into the human, social, and organisational aspects of information systems.

The method chosen has provided great depth of understanding of the core processes involved in whakapapa. The human and cultural factors identified illustrate what Genealogist would have us know about whakapapa, and to this extent they are appropriate.

5.4 Post study projection

Interface issues

The traditional method for presenting genealogy data as reports/outputs are via tree diagrams, fan charts and register reports. Each of these report types are useful in their own way, for illustrating pedigrees (trees and fan charts) and including other information about individuals (register reports), however they fail to represent other complex data equally well.

It is necessary, for this system, to consider how other data can be represented that is not event or pedigree based, for example reports that show tribal relationships that are the result of the inclusion of an ancestor — that is, individuals may not have the

tribal data in their record, but they are still found because of what their ancestor did. Mechanisms exist that facilitate the interrogation of data in this way, for example Common LISP, which can be used to build lists from data and has been used in artificial intelligence applications (*Lisp Programming Language*, 2005), or eXtensible Markup Language (XML) for which there are similar applications being developed to those that LISP is capable of (*XML.org*, 2005) for example, an application of XML, GEDCOM XML 6.0, has been developed by the Church of Latter Day Saints (*GEDCOM XML*, 2002). The application offers a coherent framework that can be used as a basis for including tribal data and assertions. In a previous study, an assessment was made of the suitability of XML as a data storage framework (Lu & Scaramuzza, 2003). In it the assertion is made that XML is the better approach for dealing with rich detailed genealogical information and displaying them on the Internet. While in this case the suitability for displaying information on the Internet is secondary, it is nevertheless an issue that may be of concern when it comes to the development of applications for the display of data online.

In general, data is represented in two dimensions, either on screen or as a report. Much of this data may be better served if represented in multiple dimensions. Additionally, audio, video and dynamic data are not compatible with printed reports, so alternatives ought to be considered. Data search facilities tend to be restricted to the data structures that were imposed on the information stored within the system. If the user is given the chance to create their own data structure then the search function does not suffice. In these cases, XML provides a framework in which the data is abstracted and stored separate to the output or input system. This allows for a high degree of data independence from the interface.

Does new media or technology oppose whakapapa or its values?

The question appears to address the issue of technology's apparent ability to cause or trigger social change. As new eras of technological development have taken place, for example the use of colourful pigments in wharenui, they have been pinpointed as the means by which social interactions have been transformed. On page 48, it was cited that a stand-off had occurred between warring tribes after intense battles during the 1820's. This presented an environment that was ripe for social change, but the question arose, what form should it take? Roger Neich looked at the development of kowhaiwhai (painted art forms in wharenui). What he noted was that prior to the 1840s most painting in meeting houses consisted of the spreading of red ochre onto carved works, but after this time distinctive regional styles of kowhaiwhai had begun to emerge (Neich, 1994). He found that the introduction of new metal carving tools and colourful pigments allowed for a change in how ancestors and other forms could be represented. As marae

experimented and developed these forms, competition emerged between hapū and iwi about who's wharenui was the greatest. Neich suggests that this replaced the tendency to take to arms during disputes.

In this example, the application of new technology and forms of expression appears to have facilitated the transformation to non-violent forms of competitive engagement. It appears to have gained support from those engaged in it. It does not appear to have been universally accepted, since there were those wharenui that were constructed using more traditional forms of expression. That is, there are those who cling to traditional values, for fear of losing what they hold to be core, the essence, the Hei Āhua/Entstehung. There are those who claim that new media are anathema to the spirit of whakapapa, and indeed fear that what is sacred may be sullied by its use. There are those who, on the other hand, see that it is the only viable way for data to be stored while those who remember it are still alive. The short answer to this question is that there does indeed seem to be an opposition here, but it is not between whakapapa and technology. The opposition exists between those who see value in the processes of the Genealogist or the Historian.

Dealing with history as data

Society has become so conditioned by the structures imposed by date/time that it is difficult to envisage a world without them. As children we lived our lives without time and had to be reminded of it by our mentors, then as we grew older and this conditioning took hold, we took our place within the daily grind of living a life, checking in and checking out. If we were born into a consciousness that did not recognise date/time, but had to adopt it, it is not such a distant leap to consider that societies which existed outside the artificial imposition of date/time will have used other measures to record important occurrences.

Whether past events are remembered in the Dreamtime, as part of whakapapa, fable, or lore, an information system ought to be required to work within those bounds. Indeed the information system ought to be sufficiently flexible that it can be adapted to any taxonomic structure. It appears that much of what one reads of historical accounting matters, whether anthropological, geographical, humanistic or religious, much effort is put into relating those events with the date/time construct.

It seems people are preoccupied with answering the question, when did that happen? The question is a natural response when confronted with uncertain knowledge. Our modern age is based upon the premise that all things must be made certain — the premise of the Historian. It lays claim to the right that all knowledge and experience must be forcibly placed within date/time. The issue being addressed here is what measure, if it is not to be date/time, is deemed to be valid? Which carries enough

authority to satisfy the Genealogist *and* the Historian?

Examples of battles that rage between factions intent on defining when this or that happened are legion. A recent example of this kind of argument includes the ongoing debate about when Māori arrived in New Zealand. Emma Young (2004) attempted to round up some of the contenders by presenting their relative points of view. In that case all the participants within the constraints of date/time, but use different sets of tools to do it with; mitochondrial DNA, linguistics and anthropology.

It is convenient for the systems designer to adopt date/time for organising data. Most systems are built to cater for this and systems designers can be forgiven for taking the path of least resistance. If structures than other date/time were to be used, what technology would make it relatively trivial to cater for this?

Whilst XML is hierarchical in its structure, it allows for the application of object oriented systems design. XML provides a tremendously powerful, semantic framework in which the systems designer can define their own taxonomy. The information system therefore needs to make allowance for the possibility that this is what the researcher will want to do, as well as providing templates for those that don't.

Earlier, GEDCOM XML 6.0 was identified as a possible starting point for the development of an information system. It was mentioned that GEDCOM XML 6.0 already has a coherent structure defined by its Document Type Definition (DTD), but it still assumes the Locus familial style of relationship and enforces date/time to events (births, deaths, marriages, church events, and so on). This means that the GEDCOM XML 6.0 DTD can be altered to make allowance for new elements, changes to existing elements with alterations to attributes.

Dealing with the problem of creating taxonomies is part of the issue, then. Another part is what to do with ad-hoc references that often emerge during interactions between actors engaged in the process of whakapapa data exchange? It is fair to say that what a person says during such an interaction may be for them real and true, but for others it may be seen as false or mistaken. In such a case as this, just identifying the relationships between objects is not enough. It becomes necessary to make allowance for permutations of data, for falsehoods to be listed alongside each other, with equanimity. Falsehoods are assertions and room needs to be made for them. An attempt to rationalise the assertions between parties was made in an application developed at AUT (Charkova, Lin, Clear, & Lomax, 2004). In this case, a student capstone project was developed to provide the tribal group, Nga Iwi o Ngapuhi, with a web based tribal membership system. The system was based on the GENTECH Genealogical Data Model (2000). The system provided a relational data model for the inclusion of genealogical data, as membership data. However the way the system was implemented prevented the data from being used as genealogical data in other applications. In the end, this became a

critical flaw in the implementation of the system.

In discussion with some involved with the Nga Iwi o Ngapuhi, it appears that there were two apparent flaws. The first was that data was able to be input into the system, but querying it in a useful fashion had not been part of the development process. The runanga (the tribal management authority) did not have sufficient knowledge of programming and databases to see how they could use the system to their advantage. There was no reporting program provided for the runanga apart from the web based user interface. The data entry views were very well developed, and would have been easy for both experienced computer users, and novices to work with. Indeed the application won the two undergraduate students an award for the work they had put into it, which was of a very high quality.

The second was that the whakapapa data, when entered, could not be cross referenced against other records to validate membership applications. Given the large number of potential members (in the tens of thousands), the task of validation fell to human intervention. Possibly, the problem just looked too big to both input existing records manually, and to validate new records against those that were existing.

In Section 5.5, questions are asked about the application or use of whakapapa data within an information system. While the issues raised in the questions are outside the scope of this study, some offer guide posts for further work and research.

5.5 Reflections on the study

Ultimately, the study returned the results that were intended; a set of human and cultural factors that could be used in the design of an information system. During the study cultural factors were identified and these have influenced the outcomes. It was found that the cultural factors are an important feature in the design of a genealogical information system, of such significance that they cannot be ignored.

As may be expected in a study of this kind, there were some issues that arose. The process of obtaining consent could have been handled better, with improved forward planning. However the value of the occasion may have been compromised if participants knew they were being observed (there is a sense amongst Māori that they have been over analysed by researchers and are reticent to allow researchers into their midst because they are mistrustful of their motives and doubtful of their promised outcomes).

Did this alteration affect the outcome of the study? That is a question which cannot be answered with any degree of accuracy, but the absence of the source of data did not greatly weaken its outcome. This statement is made on the assumption that the analysis of the interview transcripts and text sources provided sufficient material to accurately identify human and cultural factors useful in the design of an information system. On the other hand, observation is a formidable tool and essential for the success of any

ethnographic study. Its absence, in this context, is a serious omission which is only mitigated by the fact that the researcher is already engaged in the environment and is able to draw from their own experience.

An issue with the application of an ethnographic method in any event is that it is easy to become engulfed in the quantity of data and for the focus of the study to be lost. This became apparent in this study when, halfway through the analysis phases, it became necessary to halt the analysis for a period of time, refocus and address the question afresh. This is not a criticism of the method, it is criticism of the analyst. The researcher/analyst needs to be very careful about how much depth they go to in their analysis otherwise they suffer the cliché; *paralysis by analysis*. That happened in this case and it was not easy to extricate oneself from it. Time out proved to be a useful strategy for dealing with this. Then re-approaching the work with new vigour, and more questions, in the new year.

So far as the model, symbolic interactionism, is concerned (Section 3.2.3). This is a very powerful model that enables tremendous depth and insight when analysing interactions between people, events, places and artefacts. In this study the model's potential has barely been tapped, and indeed the interactions that were considered offered greater insight than what was written of. It would be a delight to be able to use this as an analysis tool in other environments.

There are a number of questions that arose during the study that need to be addressed, but are outside the scope of this study:

1. How will knowledge be passed from the system, for example what are the interface and report design issues?
2. Is the whakapapa process important in the application of an information system?
3. Does new media or technology oppose whakapapa or its values?
4. Is new technology better placed to maintain whakapapa than traditional oral methods?
5. Before the modern era that we recognise as history existed (i.e. in the period called prehistory), the western date paradigm did not exist. As a result, physical and social anthropologists, historians and archaeologists spend a huge amount of time assigning dates and periods to past events (see Section 5.4). So:
 - (a) Is it a valid process to engage in with whakapapa?
 - (b) Should not the system be capable of using the whakapapa paradigm?
 - (c) If so, what are the essential data elements and how can they be conveyed?
 - (d) Are the essential data elements open to translation and error, and does it matter?
 - (e) How can assertions be made, which may contradict other assertions, but are no less valid?

These questions mostly address the application or design of the information system, but raise the question, where to from here? In Section 5.2 is an outline of how the human and cultural factors may be applied when the information system is designed. The system draws from existing frameworks and considers alterations to suit the application of Demotic data.

5.6 Summary

In this final section is a summary of the thesis content, leading to a conclusion about the method and its results.

In Chapter 1 was presented an overview of the thesis, its aims and objectives. There was a discussion supporting the use of ethnographic methods in systems design to counter any perceived bias towards quantitative methods. In the chapter, the data analysis process was described and a summary of the analyses presented.

In Chapter 2 was a review of publications that relate to this study. The chapter introduced the concepts of the Demotic and the Locus, as representations of the result of cultural evolutionary processes. The Demotic and Locus are placed within the context of genealogy and whakapapa, and then Foucault's descriptions of the Historian and the Genealogist were introduced and compared against the Locus, the Demotic, and against each other. Foucault's concepts have been adopted and used to describe *Timatanga/Ursprung*, *Kotahitanga/Herkunft*, and *Hei Āhua/Entstehung*, which are symbolic of processes and core understandings of whakapapa. The symbols were then applied to whakapapa, to create a context for the subsequent analysis of data.

In Chapter 3 was a discussion of the methods applied in the study. The qualitative method was described and research question were derived. The process from model, to concept, to theory, to hypothesis, to methodology, to analysis, and then to summary was described and illustrated in Figure 3.1. The data gathering methods were described, how informants were selected and how the data was prepared for analysis. A series of models were presented in Figures 3.3, 3.4, 3.5, 3.6, and 3.7. The figures represent a detailed conceptual description and definition of the process of whakapapa, but as yet only Figure 3.3 has been applied in the study. It may be an avenue for further work to apply these models to an adaptation of the GEDCOM XML 6.0 DTD. To accomplish this would require additional studies and research to test their application and suitability.

As a whole Chapter 4 contains the results of the analysis, and has three main parts. In the first part (Section 4.2) is the result of the interview analysis using the ethnographic method, symbolic interactionism. The results of the analysis are analysed again, in a meta-analysis phase, to produce a generalisable set of symbols to represent the processes a Genealogist and a Historian engage in when considering whakapapa

data. In the second part (Section 4.3) are the results of the analysis of the text sources using qualitative analysis. The results of the analysis were analysed again, in a meta-analysis phase, to produce more symbols. The symbols from the previous two parts were merged, in the final part of the chapter (Section 4.4), with the model produced during the discussion of Foucault's treatment of genealogy (Figure 3.3). From this phase of the analysis symbols were derived to define whakapapa processes. These were used to produce the human and cultural factors identified in this chapter.

In this chapter, is a summary of the thesis and the human and cultural factors derived from the previous chapter. The study has been considered and a reflection offered on how it was conducted, improvements that may be made if it were to be done again, its relative strengths and weaknesses. There was a projection about where the results of this study may lead and how they will be applied in subsequent studies and activities.

In question 5c on page 143 it was asked, "what are the essential data elements and how can they be conveyed?" This provides a line of enquiry into the next phase of the study. From here, the models mentioned in Chapter 3 can begin to take substance and a schema outlined for application in XML defined. In this phase the opportunities for displaying data in appropriate ways can be considered, and prototypes created to test their applicability. Significant testing of interfaces will need to be undertaken using usability methods provided by the HCI (Human Computer Interaction) community (Preece et al., 1994; Simonsen & Kensing, 1998; Barnum, 2001; Preece, Rogers, & Sharp, 2002; Cooper & Reimann, 2003; Cooper, 2004). Also, special consideration needs to be given to the application of graphics and other media as communication, in the sense that meaning can be conveyed by engaging more senses than just the eye, and understanding is gained by using more than just the intellect. This may prove to be an exciting adventure into the design of a Democentric interface and the work that has been completed is built upon in the next phase of development.

Appendix A

Interview transcripts

A.1 Interview 1

This transcript was conducted by an interviewer, called Mark here, in 2004. It is an interview between him and a subject called Paul, who has had experience in genealogy and whakapapa. Any references to identities have been masked to protect the privacy of those who may be affected by the disclosure of any sensitive material.

The original transcript contained a large number of errors in spelling and context, especially in regard to correct spelling of Māori words and names. These errors have been corrected in this transcript, but so that the corrections do not interrupt the natural flow of the conversation they have not been highlighted. Where it was deemed appropriate the transcript has been reformatted to better reflect the natural way a person would speak in the conversation.

1 MARK What according to you is whakapapa.

2 PAUL Well, I think I am just a beginner. I am a learner, so I don't think I speak with
3 any or much authority about it.

4 So I can... I know what it means to me, and I think I'm also changing my mind...
5 or forming a bigger picture of it... as I bigger understand it... as time goes on.

6 So at the moment whakapapa means the accumulated history of my ancestors... Of
7 what they have discovered and learned in their life.

8 Some of that filters down to me somehow. Maybe it is genetic, maybe they are spirit
9 and they communicate directly with me. I don't know ... Ah... their life experiences.

10 MARK So when you say their life experiences, have you read about their life experi-
11 ences or you have been told about their life experiences?

12 PAUL Right. All of those.

13 So as well as having those genetic things, and maybe the spirit thing, and I learned
14 a few things from reading and researching and books and ah... journals.

15 There are some books about our family. Books from French sailors from early 1800.

- 16 Some accounts from missionaries... Marsden talked about some of my people.
 17 So they are just little bits ah... Then there are some people whom I met who have
 18 met my recent ancestors and they tell me a little bit about them. But nobody can
 19 tell me much about...
 20 No that's not true!
 21 Depends on the line you see. There are two lines. I got one through my great
 22 grandfather and one through my great grandmother. And I know the whakapapa to
 23 my great grandfather through the land court meeting minutes way back from 1890
 24 and he tell his whakapapa through just the people... you know... the line of people.
 25 But he also give lots of stories but I haven't had those translated or haven't tried to
 26 translate them yet; that would be quite good to do. So there is a lot of information
 27 in those land court meeting about him. And not many people know about his line
 28 (the living people) but on the other hand my great grandmother there is quite a lot
 29 known about her family, like there is a lots of... because she come from <...> and
 30 there is quite a few people interested in genealogy, in whakapapa, in that group.
 31 And there is a professor and different people who have collected stories. So that is a
 32 bit more living, you know, more living people know about that in fact some of those
 33 old people are teaching me.
- 34 MARK So that means whakapapa to you means the history of your people, their spirit,
 35 and their effects on you?
- 36 PAUL Ahh they are teaching me at the moment. They are just teaching me the
 37 general history concerning that group of people rather than my direct line. So I am
 38 just learning about that hapu, that sub group of...
 39 But there are lots of people in that group, in the <...> group, in the <...> group
 40 who are researching the various people and some of them have even gone to England,
 41 to Ireland, to research <...>, who came in 1830 and married into the Māori line.
 42 So they are searching him to find out where he came from, find out quite a few bits
 43 through records. I don't think they found out any thing about his family.
 44 One family member in the <...>, which is where the my great grandmother <...>
 45 lived, he... (*long pause*) he works as a kind of healer. Works with the wairua light,
 46 wairua means spirit lights. So I don't know what will happen when I work with him.
- 47 MARK When you speak about their teaching, what method do they adopt to teach?
- 48 PAUL Pretty casual. We had couple of meetings for our group. Some people came
 49 along. Quite a few people came along in the first meeting but the second meeting
 50 their were only ten and then we didn't set another meeting, so it is a kind of lost
 51 momentum.
 52 In those meeting they taught us basic karakia, prayers and basic openings.
 53 Which was from the big, to small. Start off with the universe, describing New Zealand

54 and the different groups and where we fit in. Describe some of the mountains where
55 we relate to the boundaries of our area. How we got our name <...>.

56 So a couple of teachers I had, they did come from a traditional background where
57 they learned it traditionally, from a young age. Taken in at night, in the dark room...
58 taught to memorise and recite. But they are not teaching us that way. I guess because
59 we are older or there is no time and they now got older themselves, and they feel
60 pressure to try and transfer some of those stories, some of that knowledge before they
61 die and it's lost.

62 MARK So now that they don't do it orally, have they written it down or...?

63 PAUL Some people have written some things down, but those two teachers haven't.
64 But people are writing things down now here and there. We have a family book which
65 has got some stuff written in it, like dates and birth dates, deaths dates, children,
66 land blocks...

