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# I TE WA I A MEA . . .

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**Monty Soutar**  
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## HE KUPU WHAKATAU

Ko nga kupu e whai ake nei he kupu mihi atu ki a koutou i awhina mai ai tenei mokopuna a koutou. "E iti noa ana, na te aroha."

Tuatahi he kororia ki te Atua nana nga mea katoa.

Ki a Professor Meihana Durie nana i whakato te whakaaro mo tenei tohu e kiia nei he tohu Mahita. Tena koe. Tena koutou oku hoa rangatira o te Tari Maori kei roto i te Whare Wananga o Manawatu. Me mihi atu ki a Julia Taiapa, ki a Tairahia Black, ki a Lindsay Cox, me Hazel Riesborough mo a ratau kupu tohutohu. Ko Julia Taiapa te kaiwhakarite moku. Na Esther Tinirau i taipa tenei putanga, i whakatakoto hoki i nga tuhituhi. Ka nui nga mihi ki a ia mo tona pumau ki tenei mahi.

E hiahia ana au ki te tuku he mihi ki oku pakeke ki a Tamati Kupenga, ratau ko Waho Tibble, ko Manu Stainton, mo nga whakapapa i tukua mai ki au. Ka nui hoki nga mihi ki a Takuta Tamati Reedy, ratau ko toku tuakana ko Barry Soutar, ko Wayne Ngata, ko Mae Kupenga mo ta ratau awhina i taea ai te whakapakari whakatinana i enei whakaaro aku.

Nui noa atu nga hoa me nga whanaunga o Ngati Porou hei whakawhetai atu maku, tae atu ki toku whanau. Kia ora rawa atu koutou katoa.

Ka hoki oku mahara ki a ratau kua wehe atu ki te po. E eke i runga i te taheke-roa e kore nei a muri e hokia.

Heoi ano, te aroha atu ki a koutou whanui tonu.

## ABSTRACT

The title gives only an indication of the subject to be discussed. It reflects how the Maori thought with regard to time. Because such phrases lacked the precision of calendar dates, numerous Western historians sought to translate Maori chronologies into time units of their own reckoning. The result was the invention of several methods of dating based on genealogies.

These methods are the central focus of this thesis. It is argued that they are both inaccurate and inappropriate for the recording of Maori traditions. Each method is trialed against the traditions and whakapapa of one hapu in order to highlight their inaccuracies. So obvious do these inaccuracies become that the reader is asked to consider their dismissal altogether.

In place of the Western methods of dating the Maori method of referencing time is reconsidered from a Maori perspective. The Maori concept of time is contrasted against the Western sense of absolute time in an attempt to bring credibility upon Maori time references.

## PREFACE

This thesis has been prepared to contribute a Maori perspective to the interesting and fascinating subject of chronology. The theme running throughout it concerns the debate on the use of genealogies as a means of dating Maori traditions. I have endeavoured to demonstrate that frameworks which attempt to chronicle pre-European Maori traditions in terms of the Julian calendar are inaccurate by virtue of the fact that there is insufficient reference material to arrive at anything other than conjectured dates. More importantly, I have argued that they have been constructed to satisfy Western historians as to the validity of Maori history. Many Maori people themselves regard them as inappropriate since for them, the verity of their history has never been in question. Therefore in dismissing these frameworks as inadequate, I have advanced in their place the Maori method of referencing time which was operative well before the arrival of Captain Cook and which is still actively used today.

The genesis for this thesis arose from an investigation conducted for the Department of Maori Affairs, Tairāwhiti into the early history of Te Aitanga-a-Mate, a sub-tribe of Ngāti Porou. During the exercise I discovered the various methods of applying dates to genealogies which had been invented for the purpose of dating Maori tradition. I was particularly amazed at the time and effort Western historians had put into the subject of dating Maori history since, in my upbringing, I could not recall ever having heard a kaumatua refer to an event in iwi or hapu history by a Julian date.

To say that this was because the Maori did not have an accurate dating system, I found was an oversimplification of the matter. An analysis of the methods of dating based on genealogies as well as an in-depth study into the concepts of relative and absolute time led me to the conclusion that the Maori system of referencing time was, and still is, the most satisfactory for sequencing a tribal history.

With the Maori renaissance occurring throughout the country at present, and Maori researchers becoming involved with writing iwi and hapu histories, I felt subsequently that there was merit in discussing these findings.

It is with tribal historians in mind that this thesis draws attention to the Maori system of referencing the past as a valid and coherent one; one which deserves to be retained as the basis for chronicling future tribal histories.

In carrying out the research for this thesis, particularly where concepts of time were concerned, I found that although there existed an enormity of published material on how time was and is viewed, almost all of it related to either the Western culture or cultures foreign to New Zealand. Hence, in my attempt to explain how the Maori viewed time I was in fact breaking new ground. For this reason and the fact that there exists personal and tribal diversity in opinion on some of the matters discussed in this thesis, I make no claim to express *the* Maori viewpoint. The Maori views which are presented in this thesis are only those which I encountered in my own tribal area.

The question of how best to calculate calendar dates for pre-European Maori history is a basic issue of our times and it has been addressed by many distinguished scholars over the last one-hundred-and-fifty years. Even so, I felt it appropriate to bring into the discussion the recapitulation of their proposed solutions in order to show that I do not share them. However, I am indebted to all of those writers because they have put their fingers on the very issues and induced me to think them over in my own way. Therefore, I list their names with gratitude. This is not an empty act of courtesy, but the expression of my obligation to New Zealand's scientific community of yesterday and today. Irrespective of whether I have quoted their works and names, I am especially indebted to: Best (E.), Buck (P.), Fletcher (H.J.), Fornander (A.), Gudgeon (W.E.), Halbert (R.W.), Hongi (H.), Kelly (L.G.), McCrae (J.), Mahuika (A.T.), Piddington (R.), Porter (J.P.), Robertson (J.B.W.), Sharp (A.), Shortland (E.), Simmons (D.R.), Smith (S.P.), Sorrenson (M.P.K.), Stack (J.W.), Stokes (J.G.F.), TeHurunui (P.), Thomson (A.S.), Travers (W.T.T.), Williams (H.R.), and Wilson (M.G.).

It is common academic procedure to follow on here by acknowledging those, who through their personal assistance brought about the completion of this thesis. However, as the reader will realise, this has already been done. In keeping with a Maori line of thinking, these

acknowledgements (he kupu whakataua) have been undertaken at the beginning of this presentation.

Throughout this thesis, there are references to papers presented by Maori scholars of iwi other than my own. In Maori society it is deemed disrespectful for the young to critique the works of their elders. Hence I have been at great pains to oppose some of these scholar's work, especially as they themselves have long since departed this world. Where their work has been criticized by this writer, it should be remembered that these criticisms are levelled at an academic rather than a personal level.

The scope of this study was so vast, it was necessary to restrict the parameters of enquiry in order to complete it in the allotted time. The Maori concept of time and its delineation, for example, is one area yet to be fully dealt with. The Maori language of time contains concepts and abstractions which are foreign to the Westerner and which I found the English language sometimes lacks adequate terms to describe. In future projects I hope to further employ my own tribal traditions to expand on some of the more interesting points, which were brought to light in this thesis (eg. the Maori concept of time, the demography of pre-European Maori, archaeological methods of dating).

Part of my task in collating the early history of Te Aitanga-a-Mate was to undertake a detailed study of the genealogy of this hapu and record in table form as many lines of cognatic descent as possible. This was never achieved to any great degree and the task was taken up again during the writing of this thesis with the added incentive of providing a