67 MARK Is it similar to genealogy or...

68 PAUL Yeah, it is similar. The kind of book that we have got...

69 I don't know whether it is difficult but I don't know where that book is now. One of
70 my cousins have got it and I don't know who it is. It is kind of lost to me.

71 That is one thing that attracts me about computer based or web based. it is more
72 accessible. Like we do have a web site for the <...> side that has some information
73 on our line. It has some pictures in it.

74 MARK Like you told me, that in the first meeting there were so many people, but in
75 the next meeting there were only few. Is it because of people losing interest, or is it
76 because people have no time?

77 PAUL Originally in the first meeting there were lot of people, so there was a high
78 interest.

79 Why did the second meeting didn't have many people, I don't know. In the first
80 meeting most of the time was spend with every one talking about themselves, so
81 every one else knew who they were. There wasn't a lot of teaching in it. So maybe
82 people didn't want to know about that, or I don't know why they didn't come back
83 again.

84 MARK So how have you been maintaining your whakapapa?

85 PAUL Oh well, on the two sides. My great grandmother <...> side, a lot of people
86 are doing that so I am kind of leaving that to them. You know, they created the web
87 site and there are lots of historians there, researchers, so I feel quite comfortable to
88 leave it to them. And I can ask questions to them and stuff.

89 So on my great grandfathers side, which is the *[hapu withheld]*, not so much is known.
90 Not much people are keeping record on them, so I am doing a bit more on that. But
91 I don't know much. I just collect photocopies of bits that I find.

92 MARK Photocopies of what?

93 PAUL Well, this is the land court meeting minutes, which is my great grandfather's,
94 at the land court claiming land. And I will make some more copies and try and
95 translate it.

96 This is whakapapa, which I have got the line of lineage line.

97 Ah... some photos.

98 Copies of the French captains, what they write about their family.

99 And I ask them what he wrote in the book "The Puriri Trees are Laughing", what
100 has a little bit about my family. I bought that book.

101 This map here behind me, which is made by <...>, who is a historian. And he
102 got all the Māori names for the <...>, which is where my great grandfather came
103 from... <...> people. But he has used old maps, old stories and land court meeting
104 minutes, like my great grandfather. Is where I found out about him... through him
105 to collate the stories, to find out the place names.

106 But on the map you don't know the stories, you don't know the people, so that the
107 other thing which excites me about the computer based systems. Could we have map
108 and you click on the place, and you find out the history of that place, the different
109 people the different things that might have happened.

110 MARK You just spoke about a your who developed web site, where did they get all
111 the information from?

112 PAUL Oh that's the <...> line, the <...>. So there are stories handed down, ah,
113 you know, the people who have kept in one place were in the <...>. We got scattered
114 around and don't seem to have kept the stories so much. Ah... and like before that
115 they have researched it by going to Ireland, that was for the Irish side and the English
116 records. But they still got for the Māori side, the oral history there.

117 MARK That's how they kept the stories alive?

118 PAUL I think so. Like there's a story of my great great grandmother who married
119 <...>, and they had six or seven children, and then she killed him with... one of
120 the stories says with an axe, and the other say with a shovel because he was playing
121 around with white women, and drinking, and stuff, and when he was coming back
122 home she waited in the ditch with a couple of children and then killed him.

123 MARK Now, you said that there are two different aspects of the same story. Then
124 where does the validity come from?

125 PAUL I don't know. I don't know whether that story is true. It seems to be commonly
126 held. People seem to think it is true but people don't know whether it was an axe or
127 a shovel.

128 Then I said that is pretty awful and someone said he was playing around with another
129 woman.

130 Then I said, is that a good reason to kill him? Then [?] said he was having incest
131 with the children, and then I said that's pretty bad. Is that a reason to kill someone?
132 So that's ah... now, that's confidential, that particular story. You would need to
133 change my identity, or have some way for the reader not to know who that story
134 belongs to, that particular part. Because, you know, I don't mind other people
135 knowing but it might be other family members alive who don't want everyone to
136 know that. But it is probably far enough in the past to not matter too much but if
137 it was closer to present, that would be an example of why you don't want people to
138 know those stories.

139 So that's an issue. That's one reason why people don't want things to get out, and
140 others to do with land. Because we got land all over the place, but it becomes harder
141 and harder to prove who owns what, who should have what. So whakapapa is very
142 important for working that out.

143 MARK What is this whakapapa book, what it contains?

144 PAUL Oh the book. A family book. I don't know, I haven't seen it, so I got little bits
145 from it somehow. Someone has copied it and I have copied them. So I don't even
146 know if they have copied it right.

147 MARK So what does it contain?

148 PAUL Well, it contains people and birth dates, land block courts. I don't know what
149 else.

150 MARK So it means that whakapapa book is not similar to what, whakapapa?

151 PAUL Not necessarily. It is like a family book.

152 MARK So it is more like a genealogy, is it?

153 PAUL I think anything is genealogy you know. I know Māori families have these
154 books, and I don't know what stuff they keep in them.

155 MARK Have you ever used any genealogy software?

156 PAUL No, not yet. I am about to use Family Tree Maker.

157 MARK So what do you think. Will this software be better off than the older tradition?

158 Could they replace older tradition or would they help maintaining whakapapa better?

159 PAUL Well, they are big questions. All depends. How is the software developed? I
160 don't know yet. Ah, for me it will never be the same. They will be different, and
161 they might do some things better and some things they can't do.

162 So in some ways I believe that the past is past, and it doesn't exist. It only exists
163 now. What's its impact now, right now, so my understanding now. I experience
164 now, is the important thing. Learning about things in the past can enrich my now.
165 Whether they are correct or not, in some way, doesn't matter. It's what I make of
166 them now. I can reinvent the past to make my current present interesting.

167 Now I don't totally believe that. But the fact that you have mentioned my great

168 grandfather or my great great grandfather who was a tohunga, or a priest, I have
169 certain fantasies about what that means in me. How does that relate to reality? I
170 may never find out but it has a certain thing in me. It is like a fairy tale or a movie
171 like you are Arnold there, and you identify with him. All that is a part of you. He is a
172 part of you. Part of you wants to be tough, like Rambo, who fights for the underdogs.
173 Its alive in me and you, it is real. So that's the kind of way I look at it, a bit.

174 MARK So it is more of the effect of the stories?

175 PAUL Yes, I know something in me is very attractive to the tohunga or priest. It's a
176 big mystery to me, but it brings up certain kinds of feeling. So that's good, I work
177 with that.

178 Now some of that will come through computer based systems. Maybe if I read the
179 story or his picture, that might help me. But if I met someone, an old teacher, and he
180 was telling me directly about his meeting with a person, or he had embodied some of
181 the knowledge of tohunga or priest, and was using the same method with me. Then
182 that would be very, very rich you see. And that may not come with the computer
183 system. And I don't know what that thing is. It might be an attitude, you see.

184 For example, I think it probably already happened in terms of the <...> line. There
185 is a healer, a cousin of mine we had a bit to do with each other he does teach me like
186 one thing he is teaching me is the phrase "a te wā" which means literally means "to
187 the time" but ah... its meaning, I think, has different kind of meaning, with different
188 context. One meaning is, that I will see you when I see you. Other meaning is, what's
189 meant to be is what's meant to be. Things are, because they are meant to be. So he
190 is teaching me that. The way he lives. So if he is driving his car and he gets a flat
191 tyre that's meant to be, he doesn't have a tantrum he thinks there is a reason. So he
192 personally will have a tantrum, "I want to say it is not fair" and fire the universe and
193 curse the god and blame myself for not checking the tyre. And then feel bad about
194 changing the tyre in the cold rain and being late of an important meeting, and he is
195 saying "don't worry, there is a good thing in there".

196 So I think maybe that is attractive. I like the attitude. Ah, I don't know whether I
197 can believe that there is always a reason for something, because I don't necessarily
198 believe that anyone is looking after me. I don't necessarily believe that there is a god
199 who is looking after me. I don't believe that there is a god who is looking after me,
200 you know I mean? If there are gods looking after people, then why would anyone
201 suffer. So maybe there is, or there is no god. I don't know I am confused. So I'm
202 just working it out.

203 MARK So you believe that in some ways computer systems will be better and in some
204 ways oral tradition will be better?

205 PAUL Yeah, I don't know that for sure. It's only my feelings or assumptions.

206 MARK What do you think about recording these older people, and putting them in
207 the systems?

208 PAUL Well, it could be great. But it wouldn't be interactive, necessarily. Like, I think
209 those old people have millions of stories and which one of those are they going to tell
210 on tape. See, if I go to them and they form a relationship with me, they get warmed
211 up to certain things. Like if I said, did you meet my great grandfather? Like, I met
212 an old aunty, <...> and I asked her about my great grandfather, and she said "oh,
213 he was staying with us when I was a young woman, old man, he was very spiritual.
214 Moreporks used to talk to him, and he told me that I wouldn't understand." And
215 she also said that when he was ninety he was still chasing women around. That's a
216 story you see, that's only one of the thousands of stories which she got. She may not
217 even tell that story because... and so the relationship actually means a lot. She is
218 a teacher, so if I go up to to her she will be warmed up to teach me one particular
219 thing which she thinks I should learn. Where as if it is just recorded she doesn't know
220 whom is she teaching to. Probably she has to be warmed up to teach everyone. So it
221 is not individuated, it is not specialised. That would be one aspect of what you are
222 raising.

223 MARK That means that the computer system would not replace the older system but
224 could just be another help to maintain whakapapa.

225 PAUL It could be a good help of course. Because if no one records these old people,
226 then they are gone and that's what lots of my old aunties and uncles are saying. That
227 older women are worried that if they die, their stories will be lost so even if some of
228 the stories are recorded it's, better than nothing.

229 MARK So, no one is learning them now?

230 PAUL Don't know. Some of them are, and some of them are not. Lots of these young
231 people are focussed on other things, you see.

232 MARK So, does that mean younger people are losing their interest in it?

233 PAUL It seems that people have lost interest in it quite a bit. Then it seems that
234 there are new thing happening in and they are getting their interest back, you know.
235 But not only interested, but also busy, but are doing some thing.

236 MARK That where computer system could help, because you are busy, and you have
237 no time to go up north to learn stories or attend meeting?

238 PAUL Yeah, yeah. It will be a great help.

239 MARK What kind of things would you like computer systems to have?

240 PAUL Stories, like I said. Stories of the old people and their faces talking, you know.
241 That will be great. In terms of genealogy, in terms of people, I am not that interested.
242 Maybe only my own line. Not interested in forming huge maps and finding out who
243 connects with who. I pretty much got my two line and that's enough. I'm interested

244 in stories.

245 MARK Will people share their stories?

246 PAUL I don't know. People don't want to want to loose control of their stories by
247 putting them on the internet or software. Or someone records them, then the other
248 person will have control on them, so they might hold back the stories if they think
249 everyone can read it. Maybe a password could help, like the <...> one. You need
250 to have a password to log on to it.

251 MARK Do you think people will move on from the oral tradition to the computer
252 based?

253 PAUL Probably they will use both

A.2 Interview 2

This transcript is an interview conducted by an interviewer, called Mark, with a female subject called Hanna, on 16 December, 2003. The identities of any parties have been masked to protect their privacy. During the course of the interview three other people join in.

When the transcript was received it contained a large number of spelling errors that were corrected. At the same time the transcript was reformatted to reflect the flow of conversation between the parties.

- 1 MARK Hanna was interviewed on the 16 Dec. 2003. I went to her house and my
2 supervisor had already spoken to her about the research and the reason for my going
3 to her. To my surprise she was ready and waiting for me. She had got all of her
4 research materials, documents and books to show me she also had videotape, which
5 some else had recorded before. She showed me the book, which was written by one of
6 her ancestors, and she said she was writing a book too (from her father and onwards)
7 with the help of FTM. She was excited to see it, and me. Seemed that she said enough
8 to talk about because as soon as I got there she started talking about her genealogy
9 and what has happening. At the beginning her comments were like “ no way it can
10 be computerised as the data is not valid”.
- 11 The interview was recorded on a Sony Dictaphone (Minh Micro, M-100 MC).
- 12 MARK What whakapapa means to you what according to you is whakapapa?
- 13 HANNA Well, it is part of me its my... my ancestry.
- 14 MARK Well, it is about your ancestors, is it? Only about the names of the ancestors,
15 or it is about...
- 16 HANNA Oh no, it is about stories and events.
- 17 MARK That’s how it is different from genealogy?
- 18 HANNA No, no, we do them both.
- 19 MARK For so many years, how did you maintain your whakapapa? Had you been
20 taught orally about it or you had been given...
- 21 HANNA No, I have been helped by people, and they have given me all this. (*Shows*
22 *me books and the list of names which was given to her by one of her ancestors.*)
- 23 MARK Where did they get their whakapapa from?
- 24 HANNA From the old people.
- 25 MARK So that means they were taught orally, by old people?
- 26 HANNA Yes. yes.
- 27 MARK So do you have your whakapapa book, like different tribes have?
- 28 HANNA No, I don’t have such a book.
- 29 MARK So you don’t have a book?

- 30 HANNA Probably the tribe does have, but I have never gone into it.
- 31 MARK Do you think whakapapa and whakapapa book are two different things? Be-
32 cause whakapapa is taught orally and the book is written.
- 33 HANNA See, that might be the answer to my problem. But I haven't seen such a
34 book. (*prob: she is not sure of the validity of data which she has with her.*) I think
35 Ngapuhi might have one, I never thought of that.
- 36 MARK That might be helpful to you.
- 37 HANNA Oh yeah.
- 38 MARK Whakapapa is considered to be very personal and tribe don't want to share
39 their whakapapa. Is that true?
- 40 HANNA Well yes, I had trouble because I had been with the Society of Genealogists,
41 and we have a Māori interest group. Now, it is really for people like me who have
42 Māori blood that is watered down. And because there is one there, and their ances-
43 tors, but I don't know where to look... and we help them and tell them to go to
44 tribes, etc. Some of the tribes don't like this, as they think we are trying to take over
45 and of course, it is not that at all.
- 46 So, ah... I have not, I don't know, it is a hard one. People who find out, they want
47 to know where to go and we just help them. But we don't do it for them. Well I feel,
48 I think you have to be of the blood. If you want it for yourself then it is fine.
- 49 MARK Why is it so?
- 50 HANNA Well it is just the way. Why? I don't really don't know about that. (*I think*
51 *she doesn't want to share her views.*)
- 52 MARK Do you know why did they change from oral to written history?
- 53 HANNA I think when the tribe and people flooded away, left the marae and things,
54 and came to the city. So there is nobody to hand it on too. I don't know really.
- 55 MARK Do you think it is better to have them on computers than to have them on
56 books?
- 57 HANNA Yes, I think it would be, but I think half the thing is, people can change things
58 on the computer program. But not so easily on books, but certainly on a computer.
59 You know, this thing they write according to him, and I don't want anyone interfering
60 with it. You can understand that... ha ha.
- 61 MARK Yeah, I understand. But you could always use a password on that.
- 62 HANNA Yeah, you can.
- 63 MARK You could have a security level beyond which only your tribe people could
64 have access too.
- 65 HANNA Yes, yes. Well I know that some man in South Island tribe, Ngai Tahu,
66 they have in Christchurch, have got a proper unit or something for their whakapapa,
67 and they did come and we New Zealand Society of Genealogists had a conference in

68 Christchurch and that man come to our conference.
69 MARK What was the conference about?
70 HANNA It was about computer programs and something, I don't know. But there
71 was something, a unit, which is attached to the university, I presume. That is a part
72 of the whakapapa for South Island.
73 MARK There are so many software, and people are working on software for maintain-
74 ing whakapapa. Like you are using FTM.
75 HANNA Yes.
76 MARK What are you using the FTM for?
77 HANNA Well, I use it to write a book, you see?
78 MARK A book?
79 HANNA Yeah, a book about my family, eventually.
80 MARK So you are getting your data into that.
81 HANNA Yeah, I have started. But we have written some book, and that's her and
82 Māori family. You are more than welcome to have a look if you wish, but it tells
83 about the family. You know, the original lot. We had a reunion, and we visited, and
84 so this is all about it.
85 MARK This is far back, to what generation?
86 HANNA Because this was the William's book. So it went back to Sarah, Charles and
87 Sarah Williams. She was Sarah Birch.
88 MARK So, you do not have any records beyond that?
89 HANNA No, only this stuff here. And others I can't verify. See that's all I have got.
90 MARK It's a piece of paper, with names on it.
91 HANNA Yeah. Which Walter Birch did, who was Sarah's brother.
92 MARK Did you try to getting in touch with him?
93 HANNA No, he is no more. He is dead. This was someone gave it to me. He was a
94 Birch too. (*Shows me some other papers.*) But he is dead as well.
95 MARK I can only see names in there. But there are no stories and events in there.
96 HANNA Well, there are a few stories in here. No she hasn't given me events, except
97 for these things, which are quite new. (*She tries to read something on the papers.*)
98 Look, this person died... no, sorry, was born in '61 and died in '62. She... there
99 is some thing stupid here. (*Difficult to read it, Mark thinks.*) Oh, that must be 1861
100 and died in 1962. OK. And that's all I have got. I've got a lot of research to do.
101 MARK How will you do the research?
102 HANNA Well, I got some books on the North and I think I will have to go up and try
103 something. There is a marae, a Birch marae. This is where the meeting was held,
104 Tahiki marae, and probably someone there might be able to help me, but I haven't
105 been able to do that.

- 106 MARK But she might give you something like that. (*Referring to the page she showed*
107 *me.*) And how will you validate that information?
- 108 HANNA This is what I have already got. See this is the thing. They even didn't have
109 much either. (*Then she starts comparing the book and the paper, which she had to*
110 *find out the similarities between them.*)
- 111 MARK So you can actually compare that with this.
- 112 HANNA Yeah, I will have to go through it very carefully, which I have not done.
- 113 MARK What did you put in the book, which you said you guys wrote?
- 114 HANNA This is from Charles and Sarah, downwards until 1993.
- 115 MARK So this book has got all the event and stories.
- 116 HANNA Yeah.
- 117 MARK So did you create this book on FTM?
- 118 HANNA No, actually. This book was written by a firm called Evergreen Publishers,
119 who are in Te Atatu. I don't know what program they used.
- 120 MARK You are trying to use FTM to write a book?
- 121 HANNA Yeah, I am trying FTM.
- 122 MARK So, are you going to put events and stories in it?
- 123 HANNA Yes.
- 124 MARK Does FTM help you to put events and stories in it?
- 125 HANNA Oh yes, and I have. And here you see are all the descendants. (*Shows me a*
126 *report which was generated by FTM.*) Here is the person I am trying to put information
127 in, and this is the information I have got about him. (*Flips over to pages and shows*
128 *me.*) I have got a lot of work to do.
- 129 MARK So you can put events and pictures into it?
- 130 *Tama is her husband who comes in the room where the interview was being*
131 *conducted*
- 132 HANNA Yes, but I haven't put any photos in it yet, but you are going to do that
133 Tama ain't you?
- 134 MARK Hi Tama.
- 135 TAMA Hi.
- 136 HANNA So he is got a digital camera and he is going to put photos in it.
- 137 MARK So does that mean that you are changing from written history to a computer
138 based tool?
- 139 HANNA Yes but I will use it to publish the book.
- 140 MARK Why are you doing this?
- 141 HANNA Because I want more of this.
- 142 MARK More of what?
- 143 HANNA Information.

- 144 MARK Where are you going to get this information from?
- 145 HANNA I got this information with me.
- 146 MARK Where did you get it from?
- 147 HANNA Oh I got it from hundred and millions of places, you know. I had been doing
148 this for 25 years now. I got quite a lot of stuff I just have to put in it. See, I had
149 been working until now, but once you retire you can do this. Ha ha.
- 150 MARK You are getting into computer based tools. Do you think other Māori will
151 accept this change?
- 152 HANNA I think so.
- 153 MARK Why?
- 154 HANNA Because nobody learns orally anymore. You don't learn orally times tables,
155 do you? And I think they are skilled, today's kids. I worked in Hato Petera College,
156 which is a Māori boarding school here on the Shore, and those kids are computer
157 literate.
- 158 MARK What do you think can be improved in FTM which will get more people to
159 use it?
- 160 HANNA You will probably find the same I have got from. Things which you can verify
161 in the government system, life, birth date, death and marriages. You can carry on,
162 and all you would say is that this is oral history. This is probably how I am going to
163 handle it because you can't actually prove it.
- 164 MARK So you mean the validity is the main issue?
- 165 HANNA Too many people have researched their family tree and have found that they
166 have linked it up properly, and have actually done somebody else's family history.
167 And that is costly, and it is not easy, and you don't want to be wasting your time.
168 Do you?
- 169 That is why I want to make sure about the few doubts I have before I commit anything
170 there.
- 171 MARK Does that mean that computer based tools are better than Māori tradition?
- 172 HANNA Definitely. It has to be that way, because people children of today are timed
173 to change.
- 174 MARK Some time back we were talking about that people don't want to share things.
175 But if you put it on computers other can view it.
- 176 HANNA That's another problem. I think it would be good to talk to this man in
177 Christchurch. Its something to do with Ngai Tahu tribe, based in Christchurch, and
178 I mean he was taking about it in the conference. Do you know something about it
179 Tama?
- 180 TAMA No.
- 181 HANNA He was taking about this, well I don't know how the Māori feels about this.

182 But the elders must realise that people aren't there and they are not going to learn
183 anything of them, either. The oral history is gone. Once they die off what happens
184 then?

185 MARK So it is better to save it on computers?

186 HANNA Oh yeah. (*Pauses for some time.*)

187 MARK What according to you would encourage people to use more of computer based
188 systems. Like you had been using FTM for a long time, what do you think should
189 be changed.

190 HANNA Probably nothing, except that we do need some dates. I would like to be
191 able to tie it up with dates to make sure that this person is the one who I think it is.
192 Even if you say on the thing, these are oral history. But if you can tie it up so that
193 it is obvious that some body is not 3, when you are putting someone as grandfather.
194 And he is got to be 20 or 35, so that it is possible. If you could even do that, it could
195 help.

196 MARK Do you think this computer system could be help in other sectors, like gov-
197 ernment and land court? I mean, information on land.

198 HANNA Oh yes, you could put those information in. See that's not a problem and I
199 have done that here. It is not a problem if you know there was land up north. We
200 went there and had a look at it, it was here and anyway, yes information could help.

201 MARK I read in a article that Māori have their own values and they believe in oral
202 history and they don't want written history.

203 HANNA I think they're gonna have to. I mean I know they probably don't want to,
204 like I said, there would be nobody left. It will be all lost if they don't. I am sure
205 this man in Christchurch is doing the same. I think he is paid by the tribe and is
206 attached to Canterbury University.

207 MARK Can I get his information?

208 TAMA Sure I will try find out and then call you.

209 MARK Thanks, Tama. What are the disadvantage of a software? Where do you think
210 that the software might not help?

211 HANNA I don't see any disadvantage. I think the software will help only if it could
212 verify things.

213 MARK So you are happy using FTM, and it meets your requirement?

214 HANNA Yeah, yeah. We haven't used it that much. We used something else before
215 this. What was the one we used before this? (*Question directed at Tama.*)

216 TAMA ftree

217 HANNA And that was a bit limited. But this Family Tree Maker you can get, it
218 updates... what version are we using? 11 is it?

219 TAMA Well there are too many up there, ain't they? What are you doing, are you

- 220 doing a market research on software? (*Question directed at Mark.*)
- 221 MARK No, no. I am doing a usability of genealogy systems and how they meet Māori
- 222 requirements.
- 223 TAMA The thing with FTM is that they get upgraded two or three times a year. They
- 224 make slight changes and charge you full for upgrade. There are quite a few software
- 225 and they all are slightly different from each other and if you ask anyone, everyone is
- 226 happy with the choice they have made. For specific need as such it is very hard to
- 227 judge.
- 228 HANNA I think if all you have got is a name then it is fine because that what you got
- 229 with oral history, you know. If you go back you got something like this I showed you.
- 230 (*Shows, again, paper with list of names.*)
- 231 TAMA You need some specific dates for FTM because it really relies on dates for
- 232 sorting and so on.
- 233 HANNA hummm
- 234 TAMA And if you don't have that then I am not sure.
- 235 HANNA Probably lump them all together and don't know what it will do.
- 236 TAMA It would not be able to say that, that person is older, to have that descendent.
- 237 Now it does if you put a child to a 5-year-old parent, it will reject it. Now, it doesn't
- 238 have that sort of filtering function if you don't have the dates. And so you could have
- 239 wrong stuff going into FTM. Which by mistake or other error could easily be entered.
- 240 HANNA That's what I am trying to say, is that you have to work backwards and you
- 241 have to try and work out, to get it into it. You have to work out, and I mean that's
- 242 stupid because people have babies at 20 and people have babies 40 so you can't, you
- 243 know, got to have something more than that to put it in.
- 244 MARK That means you need more information to work on the software.
- 245 HANNA Yeah, yeah. From the oral history.
- 246 TAMA Because it used to be numeric based, somehow.
- 247 HANNA You could actually do that, if you made a software that would go backwards
- 248 numerically, you could do like that couldn't you, without a date.
- 249 TAMA Yeah, some sort of coding system.
- 250 HANNA Yeah, to have some sort of code.
- 251 MARK Yeah, you could go back in generations.
- 252 HANNA Yeah, you would wouldn't you. Might be able to do it, like that.
- 253 TAMA I think it will be true to say that all software are mostly the same though.
- 254 You know it does rely on numerical data for the purpose of verification, and if you
- 255 don't have it, like in the case of whakapapa, you will have to have some other way to
- 256 tackle that. It sounds a bit dodgy.
- 257 MARK Some time back you talked about some specific needs. What did you mean

258 by that, what are your specific needs?

259 TAMA Well, some people like lots of narration with individual people. Some people
260 like to incorporate photographs, and maybe pictures of other documents, you know
261 like birth certificates or letters. So, you know, some people are just happy with
262 very old family tree, with just names, birth date, marriage dates and stories and the
263 same for their children. So, you know, different programs cater to different needs,
264 differently.

265 So whoever you talk to, everyone thinks their own software is better, as they have
266 chosen it and are using it. And very few people have tried more than two or three
267 program, so they can't really judge them on the merit, on any other program. And
268 if you go out and ask, what they are using, you will find some use FTM, some use
269 something else, and so on. And everyone is 100 percent satisfied.

270 HANNA Ha ha.

271 MARK Ha ha.

272 TAMA Yeah, that's right, and that's why I will never recommend any program to
273 anybody. You should make your own judgement and assessment of what you think
274 you might need. I suspect, without knowing, that some programs are better in or
275 handling this sort of data and photo and stories. The one we used before, ftree, had
276 very small fields for writing any stories. 255 words and you couldn't add any more.
277 There might be some other one which might have some more space.

278 I think the newer ones have got the hyperlinks, if you want to read a document, you
279 click on it and it takes you to the document. You see what I mean, it is a really just
280 a big open field.

281 MARK That's what I am trying to find out, what the users need and what Māori
282 needs.

283 HANNA Yes.

284 TAMA To find out what they want, because Māori could trace their history way back
285 to canoes, to put dates and times opposite to his things, is difficult. When that land
286 was taken, you know, at least you could say, maybe 1943. Then you can't go back
287 and trace the official English records. Because there is no links between stories, that
288 such and such moved from here to there, unless you have dates you can't link it for
289 the purpose of land claim.

290 MARK Yup.

291 TAMA So if you don't know when the guy was born, or when he died, you can't even
292 get within 40 years. So you see what I mean.

293 MARK Yeah, I understand the importance of date line.

294 HANNA Yeah, that's the thing.

295 MARK Thanks Hanna, for all this valuable information. It was great talking to you,

296 and thanks to you too, Tama.

Appendix B

Text sources

B.1 Marsden, Samuel 1765–1838

This article was extracted from the government website *The Dictionary of New Zealand Biography* (Parsonson, 2003).

1 According to reliable sources Samuel Marsden was born on 25 June 1765, at Fars-
2 ley, Yorkshire, England, the eldest of the seven children of Bathsheba Brown and her
3 husband, Thomas Marsden. He was baptised at Calverley, near Leeds, on 21 July 1765.
4 At the age of 14 or 15 he went to work in his uncle's smithy, and in 1786 was recruited
5 by an Anglican evangelical group, who sent him to Magdalene College, Cambridge, in
6 1790. Two years later he accepted an appointment as assistant chaplain to the colony
7 of New South Wales. In 1793 he was ordained, and at Hull on 21 April he married
8 Elizabeth Fristan.

9 Marsden arrived at Sydney Cove on 10 March 1794 with his wife and new-born
10 daughter, Ann, the first of their eight children. He took up residence at Parramatta in
11 July, and concerned himself with the welfare of orphan children and female convicts. In
12 October he took up a 100 acre block, where he quickly put to good use the gardening
13 and farming implements he had brought with him. Late in 1795 he also consented
14 to serve as a magistrate (gaining a reputation for severity) and as superintendent of
15 government affairs.

16 In the next few years Marsden was very busy, not merely as chaplain and magistrate
17 but as a rising landowner. However, he early felt the call to evangelise. He lent his
18 warm support to the infant missions to the South Seas, and in 1804 took up the post of
19 local agent for the London Missionary Society's Pacific operations. Marsden's attention
20 gradually turned to the Māori of New Zealand as a promising people for evangelisation.
21 He often accommodated visiting Māori, putting them up in his own house and teaching
22 them, entirely at his own expense. As early as 1805 Te Pahi was a visitor.

23 The extension of the mission to New Zealand was another matter. In 1800 Marsden

24 had been called on to act as sole chaplain for New South Wales, and it was not until 1807
25 that he was free to return to London to plead his cause before the Church Missionary
26 Society. He then raised a band of lay settlers to prepare the way for ordained mission-
27 aries. They were William Hall, a joiner; Thomas Kendall, a schoolmaster; and John
28 King, a ropemaker. It was not until August 1809 that Marsden left England aboard
29 the *Ann* with Hall and King. Ruatara, of Nga Puhi, who was discovered in England
30 in a sick and neglected state, travelled with them and was to spend eight months with
31 Marsden, to whom he taught the rudiments of the Māori language.

32 The establishment of the New Zealand outpost was further delayed. The missionary
33 societies rejected Marsden's proposal to link Sydney, Tahiti and New Zealand, and,
34 probably in February 1814, he was obliged to buy his own ship, the *Active*, for £1,400,
35 most of which came out of his own pocket. The temporary Colonial Office veto of any
36 further settlement in New Zealand almost proved the last straw. Hall and Kendall (who
37 had come out in 1813) did not reach the Bay of Islands until June 1814; Marsden himself
38 did not arrive until December.

39 On the face of it the new venture began well enough. On 20 December, at Matakauri
40 Bay, Marsden persuaded Ngati Uru and Nga Puhi to make peace. On the 22nd he
41 landed at Rangihoua, Ruatara's place. On Christmas Day Marsden led off with the Old
42 Hundredth (Psalm 100) and then preached from Luke 2:10 - 'behold, I bring you good
43 tidings of great joy' - to a large, well-drilled congregation. Ruatara translated for him.
44 On the 26th Marsden set up a charcoal forge to replenish his stock of axes; and on the
45 27th he went to Kawakawa to lay in a supply of kahikatea. Early in the new year he
46 perambulated the bounds of his extended parish with Hongi Hika and Ruatara. On 13
47 January 1815 he went aboard the *Active* with Te Morenga of Tai-a-mai, near Waimate
48 North, another old friend, to prospect the coast as far as the Thames. On 15 February
49 he completed his cargo of flax and timber, and on the 24th, after buying the mission
50 site of some 200 acres at Rangihoua, he cleared for Sydney.

51 All the same, success was far from assured. In his walks abroad Marsden had seen
52 much want and misery. He had also been made aware of the inveterate jealousy of the
53 hapu, their tendency to violence and revenge, their attachment to tapu and to their own
54 gods. The death of Ruatara soon after Marsden's departure was a serious blow. The evil
55 conduct of the crews of passing ships, the matching of violence with violence, was further
56 cause for concern. In addition, the ever-increasing cost of blankets, clothes and tools
57 for visiting chiefs at Rangihoua and Parramatta, rice and potatoes for Kendall's school,
58 provisions for the mission village at Rangihoua, and the salaries of the New Zealand
59 settlers, was soon a major worry. The *Active* had to be sent whaling to pay her way.
60 There were, before long, personal difficulties with his missionaries. They seemed unable
61 to work amicably together, or to agree on what should be done.

62 A year or two later things were no better. Marsden's chief ground for complaint
63 at this stage was the private trade in firearms, which he had banned as early as 1815.
64 In February 1819 he was obliged to entreat his settlers once again to desist. They
65 all except Hall agreed to do so, and then promptly yielded to temptation once more.
66 Marsden's own connection with the venture was also in doubt. In New South Wales his
67 material success, and his violent disagreements with the governor, Lachlan Macquarie,
68 and others had caused his missionary ventures to be regarded with suspicion and even
69 contempt. In response to Macquarie's repeated refusal to grant him leave to revisit
70 the Bay of Islands, Marsden took in increasing numbers of Māori at Parramatta and
71 taught them fish-curing, ropemaking, and brickmaking. He also added to his properties
72 so that he could employ all who came in gardening and agriculture, mixed with moral
73 and religious instruction. He plied the settlers at Rangihoua with advice, supplies, and
74 extra hands at his own cost, and kept the *Active* going back and forth, to pick up pork
75 and timber and more visitors.

76 In mid 1819, with the Church Missionary Society's blessing, Marsden moved to take
77 an even firmer grip on the venture. In the course of his second visit to New Zealand,
78 from 12 August to 9 November 1819, he dismissed two of the settlers and banned once
79 more the traffic in powder and muskets. In February 1820, at the beginning of his
80 third visit, he remonstrated in vain with Kendall about the latter's impending visit to
81 England with Hongi. In June 1822 he suspended Kendall for adultery with a Māori
82 woman. He also found himself obliged to report the disobedience of the Reverend J. G.
83 Butler, the superintendent of the mission since July 1819.

84 In the same period he also set about strengthening the mission. In 1819 he estab-
85 lished a new settlement at Kerikeri, and 'bought' from Hongi a 13,000 acre block of
86 land there, which he thought might answer the needs of any poor colonising families
87 the society might send out. In 1820 he stationed James Shepherd with Te Morenga
88 at Tai-a-mai. In August 1823 he opened a further station at Paihia for the Reverend
89 Henry Williams. He also gave what help he could to the infant Wesleyan Methodist
90 mission established at Kaeo, near Whangaroa, in 1823.

91 The objectives of Marsden's visits to New Zealand at this stage were, however, very
92 different in kind. He wanted to see the country and its people, and his remaining journals
93 describe in vivid detail his long journeys, often in rugged, heavily bushed country where
94 no European had ventured. On his third visit, from 27 February to 5 December 1820,
95 he went as far as Tauranga, then back to Kaipara, accompanied by Te Morenga. He
96 also wished to examine at first hand Māori economy, institutions and religious beliefs.
97 Above all, he had come to teach and to preach. Wherever he went he talked, often
98 far into the night, on all manner of subjects - agriculture, commerce, navigation, the
99 principles of government - but especially on the absurdity of tapu, the root cause of

100 all their wars, ‘upon the works of Creation, the being and attributes of God, and the
101 institution of the Sabbath Day, and the resurrection of the dead.’ He also hoped to
102 press ahead with the translation of the Bible into Māori.

103 In his latter years Marsden was still to suffer much pain and sorrow in the pursuit
104 of what he deemed to be the Lord’s will. The setting aside of his claims as archdeacon
105 in 1824 he looked on as of small moment, but he was deeply distressed by W. C. Went-
106 worth’s libels in the third edition of *A statistical account of the British settlements in*
107 *Australasia* (London, 1824), and a reprimand in December by Earl Bathurst, the secre-
108 tary of state for the colonies, in response to Marsden’s charges against the government
109 official H. G. Douglass. He felt he had served his country faithfully and to the best of
110 his ability for 34 years, and at the last had been held up as a promoter of public discord.

111 The crisis passed, and Marsden’s publication in London in 1826 of *An answer to*
112 *certain calumnies*, and the removal of Douglass from office in 1827, silenced his enemies
113 and produced an effect in his favour in the colony. Even more happily, the new governor,
114 Ralph Darling, encouraged his missionary endeavours, although Marsden’s advice to the
115 New Zealand mission was not always accepted. The missionaries, under Henry Williams,
116 often tended to go their own way.

117 Marsden’s brief visits to the Bay of Islands were packed with action. On his fifth
118 visit, in April 1827 aboard the *Rainbow*, he pointed out to various chiefs their crimes in
119 robbing the Wesleyans at Whangaroa. On his sixth visit, with his daughter Mary, from
120 March to May 1830, he played a vital part in restoring peace between the rival armies
121 in the bloody Girls’ War. A no less significant move was to set up a farm at Waimate
122 North, to render the settlers less dependent on uncertain and expensive supplies from
123 New South Wales and to set an example of peaceful, constructive industry. He threw
124 himself into the work of teaching the small groups of anxious young inquirers who visited
125 him in the evenings, and preaching in Māori to the crowds who gathered round him
126 wherever he went.

127 Marsden never really retired, although in his latter years he began to show signs of
128 wear and tear. In October 1835 Elizabeth Marsden died. She had been disabled since
129 1811. The following December Marsden himself was taken ill. He recovered, but still
130 refused to rest. In February 1837, with his daughter Martha, he undertook yet another
131 voyage to New Zealand, at his own expense. This visitation assumed the proportions
132 of a triumphal procession. At Hokianga hundreds came to pay their respects to the
133 grand old man. On his arrival at Waimate North, where he was borne on a litter
134 through the bush, he was greeted with reverence. On 1 April he visited Kaitaia where
135 Māori came in party after party. For all his physical weakness he nonetheless threw
136 himself into the ordinary business of the mission. He not only spent endless hours at
137 committee meetings on all manner of subjects, but ventured many times with Henry

138 Williams into the rival grog-drenched, convict-infested pa, in a vain effort to negotiate
139 an enduring peace between Pomare II and Titore. More happily, he visited most of
140 the mission stations within 100 miles of Waimate North, to teach and preach to their
141 scattered parishioners and to lend the weight of his name to the rapid spread of the arts
142 of reading and writing, the diffusion of peace and order and of the Gospels.

143 His final departure was on 2 June 1837 aboard the
144 *emphRattlesnake*, via the Thames and Cloudy Bay. On his arrival at Sydney he spoke
145 of returning to New Zealand perhaps once a year. He became progressively more feeble,
146 however, and on 12 May 1838, on a visit to Windsor, he breathed his last. He was
147 buried in the churchyard of St John's Church, Parramatta.

148 Inevitably, Marsden was much misunderstood in his generation and just as often
149 misrepresented. In essence he was simple-minded and honest, even to a fault. He
150 was also open-handed, almost prodigal with his time and his money. If he apparently
151 neglected to evangelise the Aborigines it was not from want of trying. He also looked
152 with pity on the fallen and the lost; he often befriended convicts. He was extraordinarily
153 generous towards those who disappointed him, or even those who hated him. As he was
154 always ready to admit, he could make mistakes, from human weakness, or from lack of
155 counsellors in times of trouble. If he had a serious fault, it was his predisposition to
156 take offence.

157 His role in the gradual emergence of New Zealand is difficult to assess. Without him
158 the conversion of Māori to Christianity might have been long delayed. Marsden also
159 transformed the Māori economy and laid the foundations of New Zealand agriculture.
160 It can be said, too, that he made a notable contribution to the debate which ended in
161 the British annexation of New Zealand. In 1831 he urged Darling to put a stop to the
162 growing trade in tattooed heads, and protested with great energy the participation of a
163 British captain and crew in the abduction and torture of Tama-i-hara-nui of Ngai Tahu
164 by Ngati Toa. He urged the dispatch of a naval vessel with due power to restrain such
165 scandalous misbehaviour, and recommended the appointment of a British Resident with
166 proper authority, to whom Māori could appeal for redress.

167 In the last resort, however, as Marsden recognised, all this would hardly be enough.
168 He was far from objecting to the occasional colonisation of thinly peopled or vacant
169 districts, and opined that if 'a body of good men were to sit down as Colonists — it
170 would prove a great blessing to the Island.' Whatever the case, it would be necessary
171 for some power to take New Zealand under its protection if the anarchy that prevailed
172 at Kororareka (Russell) were not to become universal. That that power was ultimately
173 Great Britain was in large measure due to the apostolic labours of Samuel Marsden.

B.2 Te Ao-kapurangi 1818–1830

This article was extracted from the government website *The Dictionary of New Zealand Biography* (Ballara, 2003).

1 Te Ao-kapurangi was born probably in the late eighteenth century. One of her
2 parents was Pare-puwhehua and the other possibly Te Whangongo. Descended from
3 Tama-te-kapua of Te Arawa canoe and from Hoturoa of the Tainui canoe, she was a
4 woman of mana, who belonged to Ngati Rangiwewehi and Tapuika hapu. Her two
5 brothers, Te Kohuru and Te Waro, were considered to be most sacred tohunga. Te
6 Ao-kapurangi's first husband was Rauru of Tapuika. They had two sons: the elder was
7 Tarakawa-te-ipu, whose son Takaanui Tarakawa left a record of her life; the younger son
8 was Te Hihiko, later baptised Hone.

9 In 1818 Te Ao-kapurangi was captured by Hauraki, the Nga Puhi leader who had
10 gone with Te Morenga on an expedition of vengeance to the Bay of Plenty and East
11 Cape districts. Brought back to the Bay of Islands by Hauraki, she became one of his
12 wives. They had a child, who was accidentally burned, and the incident is remembered
13 by Hauraki's taking an additional name, Te Wera (the burning).

14 Te Ao-kapurangi became involved further in Nga Puhi warfare. In 1822 a number of
15 Nga Puhi, led by Te Pae-o-te-rangi, had been killed by Tuhourangi people on Motutawa
16 (the island in Rotokakahi), and some of the fugitives had been killed at Ohinemutu by
17 Ngati Whakaue. In February 1823 a great war expedition set off from the Bay of Islands
18 to avenge these deaths. Te Ao-kapurangi went with them. At Tauranga they heard that
19 many Te Arawa had withdrawn to Mokoia Island, and to reach there they decided to
20 proceed inland from Waihi along the Pongakawa river valley. Te Ao-kapurangi told Te
21 Wera Hauraki that she was concerned for the safety of her Ngati Awa relatives who
22 were living in this valley. He allowed her to address Nga Puhi leaders, and Te Koki
23 agreed that his quarrel was only with Tuhourangi and Ngati Whakaue who had killed
24 his nephew Te Pae-o-te-rangi.

25 At Rotorua Te Wera asked his wife what they were to do about her Te Arawa
26 relatives, and again permitted her to address Nga Puhi. Again she reminded them that
27 those responsible for Te Pae-o-te-rangi's death did not include her own people, Ngati
28 Rangiwewehi and Tapuika. Once again Te Koki agreed that his quarrel was only with
29 Tuhourangi and Ngati Whakaue. Others agreed and Te Wera sent Te Ao-kapurangi
30 with Taku, another of his wives, to Mokoia Island. When their canoe came close, Te
31 Ao-kapurangi was recognised and given permission to speak by her kinsman Hikairo,
32 a Ngati Rangiwewehi leader. Calling from the canoe, she proposed that her relatives
33 should go to a separate place, where they would be safe from Nga Puhi. But Hikairo,
34 although pleased by Nga Puhi's consideration, refused to abandon his other Te Arawa
35 kin.

36 Te Ao-kapurangi returned, and told Nga Puhi that if she was to save her kinsfolk,
37 she would need to be present at the battle. This was agreed to, but Hongi Hika decreed
38 that Nga Puhi would spare only those who passed between Te Ao-kapurangi's thighs.
39 Next day the attack was launched at Mokoia. As soon as she had landed on the island
40 she hurried to the house, Tama-te-kapua, and stood on the roof astride the ridgepole,
41 calling for her people to save themselves. They crammed the house, and Nga Puhi
42 allowed them to enter it and respected it as a place of refuge. This is the origin of
43 the saying, well known to Te Arawa and used when many crowd together in a house:
44 'Ano ko te whare whawhao a Te Ao-kapurangi' (How like the crowded house of Te
45 Ao-kapurangi).

46 Among those who escaped from the island were Te Ao-kapurangi's close kin, Hikairo,
47 Te Waro and Te Hihiko. They returned to the island in the night and joined the other
48 survivors in Tama-te-kapua. The next day peace was made by Te Wera Hauraki and Nga
49 Puhi, both with the survivors and with the rest of Te Arawa. Nga Puhi were persuaded
50 not to take the conquered land for themselves, and not to pursue the fugitives. A
51 permanent peace was established; Te Ao-kapurangi had played an important part in
52 bringing this about.

53 With her husband and her two sons she travelled on to the East Coast where Te
54 Wera established himself at Nukutaurua on the Mahia peninsula. The ally and protector
55 of various tribes, he was assisted in his many battles by Te Ao-kapurangi's sons. Little
56 is known of her later life, however; not even her death is recorded. But after her death
57 her grand-daughter, Rangiwawahia, composed a famous lament for her.

Appendix C

APPLICATION FOR ETHICS APPROVAL FOR RESEARCH PROJECTS Auckland University of Technology Ethics Committee (AUTEC) FORM EA1

C.1 General Information

C.1.1 Project Title

Modelling tribal genealogies for information systems development

C.1.2 Applicant Name/Qualifications

(If the researcher is a student (including staff who are AUT students), applicant is the principal supervisor. If the researcher is an AUT staff member undertaking research as part of employment, applicant is the staff member. If the researcher is a staff member undertaking research as part of an external qualification, applicant is the staff member.)

Name: Dr. Philip Carter Qualifications/registration: PhD

C.1.3 School/Department/Academic Group/Centre

School of Computer and Information Science

C.1.4 Faculty

Business

C.1.5 Complete this section only if the researcher is a student

Student Name(s):	Alan Te Morenga Litchfield
Number(s):	0002133
Qualification(s)	Grad Dip Bus (IT)
E-mail address:	alan.litchfield@aut.ac.nz
School/Department/Academic	School of Computer and Information Sci-
Group/Centre	ence
Faculty	Business
Name of Degree	Master of Business
Research Paper	Thesis / Dissertation / Coursework

C.1.6 Complete this section only if other investigators are involved in the project

Investigator Name(s)	None
Investigator Organisations	N/A

C.1.7 Are you applying concurrently to another ethics committee?~~YES~~ / NO

If yes provide details including meeting date: N/A

C.1.8 Declaration

The information supplied is, to the best of my knowledge and belief, accurate. I have read the current Guidelines, published by the Auckland University of Technology Ethics Committee, and clearly understand my obligations and the rights of the participant, particularly with regard to informed consent.

Signature of Applicant: Date: / /

(In the case of student applications the signature must be that of the Supervisor)

Signature of Student: Date: / /

(If a student project, both the signature of the Supervisor, as the applicant, and the student are required)

C.1.9 Authorising Signature

Name of HOD/AGL/School/Centre:

Felix Tan/Tony Clear/School of Computer and Information Science

Signature of HOD/AGL/School/Centre:

..... Date: / /

C.2 Project general information

C.2.1 Project Duration

Approximate Start Date of Data Collection 24–25/04/2004
 Approximate Finish Date of Complete Project 07/06/2004
 Are funds being obtained specifically for this project?¹ ~~YES~~ / NO

C.2.2 Types of persons participating as participants

Applicant's students
 Adults (20 years and above) ✓
 Legal minors (16 to 20 years old) ✓
 Legal minors (under 16 years old) ✓
 Members of vulnerable groups (e.g. persons with disabilities,
 limited understanding, etc.)
 Hospital patients
 Prisoners

C.2.3 Does this research involve human remains, tissue or body fluids which does not require submission to a Regional Ethics Committee?

e.g. finger pricks, urine etc. (Refer to Section 13 of the AUTECH Guidelines). (delete as appropriate)

~~YES~~ / NO

If yes, describe, including details of all arrangements or agreements for treatment, etc.

C.2.4 Does this research involve potentially hazardous substances

e.g. radioactive materials, (Refer to Section 15 of the Guidelines)

~~YES~~ / NO

If yes, describe.

C.2.5 Does the research include the use of a questionnaire?

~~YES~~ / NO

If Yes, a copy is to be attached to this application form

C.2.6 How will interviews be recorded?

Indicate which apply:

Audiotape

Videotape

✓

Note-taking

✓

If interviews are to be recorded, make sure there is provision for explicit consent on the Consent Form and attach examples of indicative questions or the full interview schedule to the application.

C.2.7 Describe how the principles of the Treaty of Waitangi are being addressed and applied in this project

(Refer to Section 2.5 of the Guidelines and the HRC Guidelines for Researchers on Health Research on Maori (Appendix G). Consider who might be affected by the project, its possible consequences, consultation issues, partnership issues, etc.)

The single data gathering opportunity for the study is focussed on one event. It has been promoted as a homecoming, rather than a family reunion or wananga because our family has never been close for the past three generations. Therefore most cousins would not know each other if they were to pass in the street. In the excerpt from the first panui that was distributed the situation is summed up:

In 1908 Tame Puhipi Nepia was born at Ahikiwi, almost directly in front of what is now the marae. Despite the fact that he was the youngest son, his was a notable birth because he was still the grandchild of the Te Rarawa Ariki, Te Morenga and Mereana Haki Te Ura, a daughter of Matutaera Tawhiao and elder sister of Mahuta. He later married Kathleen Litchfield and together they had 15 children in Mamaranui and Dargaville.

The Nepia family was born into a time of difficulty in New Zealand. It was the Depression and post Second World War so money, appropriate housing and food were hard to come by. It was for this and other reasons that the children tended to grow apart, having less and less to do with each as they married, left Dargaville and had families of their own.

None of them had anything to do with their father's marae at Ahikiwi, or the main Te Ohaki marae in Ahipara, west of Kaitaia. With the result that their children and grand children lost connection to home, many finding it difficult to call themselves Tangata Whenua when they could not even name where their land lay.

I found myself in this position, not really knowing whether to call myself Pakeha or Māori, but still having the knowledge of my descendancy. So I made the journey back to find where my place was in Aotearoa New Zealand.

It led to Ahikiwi and there I met the kaumātua who welcomed me home, formally. But I reminded them that I was not alone. There are three generations of Tame's mokopuna who have not been home to their marae. To which they replied that we need to get everyone who wants to come, and welcome all of them.

(Litchfield, 2004)

From this I have received Responses from all over the North Island, from cousins, uncles and aunties. Some of whom have expressed how much emotion this occasion has stirred for them, so that it brought tears to their eyes. So this is more than just an information gathering exercise, it is a homecoming of four generations, back to their turangawaewae.

The kaumātua have also expressed so much joy in having these people come home I am often left humbled. But Section 2.5 in the Guidelines suggest that three areas are of special concern: participation, protection and partnership. So they must be dealt with in their way:

Participation I have been guided in the planning for this event by the kaumātua. At each stage I have sought their involvement and asked what I should do. They have willingly provided support and encouragement for the event in April, for example I asked the Chair of the marae committee if I may be allowed to video tape the proceedings at a meeting we had in his home on 22 February, 2004. He said that is fine with him. At this meeting I asked a number of other questions²:

1. Which is the best date?

- (a) Easter — 9/4/4 – 12/4/4, or
- (b) ANZAC day — 24/4/4 – 25/4/4, or
- (c) Queen's Birthday — 5/6/4 – 7/6/4

The date that was chosen is ANZAC weekend.

2. When will the powhiri be? The time set is 11am on Saturday 24th. Lunch will be served after, at around 12pm. Beau will also arrange another powhiri on Sunday 25th at Waipoua Forest, where Tane Mahuta lives. This will be a very special event.

3. Koha — what is appropriate? The koha is to be made as cash. I will collect it on Sunday and give it to Beau, as the Chairman of the marae committee. This question raised another issue; there was debate about who will supply the food, and it was decided the Marae Committee will do this, in return the mauhiri will pay koha.

²This is an extract from my journal of the meeting with Beau Panapa, Adrienne Panapa, Karol Wilczynska and myself.

4. Can we meet prior, to organise what will happen at the powhiri This was to be on Saturday 13th March but was later changed to 22nd March.
5. Can I video the events? There is no problem with this. They have had things video'd before by professionals they were not very impressed by those results. I don't think they will want to have copies of anything we have.
6. I want to get photos of Puki, David, Jimmy, Cherry, Mickey and Ma installed into the wharenuī. When can these be presented? They can be introduced at the same time that everyone is welcomed onto the marae. The procedure that the leading people carry the photographs and if the fronts are facing forward then they are going to stay on the marae, but if their backs are facing forward they are going to be removed. Beau and Adrienne were very pleased about this suggestion.
7. I want to learn more about the family. Can we meet to do this? Perhaps at the same time that we meet to organise events. Yes. Although this is what the remaining Saturday and Sunday will be for. Unlike other Northern marae's they do not prevent their women from speaking on the paepae and women do not have to wear skirts, they may wear trousers or slacks instead.
8. What should I tell the people to bring with them. I had to remind Beau that most of the people who may come had never stayed on a marae before, so I will need to tell them what to bring. All that is required are their toiletries and bedding, mattresses are already provided.
9. What about alcohol? I would like to make it alcohol and drug free. There is a prohibition against alcohol, except for parties like weddings and birthdays. Also, there is no smoking in the wharekai and wharenuī, or on the marae itself. The only place a person can smoke is in the car park.
10. I am doing a Master degree in IT and this year I am writing my thesis. The subject is "modelling tribal genealogies for systems development." A major part will be the description of what goes on when someone is teaching someone else whakapapa. I want to video interactions, can we do this? Yes.
11. There is some confusion about which iwi to refer to: Te Rarawa, Ngāpuhi, Ngāti Whatua. Beau's family were originally Te Atiawa and had been taken as slaves. But because of the service provided by Beau's ancestor they were given land at Ahikiwi by the rangatira. This is how they came to be there. He also expressed pride in the slightly non-traditional aspect of the marae.

I raised the issue again at a marae committee meeting on 21 March 2004 in which there were 12 people present and again there was no concern.

It was at this meeting of 21 March that I asked for feedback from the committee about the research and what I wanted to do. I told them:

- What the research intended to do
- I read out the information sheet and explained any points that may have caused confusion
- I said that none of the footage would be made public and that it would be securely stored in case someone wanted to verify my findings (although that is unlikely)
- I said it is my intention to use single instance of video footage that showed how people learn their whakapapa, but at this stage I do not know which instance and indeed I will not know until after the event
- I said that if anyone objected to be filmed then I will not film them
- The only concern that was raised was if any of their whakapapa may be published with a system. In Response1 I said that this was not what I was planning to do. Rather, I am seeking to develop a set of software tools that a researcher might use for their own study, and therefore their own data.

I handed over the information sheet to the committee and got the committee chair (Beau Panapa) to sign the consent form.

Protection This research involves my whanau and I have a personal interest in seeing that they are protected from any harm. That being said, there may be instances where people feel that the spot light is on them. It was mentioned previously that if anyone does not want to be filmed then I will not do this. This then leaves the question of footage I may choose to use in my research. Simply if anyone objects to this then I will not use it. From two days there should be more than enough footage to choose from.

It is important to note that this is an ethnographic research. A fundamental precept of the ethnographic methodology is that it seeks to observe people in their natural environment, doing things as they would normally do it. Normally an ethnographer would also seek non-involvement with their subjects (in a sense, to sit quietly while things go on around them), but the particular model used in this study is “Symbolic Interactionism.” In this case the observer recognises that they cannot be divorced from what is going on around them, but that they are as much a part of the event being observed as anyone else and their part is of equal importance, if different. In this study the whanau have been invited to a homecoming and they have responded to that call. They have not responded to an invitation to possibly be part of an analysis. In a subsequent panui it is

my intention to advise people that they are going to be video taped, and not to worry about it. Therefore it would seem strange for everyone to be told when they arrived that they were actually part of a great big study and that they are going to be video taped, and that some of that tape is going to be used in an analysis, and that they have to sign forms of consent or they may not be allowed in. What can only be worse in this situation would be to stand at the gate and hand out information sheets and consent forms to everyone. If I were to tell everyone there that I was going to film them during their homecoming so I can use it for research purposes they will be immediately on their guard and will no longer be themselves, the opportunity to make observations in situ will have been lost. It is this that is vital in an ethnographic analysis.

Ethnography is an accepted research methodology and the concept of protection of the participants' privacy, authenticity and accuracy of recording underpins its very existence, as does the correct and ethical use of any information that is extracted from the observations themselves. In this case I have a greater level of requirement than would otherwise be the case because I am related to these people. If I were to perform badly in this then I would have to live with the shame of that until the end of my own days, let alone adding dishonour to this very special event.

Partnership Previously it has been discussed how much involvement there has been with all parties. This clearly identifies the level of partnership that is involved here. From out of this:

1. I will get a thesis
2. The marae will get koha for the work they have put in
3. I will be gifting photographs of those family members who have passed away to the marae
4. The hapu will get connection to four generations of their people
5. The iwi (Ngati Whatua) will obtain registrations for their records
6. The participants will make connection to their marae
7. Whanau will be given the opportunity to meet and know each other and bond through whanaungatanga
8. Those younger people who have felt disenfranchised because they did not know which iwi to call their own can now do so
9. The uncles and aunties can bridge the gap between the Māori part of themselves and their pakeha upbringing.

C.3 Project Details

Describe in language which is, as far as possible, free from jargon and comprehensible to lay people.

C.3.1 Aim of project

State concisely the aims and type of information sought. Give the specific hypothesis, if any, to be tested.

This study is part of a long term strategy I have of making a system that can be used for genealogy research in fields that are more complex than the simplistic approach afforded by current systems. By and large existing genealogy systems are too complicated and rigid in how they treat data, with the result that data which does not fit the standard model is either lost or masked inside the system and therefore hard to get at.

I have already spent time investigating various genealogy systems and practices used by mainstream practitioners. Of the systems investigated, they were all deficient in important areas like those already mentioned; important data being hidden, data lost when it is transferred to other systems, inability of systems to integrate with other programs: and the practice of genealogy research, whilst founded in well reasoned logic and deserving of respect, tends to under-rate tribal research data because it mostly comes from an oral tradition, although artefacts play an important role.

The research topic has been framed as:

This research will identify human and cultural factors that will explicitly direct the future application of Information Systems design and development. The research question has been framed as: What are the critical factors in the whakapapa process?

This excerpt contains the idea that the processes of design and development for information systems are influenced by many factors that are not obvious, but are vital to the successful deployment of any system. One often hears about the need to address economic and mission critical factors when designing systems, but those systems may then be imposed upon a cultural paradigm in which they have no place, because those people who are expected to use them do not understand them. And those people who do not understand their new systems have not themselves been understood by the people who designed the systems in the first place, because they took either insufficient or no account of human and cultural factors in their design.

From this event it is anticipated that up to 10 hours of footage will be collected (see Appendix on page 211). From that large body of video footage an interaction will be

selected which can be analysed. The footage will be used to determine what symbols and from those, what significant symbols can be determined. Once the symbols have been identified the identities of the participants will no longer be recorded because the symbols will be treated as abstractions.

C.3.2 Why are you proposing this research?

ie what are its potential benefits to participants, researcher, wider community etc?

The event would have, and will proceed with or without the inclusion of this study. It is first and foremost an important event in the life of our family. After spending several years gathering information about our whakapapa — plus the 30 years my aunt has spent — which extends now to about 64 generations, it exists as a capstone event. I see it as an opportunity to gain the most out of the situation because it will never happen again. It is a once only opportunity to gather data about how people interact. It is not an arbitrary occasion that one can conjure so that information can be gleaned, rather the information gathering processes provide an opportunity to extract greater depth and richness from the event, perhaps long after event itself.

In Section C.2.7 on page 179 it was stated that the following benefits would be met by the those concerned in the study:

1. I will get a thesis
2. The marae will get koha for the work they have put in
3. I will be gifting photographs of those family members who have passed away to the marae
4. The hapu will get connection to four generations of their people
5. The iwi (Ngati Whatua) will obtain registrations for their records
6. The participants will make connection to their marae
7. Whanau will be given the opportunity to meet and know each other and bond through whanaungatanga
8. Those younger people who have felt disenfranchised because they did not know which iwi to call their own can now do so
9. The uncles and aunties can bridge the gap between the Māori part of themselves and their pakeha upbringing

The actual research will involve the selection of a portion of footage from that which will have been captured during the event. The overall video does not form part of the research, just that which is to be used.

The research is being done as part of a longitudinal research study with the end result of a system that can be used for the study of tribal cultures. This study will focus on a small part of that, which is to determine what significant symbols exist when people learn about their whakapapa.

C.3.3 Background

Provide sufficient information, including relevant references, to place the project in perspective and to allow the project's significance to be assessed. Wherever possible provide one or two references to the applicant's (or supervisor's) own published work in the relevant field.

The individual and the collective

As a starting point tribal genealogical systems need to be given some kind of context so that the following discussions can maintain their relevance. So far it has been said that existing systems have little or no allowance for tribal data, and that a system which did would be desirable. However the distinction between tribal and other kinds of knowledge needs to be made clear and to achieve this a number of ways of understanding tribal systems are compared with the predominant cultural system, which signals its Græco-Roman roots. And for the purpose of this discussion, as a vehicle for making a clear comparison, two concepts are referred to as the locus and the demotic cultural paradigms (Litchfield, 2003a). These are illustrated in Figure C.1.

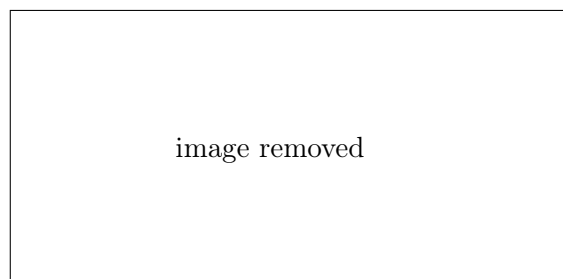


Figure C.1: Representation of cultural paradigms, refer to Figure 3.2 on page 62

Firstly, the demotic can be defined by looking at tribal structures. Tribal cultures maintain some form of collective recall, which are themselves based on traditional values (Mitu, 1998). In this context “tribal” relates to all ethnic groupings who find themselves in their place of origin, not just those that are recognised as *indigenous* today (Smith, 2001). Gregory Cajete (2000:187) makes the observation that the Definition1 of what defines a culture as *indigenous* is the perception that the people are biologically rooted

to that place. He says people are identified by archetypes, metaphorically bonded to a place, out of time. And he also makes the point that such perceptions are found in all places around the world, including "archaic rural folk traditions of Europe."

The idea of the *demotic* is similar to Hofstede's (1991) 'collectivist culture' (which is opposed to his 'individualist culture' — the individualist culture is bound to the concept of "I" and the collectivist culture is bound to "we"). He observed that these Definitions are simplistic and that variances are seen in different countries, for example he found that in Asian countries the concept of 'face' was an expression of collectivism where loyalty to the group was an essential element, and in African or Latin countries people will often subjugate themselves to an autocratic leader as an expression of their adhesion to the greater good. The main point of difference between the collectivist and the demotic is that in the demotic each person is subject to their own choices (not disregarding significant cultural, traditional or social pressures to conform) and the culture is therefore quite fluid. The conception of a collectivist system on the other hand is that it remains transfixed in time, by that thing which gave it being.

The collectivist assumption is that everyone works towards the greater good, or faces the same way, wanting the same thing. The demotic is a collection of people who are part of the same 'family,' each wanting something similar and often facing in different directions. Periodically they will all face the same way, say out of a need for self preservation or the anticipation of gain through profit. But mostly they do not, because in the end family is the most important.

Secondly, and adjacent to the demotic, is the locus where the individual is positioned at the centre of an array of relationships identified by a set of points or lines. To this array events are added, but the individual is ranked above them. The points and lines within the array have their position satisfied or identified by one or more specified conditions — what it is that defines a mother, father, sister, brother, child and so on. So, the locus represents the individual in a family, made up from loci or other individuals. Families or groups of loci are then gathered as subsets — families, extended family groups or communities — within the super set of an event, organisation, nation or cultural identity. In Hofstede's 'individualistic culture' the individual will show a tendency to fulfil their own and their immediate family needs first.

Whakapapa in relation to the collective

Whakapapa is often equated with genealogy, where genealogy is the study of pedigrees, but it is more than that. While whakapapa traces lines of descent (pedigree) it also traces major events within which the existence of groups emerge and are defined according to significant events or more frequently, as the descendants of significant ancestors. Individuals are recognised or explained in the form of story, song, dance or artefact.

Whakapapa forms a thread that creates a fabric of connection within groups. It carries forward the successes and failures that define their status. It places the person into a framework that includes not only themselves and their family group, but the rest of the universe from the beginning of time. It is a collective memory that recalls debt and grievance. It is inclusive. It is demotic.

Perceptions from post-tribal cultures founded upon the recognition of the locus oppose what may be found within the tribal context, in which the concept of the individual does not exist except that they may be remembered by the collective as a metaphor (Cajete, 2000:86).

How this relates to the study

The ultimate outcome will be to develop tools for use in tribal genealogical research, but this study (as mentioned in Sections C.3.2 on page 182 and C.17 on page 218) will concentrate on one small part of that. Before the tools can be adequately developed it is necessary to understand how relationships are formed and what constitutes interactions, in terms of the symbols that are created as people learn about each other.

While the general understanding is in place, the next phase requires direct observation to validate those assumptions.

C.3.4 Procedure

Explain the philosophical approach taken to obtaining information and/or testing the hypothesis.

State in practical terms what research procedures will be used.

State how information will be gathered and processed.

State how your data will be analysed.

Provide a statistical justification where appropriate.

The process of selection for ethnographic methodology and Symbolic Interactionism are discussed and implications during the study are identified in AppendixApp:MethodDiscussion1.

Symbolic Interactionism is somewhat different to other ethnographic methods, mostly the researcher/observer maintains an attitude of dispassionate removal from the scene and simply records what is there and then later tries to make sense of it through various analysis methods, but in Symbolic Interactionism the researcher/observer accepts that they are part of the event and that they too possess symbols through which their interpretation will be effected. Therefore the participants (those who are being observed) may take the lead during interactions (observations, etc.). They may become an agent for their own theoretical basis, their teaching or learning, or other actions.

The procedure for conducting the research will involve the following steps:

1. From the footage that is taken from the homecoming event a small portion will be selected.
2. The people involved in the portion of footage will be contacted and their permission will sought to use them in the research. If they decline then alternative footage will be required.
3. The footage will be transcribed and the resulting text will be input into NVivo for further analysis.
4. During the event notes will be taken, but they will be used to reinforce or clarify points of difference, rather than being part of the research proper.

The data that has been collected will be analysed with the following processes:

1. The footage will be used as video to determine what symbols exist in the interactions. It will be used to confirm the taxonomy I have already developed, which at this stage forms a theoretical basis for the research. This will be written up as a narrative form and pseudonyms will be used to mask the identities of those involved. The footage itself will not be included in the thesis, nor will screen dumps of the participants.
2. It is expected that symbols will be observed that do not fit the theoretical model. These will be used to refine the model as it is now.
3. The transcription will be imported into NVivo and analysed using the theoretical model, plus any changes that come from the observations. These processes are designed to produce abstractions as symbols which can be applied in systems design. Again, pseudonyms will be used.
4. Further analysis of the abstractions will be conducted by applying quantitative methods: Cluster and regression analysis will be applied to gauge the relative importance of symbols.

The method for gathering data will involve immersing myself in the event to see how it will unfold. It is critical that the behaviour of participants are captured in as natural setting as possible and it would be quite inappropriate ask people to sign consent forms or go around handing out information sheets before the event (especially since the event will commence with a powhiri). I will be armed with my journal, a digital handi-cam and 10 hours worth of tape, and a number of artefacts which will be positioned around the wharehau. I will be taking along a large family tree so that people can see where they fit and where other people fit, I will be taking photographs of family members who have passed away and these will be gifted to the marae, and I will be taking a computer

whcih contains a genealogy database of all those people who have been added so far (about 2100 individuals). Of these options I hope that there is going to be sufficient footage for research.

C.4 Participants

C.4.1 Who are the participants? What criteria are to be used for selecting them?

- The participants will be my whanau.
- Selection will be made against the quality of the footage selected for the research. I do not know at this stage what footage will be used. The points listed in Appendix C.17.5 on page 227 will form the basis of how the footage will be selected, I will look for footage that meets those.
- Participants will be told about the research and asked to sign a consent form for them (see Appendix C.13 on page 207) or one for their children if they are involved (see Appnedix C.14 on page 209).
- If participants do not want to be included in the analysis then I will select a different piece of footage.

C.4.2 State whether the participants may perceive themselves to be in any dependent relationship to the researcher (for example, researcher's students).

I regard myself as no better than any other person there, although it is possible that I will be seen in a leadership role because I instigated the affair. I have had a number of people asking me how they can help — although I am trying to keep this as simple as possible.

I must state though, I did not intend that I should be seen in this light. It did not even register with me that this may be the case until my supervisor pointed out that I would be perceived as such. I do not think it would be a good idea to discourage this view until after the event because people tend to want someone to refer to, and at this time it is appropriate the person should be me.

In terms of approaching people for their inclusion in the research, I will phone them to arrange to meet with them to discuss what I want to do. I will then go through the details of what my intentions are. I will emphasise that the event was not arranged as a research project, but rather the idea for using it arose afterwards.

If adults are selected I will ask them to sign a consent form once the research has been explained and they have agreed (Appendix C.13 on page 207. The Information Sheet (Appendix C.11 on page 201) will left with them. If children are involved I will have their parents sign consent forms before using them (Appendix C.14 on page 209).

C.4.3 Are there any potential participants who will be excluded?~~YES~~ / NO

If Yes, what are the criteria for exclusion? N/A

C.4.4 How many participants will be selected?

From the footage it is likely there will be two people selected for analysis, but there may be more depending on the quality of what is filmed.

What is the reason for selecting this number? Conversations generally involve two people, but there may be more.

Provide a statistical justification if appropriate. N/A

Is there a control group? If yes, describe and state how many are in the control group. (delete as appropriate) ~~YES~~ / NO

C.4.5 Describe in detail the recruitment methods to be used

Having viewed the video footage from the event I will choose a portion that meets the needs of the research. When the footage has been selected people will be phoned and an appointment made to meet with them. Their involvement in the research will be discussed at this point and issues related to confidentiality will be outlined and agreed on.

If by advertisement, attach a copy to this Application Form
N/A

C.4.6 How will information about the project be given to participants (e.g. in writing, verbally)?

Information has already been given to kaumātua and the marae committee, the people recruited will receive the same information and the issues in it will be discussed with them so that they have a full understanding of the issues, their part in it and their rights to pull out if they want to.

A copy of information to be given to prospective participants should be attached to this application.

See Appendix C.16 on page 215

C.4.7 Will the participants have difficulty giving informed consent on their own behalf?

Consider physical or mental condition, age, language, legal status, or other barriers. (delete as appropriate)

YES / ~~NO~~

Provide details

Some children will be too young to be considered as being capable of giving informed consent (either toddlers or babies), others will be minors. In these cases their parents will sign consent forms on their behalf.

If participants are not competent to give fully informed consent, who will consent on their behalf?

Their parents or guardians.

Will these participants be asked to provide assent to participation? (delete as appropriate)

~~YES~~ / NO

If Yes, attach a copy of the form which will be used.

C.4.8 Will consent of participants be gained in writing?

YES / ~~NO~~

If Yes, attach a copy of the Consent Form which will be used.

See Appendix C.10 on page 199. Note that this form, although not correct, has been signed by the chairman of the marae committee, he is also one of the two kaumātua that look after the marae. It would not be appropriate to go back to him again and have another form signed since he will be, for the sake of the study's intent, be agreeing to the same things.

The Information Sheet that contains the information that the marae committee agreed to is attached in Appendix C.11 on page 201.

Otherwise the research participants will be asked to sign the forms in Appendices C.13 and C.14.

If No, give reasons for this

N/A

C.4.9 Will the participants remain anonymous to the researcher?

~~YES~~ / NO

If no, describe how participant privacy issues and confidentiality of information will be preserved.

It must first be disclosed that this will be my extended family, and therefore I will be far from anonymous. Also, since I am organising the event there is every likelihood that I will be a focal point for people to talk to. I accept that I have an obligation to protect the private information of individuals that has been entrusted to me. I accept that I will not use or divulge that information without the permission of those people concerned for any purpose other than that for which they gave it to me originally. To protect the identity of individual participants is not such an easy thing to achieve.

Confidentiality will be attempted by the use of masking with pseudonyms.

C.4.10 In the final report will there be any possibility that individuals or groups could be identified?

YES / ~~NO~~

If Yes, please explain.

I have my journal notes as appendices in the thesis. These include a large amount of personal information and references to specific individuals and events. However in the analysis, within the thesis, peoples' and groups' identities can be masked with the use of pseudonyms.

Confidentiality of participants may not be guaranteed in the thesis because while their names and identities will be masked with pseudonyms it is possible that someone who knows them or the stories they are referring to could guess at it and therefore the right answer. Also, the transcripts will form an appendix in the thesis and some recognition may occur there too.

C.4.11 Will feedback will be disseminated to participants?

YES / ~~NO~~

If Yes, please explain how this will occur.

People will be offered the opportunity to see the thesis once it is finished.

C.5 Other project details

C.5.1 Where will the project be conducted?

The event will occur at our marae, Ahikiwi.

C.5.2 Who will actually conduct the study?

I will conduct the study myself and will most probably wield the video camera, or my wife who will be there too (Karol Wilczynska).

C.5.3 Who will interact with the participants?

That will be me, Alan Litchfield.

C.5.4 What are the ethical risks involved for participants in the proposed research?

(Include moral, physical, psychological, etc. risks).

People may object to their being used in the research for fear that they may be considered in an unfavourable light. Or that they are being scrutinized by someone else.

If there are risks, identify and describe how these will be mitigated?

The participants are given the right to withdraw their footage from the analysis.

C.5.5 Will there be any other physical hazards introduced to AUT staff and/or students through the duration of this project?

(delete as appropriate)

~~YES~~ / NO

If yes, provide details of management controls which will be in place to either eliminate or minimise harm from these hazards

(i.e. a hazardous substance management plan).

C.5.6 Are the participants likely to experience any discomfort, embarrassment (physical, psychological, social) or incapacity as a result of the procedures?

(delete as appropriate)

~~YES~~ / NO

If Yes, have you approached AUT Health and Counselling to discuss suitable arrangements for provision of services to deal with adverse physical or psychological consequences (refer section 2.3 of the AUTECH Guidelines)?

(delete as appropriate)

~~YES~~ / NO

If No, explain the arrangements which have been made to have qualified personnel available to deal with unexpected adverse physical or psychological consequences?

NA

C.5.7 Is deception of participants involved at any stage of the research?

(Refer Section 2.4 of the AUTECH Guidelines).

(delete as appropriate)

~~YES~~ / NO

If Yes, provide details and rationale.

1. Consent has been granted from the marae committee and kaumātua
2. The event was going to be video'd anyway
3. Consent from participants will be obtained when they have been identified

C.5.8 How much time will participants have to give to the project?

They will be giving no time, except for the meeting to discuss their involvement.

C.5.9 Will any information on the participants will be obtained from third parties?

No

C.5.10 Will any identifiable information on the participants be given to third parties?

(delete as appropriate)

~~YES~~ / NO

If Yes, provide details.

N/A

C.5.11 Provide details of any payment, gift or koha and, where applicable, level of payment to be made to participants.

(Refer Section 2.1 of the AUTECH Guidelines and Appendix A on Payment and Koha).

No koha or payment is being made for participation in the research.

C.6 Data & Consent Forms

C.6.1 Who will have access to the data?

Initially only Alan Litchfield, and during consultation with his supervisor Dr. Philip Carter. Afterward access will then be controlled by the supervisor and Usability Lab technician, Blake Lough.

C.6.2 Are there plans for future use of the data beyond those already described?

The applicant's attention is drawn to the requirements of the Privacy Act 1993

There are no plans to use the data beyond this study.

In the case of publication of material, in general terms it is likely that reference will be made to the thesis and the research, rather than publishing the material directly. Some excerpts may be taken from the transcript to illustrate point, but as it has already been stated in Section 3 on page 185 the transcript will use different names to those of the actual participants.

C.6.3 Provide the location and duration of final storage of data.

AUTEC requires that the data be stored securely on AUT premises for a minimum of six years in a location separate from the consent forms

The CD/DVD will be stored in a cabinet in the office of Dr. Philip Carter, on the 13th floor of the Oracle Tower, Wakefield Street, Auckland. Duration in this location is dependent upon the Business Faculty, and how long these facilities will remain in the current location.

C.6.4 Will the data be destroyed?

(delete as appropriate)

~~YES~~ / NO

If Yes, how?

NA

C.6.5 Who will have access to the Consent Forms?

Initially only Alan Litchfield, and during consultation with his supervisor Dr. Philip Carter. Afterward access will then be controlled by the supervisor and lab technician Blake Lough.

C.6.6 Provide the location and duration of final storage of Consent Forms.

AUTEC requires that consent forms be stored securely on AUT premises for a minimum of six years in a location separate from the data.

The Consent Forms will be stored in a cabinet at the Usability Experience Lab, which is at AUT Tech Park, Ellerslie, Auckland. Duration in this location is dependent upon the Business Faculty, and how long these facilities will remain in the current location.

C.6.7 Will the Consent Forms be destroyed?

(delete as appropriate)

~~YES~~ / NO

If Yes, how?

NA

C.7 Material Resources

C.7.1 Has application for funds to support this project been (or will be) made to a source external to AUT?

(delete as appropriate)

~~YES~~ / NO

If Yes, state the name of the organisation(s).

NA

C.7.2 Has the application been (or will it be) submitted to an AUT Faculty Research Grants Committee or other AUT funding entity?

(delete as appropriate)

~~YES~~ / NO

If yes, provide details.

NA

C.7.3 Is funding already available, or is it awaiting decision?

(Give details)

NA

C.7.4 Explain the investigator's or co-investigator's financial interest, if any, in the outcome of the project.

From out of this study I expect to get knoweledge and experience. I will get a thesis, but I doubt that it will lead to any kind of financial reward. There are no plans for making money on this. On the other hand, I am spending all my own money on setting up the event, for the good of the family.

C.8 Other Information

C.8.1 Have you ever made any other related applications?

(delete as appropriate)

~~YES~~ / NO

If yes, give AUTECH application / approval number(s)

NA

C.9 Checklist

Incomplete applications will not be considered by AUTECH.

- A General Information Completed
- B Signatures/Declaration Completed
- C Project General Information Completed
- D Project Details Completed
- E Participants Completed
- F Other Project Details Completed
- G Data & Consent Forms Completed
- H Material Resources Completed
- I Other Information Completed

Spelling and Grammar Check

- Attached Documents (if applicable)
- Participant Information Sheet(s)
- Consent Form(s)
- Questionnaire(s)
- Advertisement(s)
- Hazardous Substance Management Plan
- Other Documentation

Send one (1) copy (single sided, clipped not stapled) of the application form with all attachments to Madeline Banda, Executive Secretary, AUTECH.

C.10 Consent Form signed by kaumātua

B7 CF01
PID
RID



Consent to Participation in Research

This form is to be completed in conjunction with, and after reference to, the AUTECH Guidelines Version 1.4 (Revised July 2003).

Title of project: Modelling tribal genealogies for information systems development

Project Supervisors: Dr Philip Carter, Dr Brian Cusack

Researcher: Alan T Litchfield

-
- I have read and understood the information provided about this research project as outlined in the information sheet (c41S01).
 - I have had an opportunity to ask questions and to have them answered.
 - I understand that the event will be videotaped.
 - I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way. If I withdraw, I understand that all relevant tapes and transcripts, or parts thereof, will be destroyed.
 - I agree that I will not disclose information to any person, firm, or corporation about the research conducted.
 - I grant permission for any information collected to be used for purposes as outlined in the information sheet.
 - I agree to take part in this research.

Participant signature:

Participant name:

Date:

Approved by the Auckland University of Technology Ethics Committee

C.11 Information Sheet given to kaumātua and marae committee

C4 IS01
PID
RID

Information Sheet for modelling tribal genealogies for information systems development



Introduction

I have been engaged for some years in the gathering of whakapapa from various sources. Recently this has been put into a computerised genealogy program from America, but I have found certain problems with accessing and retaining important information. In fact what I have found is that this and other similar systems, because they do not deal well with tribal information, have a tendency to obscure vital knowledge.

In response I have, as part of my personal desire to know and understand and as part of my post graduate study and research, looked at how I could design a system which is able to deal with the often abstract relationships, information and knowledge that exists in iwi (because I am most familiar with this). In order to do that I need to understand better what goes on when people learn or use whakapapa. This has therefore led me to my current position, in which I want to observe people who are engaged these processes.

At this time I am writing my thesis for the degree of Masters in Business (Information Technology), and the research question I am seeking to answer is: What significant symbols can be identified from the whakapapa process? From this study I do not expect to fully answer this question, but it will be an important step along the way.

This research is IT focussed and eventually it is my intention to use the results to prototype a system that can be used to store, retrieve and analyse whakapapa and other tribal data. The research involves a number of parts that include reviewing literature related to genealogy and information systems development and a component will involve direct observations of people engaged in genealogy.

To that end I will use a small portion of the video recordings I will have taken of people during the upcoming homecoming of the Nepia family at Ahikiwi Marae. The footage will be used to guide the development of the proposed system through an ethnographic analysis process.

The ethnographic analysis method symbolic interactionism will be used to identify significant symbols, from which systems capable of managing complex data structures may be

C4 IS01
PID
RID

developed later. Interactions observed in the process of data gathering will be investigated to map processes in the way they appear in real life, to closely reflect how people actually do things.

Procedure

The data gathering method that is going to be employed does not require any special behaviour from people because it requires observation of people doing normal things. It is our intention to be as unobtrusive as possible, and we assume that people will accept a video camera in this kind of situation because of what it is anyway.

After the event the footage will be reviewed and one or perhaps two sections will be identified as useful for further analysis. This may be a short section or slightly longer, it is not the length that is important but the quality of the interactions to be observed.

Results

The results of the data gathering exercise will be used in the writing of the thesis and for the future development of a genealogy system that is capable of dealing with tribal data.

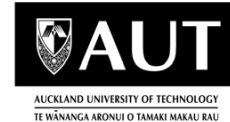
The nature of video means the anonymity of those engaged in the selected portion may not be ensured. But it will only be myself and my supervisors who will normally have direct access to the footage.

When the study is complete I am obligated to keep a copy of the research data for a period of about 10 years. This material will be securely stored and destroyed when no longer of use for its original purpose. The selected portion(s) will not be used for anything other than the purpose that has been stated here.

C.12 Information Sheet to be given to participants

C4 IS01
PID
RID

Information Sheet for modelling tribal genealogies for information systems development



Introduction

I have been engaged for some years in the gathering of whakapapa from various sources. Recently this has been put into a computerised genealogy program from America, but I have found certain problems with accessing and retaining important information. In fact what I have found is that this and other similar systems, because they do not deal well with tribal information, have a tendency to obscure vital knowledge.

In response I have, as part of my personal desire to know and understand and as part of my post graduate study and research, looked at how I could design a system which is able to deal with the often abstract relationships, information and knowledge that exists in iwi (because I am most familiar with this). In order to do that I need to understand better what goes on when people learn or use whakapapa. This has therefore led me to my current position, in which I want to observe people who are engaged these processes.

At this time I am writing my thesis for the degree of Masters in Business (Information Technology), and the research question I am seeking to answer is: What significant symbols can be identified from the whakapapa process? From this study I do not expect to fully answer this question, but it will be an important step along the way.

This research is IT focussed and eventually it is my intention to use the results to prototype a system that can be used to store, retrieve and analyse whakapapa and other tribal data. The research involves a number of parts that include reviewing literature related to genealogy and information systems development and a component will involve direct observations of people engaged in genealogy.

To that end I will use a small portion of the video recordings I will have taken of people during the upcoming homecoming of the Nepia family at Ahikiwi Marae. The footage will be used to guide the development of the proposed system through an ethnographic analysis process.

Will use a method that employs observation of people, their gestures, mannerisms, and so on to create a basis on which systems capable of managing complex data structures may be

C4 IS01
PID
RID

developed later. Interactions observed in the process of data gathering will be investigated to map processes in the way they appear in real life, to closely reflect how people actually do things.

Procedure

- From the footage that is taken from the homecoming event a small portion will be selected.
- The footage will be transcribed and the resulting text will be input into a program for further analysis. At this stage all identities of individuals will be masked.
- During the event notes were taken, but they will be used to reinforce or clarify points of difference, rather than being part of the research proper.

Results

The results of the data gathering exercise will be used in the writing of the thesis and for the future development of a genealogy system that is capable of dealing with tribal data.

The nature of video means the anonymity of those engaged in the selected portion may not be ensured. But it will only be myself and my supervisors who will normally have direct access to the footage.

When the study is complete I am obligated to keep a copy of the research data for a period of about 10 years. This material will be securely stored and destroyed when no longer of use for its original purpose. The selected portion(s) will not be used for anything other than the purpose that has been stated here.

C.13 Consent Form for adults

B7 CF01
PID
RID



Consent to Participation in Research

This form is to be completed in conjunction with, and after reference to, the AUTECH Guidelines Version 1.4 (Revised July 2003).

Title of project: Modelling tribal genealogies for information systems development

Project Supervisors: Dr Philip Carter, Dr Brian Cusack

Researcher: Alan T Litchfield

-
- I have read and understood the information provided about this research project as outlined in the information sheet (c4is01).
 - I have had an opportunity to ask questions and to have them answered.
 - I understand that the event will be videotaped.
 - I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way. If I withdraw, I understand that all relevant tapes and transcripts, or parts thereof, will be destroyed.
 - I agree that I will not disclose information to any person, firm, or corporation about the research conducted.
 - I grant permission for any information collected to be used for purposes as outlined in the information sheet.
 - I agree to take part in this research.

Participant signature:

Participant name:

Date:

Approved by the Auckland University of Technology Ethics Committee on ?? AUTECH
Reference number ??

C.14 Consent Form for adults to sign on behalf of children

B7 CF01
PID
RID



Consent to Participation in Research
To be signed on behalf of minors by their guardian
or parent

This form is to be completed in conjunction with, and after reference to, the AUTECH Guidelines Version 1.4
(Revised July 2003).

Title of project: Modelling tribal genealogies for information systems development

Project Supervisors: Dr Philip Carter, Dr Brian Cusack

Researcher: Alan T Litchfield

- I have read and understood the information provided about this research project as outlined in the information sheet (c41s01).
- I have had an opportunity to ask questions and to have them answered.
- I understand that the event has been videotaped.
- I understand that I may withdraw my child or any information that he/she has provided for this project at any time prior to completion of data collection, without being disadvantaged in any way. If withdrawn, I understand that all relevant tapes and transcripts, or parts thereof, will be destroyed.
- I agree that I will not disclose information to any person, firm, or corporation about the research conducted.
- I grant permission for any information collected to be used for purposes as outlined in the information sheet.
- I agree to take part in this research.

Parent/guardian signature:

Child name:

Date:

Approved by the Auckland University of Technology Ethics Committee on ?? AUTECH
Reference number ??

**C.15 First panui distributed to family members and posted
on the Internet**

The Nepia Homecoming 24–25 April 2004

Announcing the homecoming of the descendents
of Tame and Kathleen Nepia.

Update: 7 March 2004



In 1908 Tame Puhipi Nepia was born at Ahikiwi, almost directly in front of what is now the marae. Despite the fact that he was the youngest son, his was a notable birth because he was still the grandchild of the Te Rarawa Ariki, Te Morenga and Mereana Haki Te Ura, a daughter of Matutaera Tawhiao and elder sister of Mahuta. He later married Kathleen Litchfield and together they had 15 children in Mamaranui and Dargaville.

The Nepia family was born into a time of difficulty in New Zealand. It was the Depression and post Second World War so money, appropriate housing and food were hard to come by. It was for this and other reasons that the children tended to grow apart, having less and less to do with each as they married, left Dargaville and had families of their own.

None of them had anything to do with their father's marae at Ahikiwi, or the main Te Ohaki marae in Ahipara, west of Kaitia. With the result that their children and grand children lost connection to home, many finding it difficult to call themselves Tangata Whenua when they could not even name where their land lay.



I found myself in this position, not really knowing whether to call myself Pakeha or Maori, but still having the knowledge of my descendancy. So I made the journey back to find where my place was in Aotearoa New Zealand. It led to Ahikiwi and there I met the kaumatua who welcomed me home, formally. But I reminded them that I was not alone. There are three generations of Tame's mokopuna who have not been home to their marae. To which they replied that we need to get everyone who wants to come, and welcome all of them.

Is this a reunion? While in any normal circumstance this may be classed as a reunion, in our case it is not really. So many of our family have never met that "reunion" is a term that doesn't fit, and therefore this is more of a "homecoming."

When is it? The event will be happening over two days, beginning with the powhiri at 11:00am, Saturday 24th April, 2004. Please try to be on time for this, arrive before this time and not during.

An additional powhiri will be at Waipoua Forest at 2pm, Sunday 25th April, 2004.

What will be happening?

Day 1: Saturday, 24 April:

Starting at 11:00am will be the powhiri. The formal welcoming onto the marae, which will last for about an hour during which time there will be speeches. You need to make certain you are there with time to spare. If you are travelling a long distance, remember to start early.

After the formal welcoming will be lunch. This is being provided by the marae, so please remember to bring koha with you. During lunch will be plenty of time for whanautanga, the building of relationships. A family tree of the Tame line will be posted so people can make links between cousins.

At the end of the first day people will stay on the marae in the whareniui and if overflows need to be accommodated there is plenty of room in the wharekai.

Day 2: Sunday, 25 April:

All day will be family time and getting to know each other. You may give koha to Alan Litchfield, who will pass it on to the marae committee, rather than everyone doing this independently.

To mark this very special time, after lunch (2pm) the whanau are invited to move up to Waipoua Forest where the tangata whenua there will welcome the party into the forest where Tane Mahuta lives.

How do I get there? Ahikiwi is just north of Dargaville, past the Kai Iwi Lakes turn off. Refer to the map.

What do I need to bring?

- Food will be put on by the marae committee. Please bring koha, in the form of money, to help the marae cover the cost of hosting us all.
- Mattresses are available, but you will want to bring bedding like sleeping bags and pillows.
- Toiletries will be necessary. There are bathing facilities.
- Bed clothing appropriate to sleeping in a communal environment.

What do I do now?

All you have to do is let me know you are coming by completing the form on the next page.

If there are several of you coming please complete a copy of the form for each person, including children. I want to use this information to check that my whakapapa records are complete and accurate.

The Nepia Homecoming

Attendance Form

Tell me that you are coming to the homecoming by filling out this form and sending it back.

Name _____
Street _____
Suburb _____
Town/city _____
Phone _____
Mobile _____
email _____

Tell me a little about yourself.

The following questions will help in putting together the family tree.

Date of birth _____

Mother's name _____
Maternal grandmother _____
Maternal grandfather _____

Father's name _____
Paternal grandmother _____
Paternal grandfather _____

Any other comments _____

I will use the information to get an idea of how many people to expect and to put together a family tree. It will be added to or update existing information in my genealogy databases.

Post your form to: Alan Litchfield

PO Box 1941

Auckland

Or fax to: (09) 846 4190

Or complete the online form at:

<http://www.alphabyte.co.nz/attendanceForm.html>

The Nepia Homecoming

Map



**C.16 Second panui distributed to family members and posted
on the Internet**

The Nepia Homecoming 24–25 April 2004

Update:
28 March 2004

Kia ora whanau,

It is less than four weeks to go before we all meet at Ahikiwi and I thought you might appreciate being filled in on some of the details before we get there. I have spoken to some of the whanau during the past few weeks and there seems to be a common theme in the questions I have been asked, which is that people are a little concerned about going to a marae, and then what to do there.

Last weekend Karol and I went to Ahikiwi to meet with the marae committee. At the meeting I clarified some of the issues that needed attention, like what to do with photographs, who is going to guide us in during the powhiri and so on. I want to address these issues in this panui.

I am continuing to receive forms telling me who is coming. The response has been great and the messages of support I have received are very encouraging. So far I have confirmed that about 50 of our whanau will be there, but I guess there will be others who have not sent in a form.

We will all meet whanau who we know, who we have not seen in years, and those we have never met. We will meet cousins who may work or live close by but we never knew who they were. And we will meet the descendants of our grandparents, or great grandparents, such as a cousin who made contact with me, the great grand daughter of Teni Nepia (Puki's eldest brother) — kia ora Vonda, can't wait to see you.

I posted out the first panui to everyone I had mailing addresses for. But some said they had not received one. If you know of anyone who didn't get a copy and wants one let me know and I will post one out. I apologise to anyone who may have been expecting one and did not receive it.

Also, if anyone does not receive this second panui by post, please send a copy on to them. Again, I can post out additional copies if needed.

What to do when you get there

1. At Ahikiwi you can be yourself, you do not have to be anything you are not. Ahikiwi is a very warm and inviting place and the approach to protocol is quite relaxed, although there are some practices we will observe when we enter the marae and when in the wharenui or wharekai.
2. As a permanent record I will be videoing the weekends' events with a handi-cam. So please ignore it, no hamming or awkwardnesses are required.
3. Before the powhiri we will assemble in the car park. The powhiri is at 11a.m. You will need to be there well before kick off, it is not good form to arrive during the powhiri. Remember, it takes about three hours to get to Ahikiwi from the Harbour Bridge in Auckland. So you should be able to work your travel times from there. Do not enter the marae or the wharekai before the powhiri, of course you might need to visit the wharepaku (toilet). We will sort ourselves out into the proper order of entry before we start. If you have brought any photos, taonga or other memorabilia it is best to leave that in the car until lunch time. There have been instances where things have been taken onto marae incorrectly and they have had to stay there as a result.
4. The powhiri is the formal welcoming onto the marae. It is led by a karanga, or call, which is answered by one in our group (this role will be filled by Lil, who is a resident there). We are the manuhiri, or visitors, at this point (see the note on the next page for clarification).

Remember this panui and the previous one are online at:
http://www.alphabyte.co.nz/whanui_panui/index.html

When the response is answered we will file onto the marae, which is the open area in front of the wharenui. The wharenui is named Te Arangamai o te Whakapono (The Resurrection and the Faith, in English).

The manuhiri are led onto the marae by the women, the first of which will be sisters carrying photographs of the whanau who have "left the wharenui." The photographs will be facing forward, meaning that they will stay on the marae permanently.

Following the women will be the men.

5. The manuhiri will be conducted into the wharenui and the sisters carrying the photographs will take them to the front wall and place them below the photographs already there, looking back to the people. The women will then go back to the manuhiri and they, with the rest of the women, will file into the seating provided, filling them from the back to the front.

Normally the seating is divided so that the manuhiri sit opposite the hunga kainga (the home people), and to the right as you enter the wharenui.

So remember, if you don't know where to go, turn right.

6. When the women have found their places the men will continue to fill the seats from the back to the front until everyone has found a place.
7. The speeches will begin with a karakia from the kaumatua or a minister. While most will be spoken in Maori, English can also be used. For each speaker that the hunga kainga present, the manuhiri need to present one too. So if they have two speakers, then we have two speakers, for example.
8. When the hunga kainga have presented their last speaker, which will be the kaumatua we will present our speakers. The last one will be me, **I am the spokesman for our whanau on this occasion.**

Anyone can get up to speak at this time, provided it is their turn to do so. At Ahikiwi it does not matter if it is a man or woman.

If you stand up to speak please

introduce yourself, which you can do in English or Maori. If you know your whakapapa you can do your mihi.

9. After the last speaker there is generally some singing. This is where I need your help. I need some people who can have songs up their sleeves in case they are needed. If you practice a song and don't use it, don't worry, there will be plenty of opportunity later. We may even have our own Ahikiwi Idol.

10. Once all the singing and speeches are done then we hongi.

Basically the hunga kainga all get in one line and we file along hongi-ing the men and kissing the cheeks of the women, or hongi-ing them too.

The hongi, if you are unfamiliar with it, involves grasping the hand of the man firmly, or woman not so firmly, leaning forward and touching nose to nose, then leaning slightly further forward to touch forehead to forehead. It can be done with both men and women.

The correct greeting, if you do not know the person or you want to give a formal greeting, use "tena koe." A less formal greeting is "kia ora." After the hongi is done we wait for someone to say that it is time for tea! Then...

That's it — we are home.

Note:

While we are acting as manuhiri, we are not. We are tangata whenua here. This process is being used to create a formal instance of homecoming for our whanau. At any other time you can come and go from the marae pretty much as you please and you can use it too (although any gatherings need to be booked because the marae is used quite a lot). Of course with rights comes responsibilities, but let's talk about those later.

Some rules

1. No shoes are worn in the wharenui.
2. On most marae the women wear long black skirts. This is not required at Ahikiwi. That is, women don't have to wear skirts, but black is good.
3. It is proper that men should wear good clothes and not T-shirts and shorts, etc. I will be wearing a suit.
4. Ahikiwi is a non-smoking marae. That means you cannot smoke on the marae, in the wharenui, in the wharekai or in the space between them. You can smoke in the carpark or in the garage out the back.
5. There is to be no alcohol or drugs at the marae. These elements would only serve to spoil the occasion, especially given the large number of children present. If you really want a drink, Kaihu is just up the road and a pub is there.
6. All food will be served by the marae, so you will not be expected to bring any with you, unless you have dietary conditions to meet of course. If you do, can you please let me know and I can pass the information onto the cooks. Instead, please bring koha. I will collect it on the Saturday or Sunday and pass that on to the kaumatua. I have been asked how much to pay, but it is not proper for me to say. So pay what you consider to be reasonable. Think how much it will cost to feed about 60 people for four meals, and the electricity they will consume.
7. Karakia are said before most things, and often at the end of things. It is a good idea to allow for this, especially when it comes to eating lunch, etc.

Alan T Litchfield, PO Box 1941, Auckland
alan@alphabyte.co.nz

C.17 Discussion of methods

The study seeks to determine what symbols, and therefore what significant symbols, exist when a person is referring to their whakapapa in a social setting. The field of whakapapa will be identified within a framework outlined by Foucault. From this it is clear that there are cultural imperatives so that better understanding of the context of tribal genealogy is required because the locus model of familial relationships presents fundamental problems when applied to tribal relationships. The locus (see Section on page 182) does not allow for the complex relationships that identify a person, for example the Definition1 of family or whānau includes ones immediate family (birth parents, siblings, etc.), hapū (extended family relations typically based on the location of a marae, or meeting house), or iwi (tribal relations based on ones descendancy from a focal ancestor or tupuna), and depending upon a persons birth they may belong to more than one whānau, hapū or iwi.

Since demotic relationships tend to be complex and fluid they evolve over time, whereas locus relationships are fixed at the time of birth. In both cases a person accrues attributes throughout their life, but the demotic may add familial relationships. To model these complex relationships, and to understand their implications, necessitates the application of appropriate data gathering and analysis methods. Any method needs to be sensitive to the people and their context, it is not enough to simply go in with a questionnaire and ask for information that is often regarded as sacred. To retain a degree of separation during the data gathering phase may be regarded as rude and offensive because when one is welcomed into a circumstance it is inappropriate to then stand apart. Therefore it is proposed that the method include an element of immersion in the context, to better understand it and to experience it from an insiders standpoint.

People regard whakapapa as very private and at the same time it is intrinsic to tribal makeup. In this case the kind of information required is suspected but not fully known, therefore it is proposed that unstructured interview methods are applied. These may then be analysed later to discern what kinds patterns emerge and therefore the ethnographic method of Symbolic Interactionism provides this fine grained approach, leading to abstractions later.

A stated aim of this research is to identify human and cultural factors that can be used as predictors in systems design and development, so the research method needs to satisfy this requirement. It is proposed that this study concentrate on a small group which can be considered as representational of the larger group of Māori. This small group retains knowledge of tribal genealogical structures, but its members may not be consciously aware of how this knowledge is framed or transferred. It is understood, too, that every iwi differs in the details of how whakapapa are recalled or related, such variations are outside the scope of this study. The main focus is to identify factors that

Term	Meaning
Model	An overall framework for looking at reality (e.g. Symbolic Interactionism)
Concept	An idea deriving from a given model
Theory	A set of concepts used to define and/or explain some phenomenon
Hypothesis	A testable proposition
Methodology	A general approach to studying research topics
Method	A specific research technique

Table C.1: Basic terms in research. *Source: adapted from Silverman, 2000:77*

can be applied to other groups. Later studies may then test these.

To extrapolate findings as predictors it is proposed that quantitative methods are applied. These are not proposed as a replacement or in preference to qualitative methods, but to compliment and reinforce them.

From these points one can now begin to list the criteria that a method must satisfy:

- Allow for immersive data gathering
- Include methods for discerning structure in social organisations
- Have deep interpretative methods
- Data gathered can be used in quantitative as well as qualitative analyses
- The focus is fairly well defined, but is still open to change

The use of stories from key informants is critical to the presentation of theses, and to obtain depth in analyses. Silverman (2000:14) says that without the inclusion of stories a research may be considered as empty and unhelpful, therefore part of the requirement will be to find those stories that are representational of themes.

Given the breadth of experience already held about whakapapa, and the environment in which it is recognised, it is appropriate that ethnographic methods are used, rather than grounded theory. David Silverman, in his book *Doing Qualitative Research; A practical handbook* (Silverman, 2000), provides a template for conducting an ethnographic research and analysis (see Table C.1).

In the following sections the terms are discussed to illustrate how the methodology was developed for the study (see Figure C.2 on the following page).

C.17.1 Model

The model or paradigm provides an overall framework through which one can begin to understand reality. Any model usually has two elements, ontology and epistemology

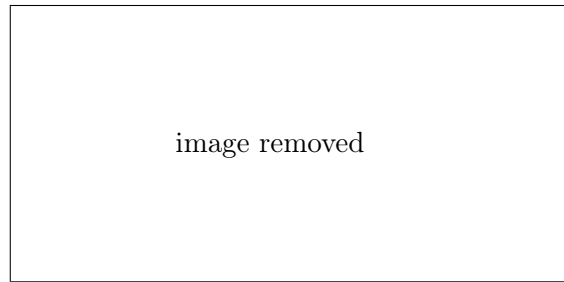


Figure C.2: Whakapapa as a process of symbolic interactions. Refer to Figure 3.1 on page 58.

and current understandings of these have been reviewed in Section on page 222. The reality and basic elements of whakapapa touches all aspects of Māori life.

Silverman (2000:77) identifies a number of models, of these *Symbolic Interactionism* fits best. Symbolic Interactionism has a long history in sociology and was led by Herbert Blumer (1900–1987), Erving Goffman and George Herbert Mead (1863–1931). It provides a framework in which examination of how individuals and groups interact, with the focus on the creation and development of personal identity through interaction with others (Symbolic Interactionism, 2003). Symbolic Interactionism grew out from social constructionism, in which Peter L. Berger and Thomas Luckmann (1966) describe ways that one might discover how social reality and social phenomena are constructed, then institutionalised and eventually reduced to tradition. In social constructionism the focus is on describing institutions, actions, etc. and not on analysing causes and effects. Berger and Luckman say people build a reality based on their experience and their interpretation of knowledge, which is then reinforced by them reproducing their reality in what they do and say (Social Constructionism, 2003).

The focus in Symbolic Interactionism is on subjective aspects of social life, rather than on large scale objective issues — this premise extends the work of Max Weber (1864–1920). Concentrating on face-to-face interactions and the meaning of events to the participants involved (the ‘Definition1 of the situation’) moves the researcher’s attention away from societal norms and values, and towards social processes that are changeable and continually readjusting. As McClelland points out, “negotiation among members of society creates temporary, socially constructed relations which remain in constant flux, despite relative stability in the basic framework governing those relations” (McClelland, 2000). In regard to whakapapa, this perspective is vital to understanding how relationships are built and defined. For example, humans are regarded as ‘pragmatic actors’ who are continually adjusting their behaviour to the actions of other actors. But humans are also ‘creative participants’ who construct their social world. They are not

passive, conforming objects of socialisation even though they interpret other humans, actions and themselves as objects. This is made possible because humans can ‘interpret’ actions and other actors symbolically, and they can rehearse actions before committing to one.

As Blumer states:

The term “symbolic interaction” refers to the peculiar and distinctive character of interaction [that occurs], as it takes place, between human beings. The peculiarity consists in the fact that human beings interpret or “define” each other’s actions instead of merely reacting to each other’s actions. Their “Response1” is not made directly to the actions of one another but instead is based on the meaning . . . they attach to such actions. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another’s actions. This mediation is equivalent to inserting a process of interpretation between stimulus and Response1 in the case of human behavior.

(Blumer, 1969:180)

Blumer’s (1986:78–79) characteristics of this approach are:

Human interaction

Actions are always joined with mutual Response1 and adjustment between the actor and others who are involved. The self of a person, if it emerges, develops from both the individual and how others see them too. Therefore human interaction is concerned with joint acts that define the form and structure of individual lives and societies.

Definition

Involves the interpretation or Definition1 of human interaction, rather than mere reaction.

Response based on meaning

Change, adjustment, becoming

Use of symbols

It is the humans’ creative and extensive use of symbols to communicate that distinguishes them from other creatures.

Stimulus and Response

Interpretation between stimulus and Response1.

Further understanding of Symbolic Interactionism may be gained from the following excerpt. George Herbert Mead (1967:181) refers to a hypothetical example in which a person threatens another and there is an instant Response1 of physical harm, but that act is devoid of consideration and is therefore, in Mead's interpretation, base. As a comparison Mead presents an alternative situation that involves the use of the human mind to create alternative actions and then to choose which one will afford the best possible outcome. It is by this device that he attempts to define what is meant by a symbol, first, and then second, the significant symbol.

A person threatens you, and you knock him down on the spot. There has been no ideal situation. If you count ten and consider what the threat means, you are having an idea, are bringing the situation into an ideal setting. It is that, we have seen, which constitutes what we term mind. We are taking the attitude of the community and we are responding to it in this conversation of gestures. The gestures in this case are vocal gestures. They are significant symbols, and by symbols we do not mean something that lies outside of the field of conduct. A symbol is nothing but the stimulus whose Response1 is given in advance. That is all we mean by a symbol. There is a word, and a blow. The blow is the historical antecedent of the word, but if the word means an insult, the Response1 is one now involved in the word, something given in the very stimulus itself. That is all that is meant by a symbol. Now, if that Response1 can be given in terms of an attitude utilized [sic] for the further control of action, then the relation of that stimulus and attitude is what we mean by a significant symbol.

(Mead, 1967)

C.17.2 Concept

Silverman (2000:78) defines the concept as "specified ideas deriving from a particular model," for example, the idea of defining a situation with interactionism and the use of a documentary method of interpretation with ethnomethodology.

So a concept is an idea that is derived from the model just discussed. Take an example, in Blumer's (1986:153–160) discussion of the development and application of concepts in social sciences, he compares perception and conception, in which the process of perception relates to the process a person undertakes when they orientate themselves with their environment. Their perception then allows them to take some action, unless blocked in some way. The conceptual process, on the other hand, allows the person to circumvent such obstacles. That is, if a person finds their activity frustrated and their perception insufficient their conceptualisation allows them to re-orientate themselves, and undertake a different course of action. Their new concept feeds back into

perceiving, reshaping or influencing perception. This process of conceptualisation involves the abstraction of phenomena so that what is observed can be applied in other circumstances.

Foucault's discourse on genealogy in *Nietzsche, genealogy, history* (Foucault, 2000) provides a framework through which current understandings and writings relating to whakapapa can be analysed. This has identified fundamental concepts that were used for the ethnographic analysis of the process of information transfer in whakapapa. Illustrations of these concepts are found in Figures C.1 and C.8, on pages 182 and 227 respectively and below are listed the findings from an extensive comparison of Foucault's comments and information that specifically relates to the demotic. In his discourse Foucault draws heavily on comparisons between the archetypal genealogist and historian. The result of his probing is a picture that is perhaps best illustrated in Figure C.3. In the figure the historian and the genealogist are contrasted and see how they have similar aims or goals, that the attribution of knowledge leads to understanding of events, people or circumstances, which in turn may allow for greater perception on a topic than was there previously.

Foucault does not necessarily degrade the value of historians in favour of the genealogist. What Foucault sought to do was identify how it is that a person would seek such similar things and often turn up such differing results. So for example, both seek to make history effective but how they do that is quite different. On the one hand the historian's approach can appear to be interrogative as they pay homage to the demigods of objectivity, accuracy of facts and the permanence of past events. The genealogist tends to pay more attention to those things the historian might disregard, such as love, instinct, and conscience. However the fundamental variance belongs to their understanding that history, for the genealogist, is a living thing and that it lives in the lives of those who have descended from their forebears and that the whole of life is therefore an unfolding and collapsing of possibilities and subjugations.

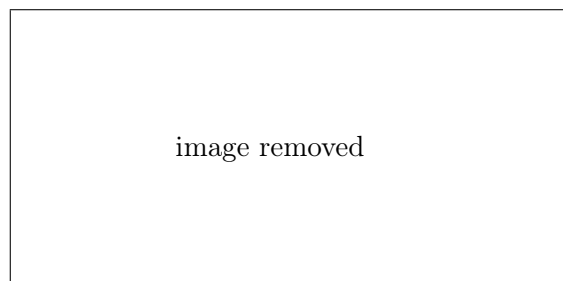


Figure C.3: Natures of approach; symbols. Refer to Figure 3.4 on page 64.

- Two cultural paradigms have been identified; the locus and the demotic.

- History is made effective by the deconstruction of stable forms. This gives rise to historical consciousness, which is neutral, devoid of passion and committed to truth.
- Whakapapa contains lines of descent and contains the pedigree of a person, artefact, event, or place. It is a connective thread that binds groups, but also is used to identify groups through deistic, cosmogonic and anthropogonic whakapapa. Within and between groups whakapapa identifies personal and group status, tracing successes, failures, subjections and injustices.

Whakapapa is a collective memory and shared history that is inclusive of all members of the group. As a memory it requires constant repetition through dance, music, story, body marking, carving, painting, aphorisms. Interpretation of events and stories, allegory, metaphor, and so on. The correct usage and repetition of whakapapa is governed by protocols and traditions.

Whakapapa is generally passed on during hui wānanga, which follow āhua-tanga Māori and tikanga Māori. It details origins, relates them to present conditions and additions to tribal records are considered. The question of who speaks, and when they speak, is controlled by perceptions of mana. Mana is established through Tīmatanga/Ursprung. Mana belongs to the demotic collective but can be held by any person for a limited period.

- There are two natures of approach, that of the historian and the genealogist (Figure C.3 on the previous page). The historian attempts to establish knowledge based on understanding of the problem and developing perception. By this the historian seeks to make history effective. The historian relishes objectivity, accuracy of facts and the permanence and unchanging nature of the past. The genealogist, whilst doing the same as the historian, seeks sentiment, love, acts of conscience and uses their instinct. The genealogist embraces the sense of origination and cultivates the events of history. In this way the genealogist develops a historical consciousness.
- Tīmatanga/Ursprung (Figure C.4 on the following page) is the process of seeking to capture the exact essence of something — what happened at its inception. It uses artefacts, waiata, karakia, story, whakatauaki (aphorism or proverb), and whakapapa as keys for the interpretation of truth. The essence is usually translated as tapu, the sanctification of objects or ensoulment. The emphasis on what happened at the inception of something requires concentration on details and accidents.

Tīmatanga/Ursprung often resolves itself as tribal archetypes. It is these archetypes that are imposed on artefacts, events or places to afford them a degree of intention,

will and mind, so that they become and agency in their own right.

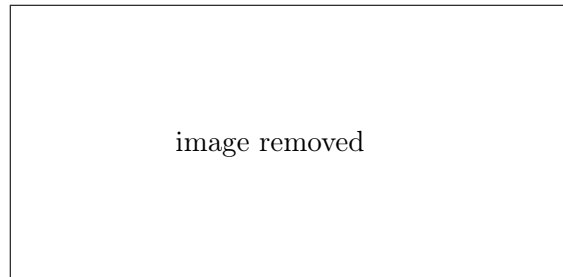


Figure C.4: Tīmatanga/Ursprung; symbols. Refer to Figure 3.5 on page 64.

- Kotahitanga/Herkunft (Figure C.5) is the process of tracing one's lines of descent and the discovery of antecedents. This process identifies ancient affiliations and blood ties to groups and often comes up against traditions and traditional values. It identifies one's social status and power structures between social interactions. As such agency becomes an important feature, in particular the succession of causes/agencies that result in the continuum of social development. Therefore the lumpy exchanges that occur scar the body of the social organism.

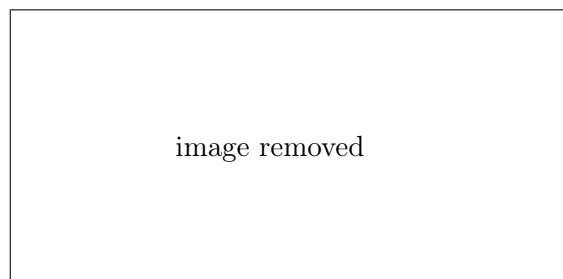


Figure C.5: Kotahitanga/Herkunft; symbols. Refer to Figure 3.6 on page 65.

- Hei Āhua/Entstehung (Figure C.6 on the following page) describes the emergence or appearance of things. This is the result of some agency, in that it is causative. An agent has intention and therefore mind, will and character. It describes the distribution/attribution of power, especially through the application of tradition and protocol. Normally the supreme singular source of all power is identified through the cosmology of the group itself. All cosmologies relate the entry of dominations, regenerative and degenerative forces that enforce subjugation after subjugation, hence Hei Āhua/Entstehung is the investigation of the

hazardous play of dominations and their unintentional results.

The means of application of oppression and control (from external, from outside the group, or internal, from inside) is by means of protocol, rules and mana. Rules are in themselves empty, their domination is a violence upon the lesser and weaker. It through the vehicle of violence that rules impose direction.

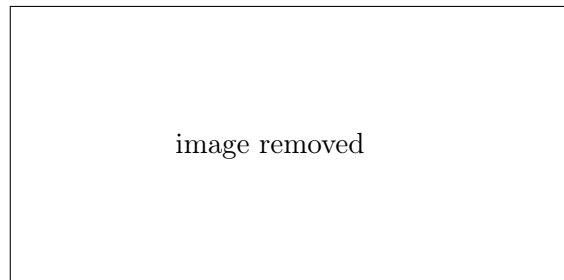


Figure C.6: Hei Āhua/Entstehung; symbols. Refer to Figure 3.7 on page 66.

These points have been used to identify possible symbols, prior to going into the study (see Figure C.7). I anticipate that these may be observed, and will look out for them in the video footage selected. However a fundamental precept in Symbolic Interactionism is that symbols will present themselves and so the items provide a starting gate.

C.17.3 Theory

Theories define and explain some phenomenon by combining concepts. Of course the relationship between concepts must be plausible (Strauss & Corbin, 1994). In this case Silverman (2000:84–85) says that most people will not bring well-defined theoretical ideas to their research, so he offers a range of suggestions to assist the researcher to think in theoretical terms. Of these some are relevant to this study, in particular:

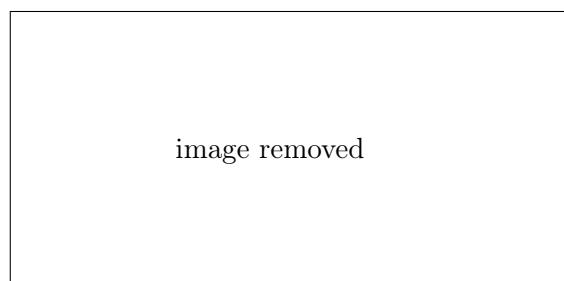


Figure C.7: Whakapapa symbols. Refer to Figure 3.3 on page 63.

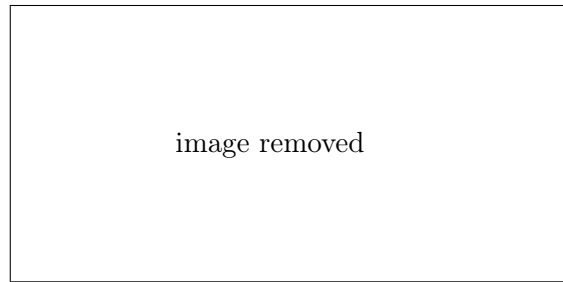


Figure C.8: Relationships between symbols. Refer to Figure 2.1 on page 33.

Context How are data contextualised in the tribal setting, the whakapapa processes or sets of experiences?

Comparison Can the data be compared with other relevant data? It may be necessary to separate the data into different sets so they can be compared.

Implications How can the data be used to relate to broader issues than those specific to the original problem?

Lateral thinking Do not be confined by narrow boundaries between concepts. Explore apparently diverse models, theories and methodologies.

At this time insufficient data exist for well defined theories to be explored, therefore they will be advanced once the information gathering phase of the study is underway. It is anticipated that when information is available then theories will emerge, progressively.

C.17.4 Hypothesis

After investigating the existing material, and appropriate research methods, a hypothesis was derived.

Symbolic interactionism is an appropriate model for the development of personas for application in systems design.

C.17.5 Methodology

Ethnomethodology, an offshoot from Symbolic Interactionism, asks the question of how people who interact with each other create the illusion of a shared social order, even when they don't fully understand each other and have differing view points. The most common method is for researchers to conduct minute analyses of ordinary conversations to reveal how such things as turn-taking and other conversational manoeuvres are managed. Other issues relate to power and status of the participants. This is the approach

that is being taken for this study where the research will be recorded using journal entries and video recordings of interactions. Of these one will be analysed according to the following concepts — Blumer’s premises of Symbolic Interactionism (Blumer, 1986:2):

- That humans act towards things on the basis of the meanings that the things have for them. These things can be artefacts, other people, social structures, morals, concepts, institutions, or anything else that arises out of the social interaction of humans.
- The meanings of things are derived from, or arise out of, social interactions between humans.
- A person uses an interpretative process to handle and modify the meanings of things they encounter.

The method for studying social interactions will be conducted through *participant observation*. It is necessary to attain a degree of immersion in the life of the participants in order for the meanings of events, actions and the situation itself to be made clear.

C.17.6 Data gathering method

This study uses no prior instrumentation because of the paucity of existing studies. Also, since the sample is going to be very small an open question method will be adopted (Silverman, 2000:88). It seeks to answer the question, **what are the critical factors in the whakapapa process?** Principally, the ‘critical factors’ are intended to aid systems design later.

The methods suggested by Silverman (2000:89) are:

- Observation — to understand the context
- Textual analysis — to understand participants’ categories
- Interviews — use of open interviewing methods
- Transcripts — to understand how participants interact, through talk

References

- Bader, G., & Nyce, J. M. (1998). When only the self is real: Theory and practice in the development community. *Journal of Computer Documentation*, 22(1), 5–10.
- Ballara, A. (1991). Hongi Hika 1772–1828: Nga Puhi leader, trader, military campaigner. In C. Orange (Ed.), *The people of many peaks 1769–1869* (Vol. 1, pp. 15–18). Wellington: Bridget Williams Books.
- Ballara, A. (2003, 16 December). *Te Ao-kapurangi 1818–1830* [Internet web page]. Wellington. Retrieved on 20 August 2004, from <http://www.dnzb.govt.nz/dnzb/>: Ministry for Culture and Heritage.
- Barnum, C. M. (2001). *Usability testing and research*. Longman.
- Barrow, T. (1984). *An Illustrated Guide to Māori Art*. Auckland: Reed Methuen.
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality*. Garden City, New York: Doubleday.
- Binney, J. (1968). *The legacy of guilt, a life of Thomas Kendall*. Auckland: For the University of Auckland by the Oxford University Press.
- Blomquist Åsa, & Arvola, M. (2002, 19–23 October). Personas in action: Ethnography in and interaction design team. In *NordiCHI*. Denmark: ACM.
- Blumer, H. (1986). *Symbolic Interactionism, persepective and method*. Berkely: University of California Press.
- Bromell, A. (1991). *Tracing family history in New Zealand* (Rev. ed.). Petone: GP Publications.
- Brown, D. (2000). Adventures in Museumland — The Māori Researcher as Cultural Tourist. In *Icom/ceca conference 2000*. Christchurch: CECA.
- Buckley, C. (2002, 29 September). Family Trees Bloom Again in a Prosperous China. *New York Times*, p. 14.
- Cajete, G. (2000). *Native science; natural laws of interdependence*. Santa Fe, New Mexico, USA: Clear Light Publishers.
- Carter, J. (1998). Growing up Māori. In W. Ihimaera (Ed.), *Growing up Māori*. Tandem.
- Charkova, R., Lin, A., Clear, T., & Lomax, T. (2004, July). Nga Iwi o Ngapuhi membership system: Relationship management and relational design. In S. Mann

- & A. Williamson (Eds.), *Proceedings of the 16th Annual NACCQ Conference, 2003*. Palmerston North: NACCQ.
- Constable, G. (2005, March/April). Annual Report, 2004. New Zealand Society of Genealogists Incorporated. *The New Zealand Genealogist*, 36(292), 130–136.
- Cooper, A. (2004). *The inmates are running the asylum : Why high tech products drive us crazy and how to restore the sanity*. Sams.
- Cooper, A., & Reimann, R. M. (2003). *About Face 2.0: The essentials of Interaction Design*. Wiley.
- Cusack, B. (1991). *A theoretical analysis of policy production*. Phd thesis, University of New England.
- The dictionary of New Zealand biography*. (2003). Wellington: Bridget Williams Books.
- Dillon, A. (1998). Why ethnography needs to show its relevance; cultural analysis and what designers need to know, a case of sometimes too much, sometimes too little, and always too late. *Journal of Computer Documentation*, 22(1), 13–17.
- Durie, M. (2001). *The dynamics of Māori health*. Oxford, UK: Oxford University Press.
- Edge, H. L. (1998). Individuality in a Relational Culture: A comparative study. In H. Wautischer (Ed.), *Tribal epistemologies* (pp. 31–39). Aldershot: Ashgate Publishers.
- Education Amendment Act*. (1990, 26 June 1990). (14, 161 (2))
- Elder, J. R. (Ed.). (1932). *The letters and journals of Samuel Marsden 1765–1838*. Dunedin: Coulls Somerville Wilkie, Ltd. and A.H. Reed.
- Fitzgerald, F. S. (1996). *The Great Gatsby* (Reprint ed.). Scribner.
- Foucault, M. (2000). Nietzsche, genealogy, history (e. a. R. Hurley, Trans.). In J. D. Faubion (Ed.), *Aesthetics, method and epistemology* (3rd ed., Vol. 2, pp. 369–391). London: Penguin.
- Fowler, S. (2001, March). Our genealogical forebears. *History Today*, 51(3), 42–43.
- GEDCOM XML* (beta No. 6.0). (2002, 6 December). Retrieved 10 July, 2005, from <http://www.familysearch.org/GEDCOM/GedXML60.pdf>.: Family and Church History Department, The Church of Jesus Christ of Latter-Day Saints.
- Gell, A. (1998). *Art and Agency; an anthropological theory*. Oxford: Clarendon Press.
- GENTECH genealogical data model, phase 1* (Report No. 1.1). (2000, 29 May). Irving, Texas: GENTECH.
- Glaser, B., & Strauss, A. (1967). *The discovery of Grounded Theory*. Chicago: Aldine.
- Godolphin, F., & Borroum, R. (Eds.). (1942). *The Greek historians. the complete and unabridged historical works of Herodotus, translated by George Rawlinson; Thucydides, translated by Benjamin Jowett; Xenophon, translated by Henry G. Dakyns [and] Arrian, translated by Edward J. Chinnock*. New York: Random house.

- Gross, D. M. (2001). Foucault's analogies, or how to be a historian of the present without being a presentist. *Clio*, 31(1), 57–82.
- Herodotus. (2000). *The history of Herodotus* (D. C. Stevenson, Ed. & G. Rawlinson, Trans.) [Internet web page]. Retrieved 3 October, 2003, from <http://classics.mit.edu/Herodotus/history.html>: Web Atomics. (Original work published 440 BCE)
- Hey, D. (2001, July). Family names and family history. *History Today*, 51(7), 38–40.
- Himona, R. N. (n.d.). *Tribal whakapapa* [Web site]. Retrieved 27 June, 2003, from <http://maaori.com/whakapapa/>.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London: McGraw Hill.
- Huberman, A. M., & Miles, M. B. (1984). *Qualitative data analysis*. London: Sage Publications.
- Hui, H. C., & Triandis, H. C. (1986). Individualism — Collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology*, 17(2), 225–48.
- Ihimaera, W. (2002). *The whale rider*. Auckland: Reed.
- Katz, J. (2001, December). From how to why, on luminous description and causal inference in ethnography Part 1. *Ethnography*, 2(4), 443–473.
- Katz, J. (2002, March). From how to why, on luminous description and causal inference in ethnography Part 2. *Ethnography*, 3(1), 63–90.
- King, M. (1985). *Being pakeha*. Auckland: Hodder and Stoughton.
- Lange, R. T. (1972). *Revival of a Dying Race: A Study of Māori Health Reform 1900–1918, and its Nineteenth Century background*. MA thesis in History, University of Auckland.
- Lisp programming language* [Internet web page]. (2005, 6 July). Retrieved 10 July, 2005, from http://en.wikipedia.org/wiki/Lisp_programming_language: Wikipedia The Free Encyclopedia.
- Litchfield, A. T. M. (2003a). Modelling Whakapapa with System Dynamics: Developing ICT tools for genealogy research. In B. Cusack (Ed.), *Proceedings of the NACCQ 2003*. Palmerston North.
- Litchfield, A. T. M. (2003b, 16 February). *Tūārangi ngā miro ia mātou tahi nape (ancient threads that weave us together)*. (Tribal whakapapa)
- Litchfield, A. T. M. (2004, 7 March). *Nepia homecoming* [Internet web site]. Retrieved 28 March, 2004 from, http://www.alphabyte.co.nz/whanui_panui/.
- Lu, J., & Scaramuzza, M. (2003). Building XML application in rich detailed genealogical information. *Information and Software Technology*(45), 95–108.
- Lydon, J. (Ed.). (1981). *England and Ireland in the Later Middle Ages*. Dublin: Irish Academic Press.

- Matiu, M., & Mutu, M. (2002). *Te Whanau Moana; ngā kukupa mē ngā tikanga*. Auckland: Reed.
- Matthews, H. (1998). *Tribal research project: Te Rarawa* (Research project). Retrieved 19 September, 2004 from, <http://www.angelfire.com/me/matthewsfamily/Rarawa1.html>: Massey University.
- McClelland, K. (2000, 21 February). *Symbolic interactionism* [Internet web page]. Retrieved 22 December, 2003, from <http://web.grinnell.edu/courses/soc/s00/soc111-01/IntroTheories/Symbolic.html>: Grinnell College.
- Mead, G. H. (1967). *Mind, self, and society from the standpoint of a social behaviorist* (Vol. 1; C. W. Morris, Ed.). London: The University of Chicago Press.
- Mitu, S. (1998). *Illusions and facts about Transylvania* [Internet web page]. Accessed 4 October, 2003 from <http://www.c3.hu/scripta/thq/1998/152/10mitu.htm>: The Hungarian Quarterly.
- Myers, M. (1999, December). Investigating information systems with ethnographic research. *Communications of the Association for Information Systems*, 2(23).
- Neich, R. (1994). *Painted histories: Early Māori figurative painting*. Auckland: Auckland University Press.
- Nelson, A. (1991). *Nga waka Māori: Māori canoes*. Auckland: Macmillan.
- Nietzsche, F. (1968). Beyond good and evil. In W. Kaufman (Trans.), *Basic writings*. New York: Modern Library. (Original work published 1886)
- Nietzsche, F. (1974a). The dawn of the day. In *Collected works*. New York: Gordon. (Original work published 1881)
- Nietzsche, F. (1974b). *The gay science* (W. Kaufman, Trans.). New York: Vintage Books, Random House. (Original work published 1887)
- Nietzsche, F. (1995). *Human, all too human I* (Vol. 3; B. Magnus, Ed. & G. Handwerk, Trans.). Stanford: Stanford University Press.
- Ouspensky, P. D. (1977). *In search of the miraculous*. London: Harcourt Brace Jovanovich.
- Parsonson, G. S. (2003). *Marsden, Samuel 1765–1838* [Internet web page]. Wellington. Retrieved on 20 August, 2004 from <http://www.dnzb.govt.nz/>: Ministry for Culture and Heritage.
- Preece, J., Rogers, Y., & Sharp, H. (2002). *Interaction design* (1st ed.). Wiley.
- Preece, J., Rogers, Y., Sharp, H., Benyon, D., Holland, S., & Carey, T. (1994). *Human-Computer Interaction : Concepts and design* (1st ed.). Upper Saddle River: Addison Wesley.
- Prus, R. (1996). *Symbolic Interaction and Ethnographic Research*. Albany: State University of New York Press.
- Reason, P., & Rowan, J. (1981). *Human inquiry: a sourcebook of new paradigm research*.

- Chichester: Wiley.
- Reed, A. W. (1983). *Māori Myth and Legend*. Auckland: Reed.
- Roberts, R. M., & Wills, P. R. (1998). Understanding Māori Epistemology. In H. Wautischer (Ed.), *Tribal epistemologies; essays in the philosophy of anthropology* (pp. 43–77). Aldershot: Ashgate Publishing.
- Royal Te Ahukaramu, C. (1993). *Te Haurapa, an introduction to researching tribal histories and traditions*. Wellington: Bridget Williams Books, in association with the Historical Branch, Department of Internal Affairs.
- Salmond, A. (1985). Māori Epistemologies. In J. Overing (Ed.), *Reason and morality* (pp. 240–263). London: Tavistock.
- Silverman, D. (2000). *Doing qualitative research; a practical handbook* (1st ed.). London: Sage Publications.
- Simmons, D. R. (1997). *Ta Moko: The art of Māori tattoo*. Auckland: Reed.
- Simon, J. (1992). European style schooling for Māori: The first century. *Access*, 11(2), 31–43.
- Simon, J. (Ed.). (1998). *Nga Kura Māori: The Native School system 1867–1969*. Auckland.
- Simonsen, J., & Kensing, F. (1997). Using ethnography in contextual design. *Communications of the ACM*, 40(7), 82–88.
- Simonsen, J., & Kensing, F. (1998). Overlooked collaborative and educational prospects. make room for ethnography in design! *Journal of Computer Documentation*, 22(1), 20–30.
- Singleton, R., Straits, B., Straits, M., & McAllister, R. (1988). *Approaches to social research*. Oxford: Oxford University Press.
- Smith, L. T. (2001). *Decolonizing Methodologies* (4th ed.). Dunedin: University of Otago Press.
- Social constructionism* [Internet web page]. (2003, 18 December). Internet web page. Retrieved 3 April, 2004, from http://en.wikipedia.org/wiki/Social_constructionism: Wikipedia, The Free Encyclopedia.
- Sorrenson, M. (1975, Oct.). How to civilise savages: Some ‘answers’ from nineteenth century New Zealand. *New Zealand Journal of History*, 9(2), 97–110.
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology: an overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 262–272). Thousand Oaks, CA: Sage.
- Symbolic interactionism* [Internet web page]. (2003, 18 November). Retrieved 22 December, 2003, from <http://en.wikipedia.org/wiki/Symbolic-interactionism.html>: Wikipedia The Free Encyclopedia.
- Thornton, D. E. (2002). Identifying celts in the past: A methodology. *Historical*

- Methods*, 35(2), 84–91.
- Thucydides. (2000). *The history of the Peloponnesian war* (D. C. Stevenson, Ed. & R. Crawley, Trans.) [Internet web page]. Retrieved 3 October, 2003, from <http://classics.mit.edu/Thucydides/pelopwar.html>: Web Atomics. (Original work published 431 BCE)
- The Times English Dictionary*. (2000). London: Times Books.
- Todorov, T. (1977). *The poetics of prose* (R. Howard, Trans.). Ithaca, NY: Cornell University Press.
- Vernay, M. (2000). Trends in inbreeding, isonymy, and repeated pairs of surnames in the Valserine Valley (French Jura), 1763–1972. *Human Biology*, 72(4), 675–692.
- Voyce, M. (1989, Dec.). Māori healers in New Zealand: The Tohunga Suppression Act 1907. *Oceania*, 60(2), 99–123.
- Walker, R. J. (1975). *The Māori People of New Zealand: 150 years of colonisation*. A paper presented at the Indigenous Peoples Conference. Port Alberni, Canada.
- XML.org* [Internet web page]. (2005). Retrieved 10 July, 2005, from <http://www.xml.org>: OASIS Open.
- Young, E. (2004, 24 April). Last of the great migrations. *New Scientist*.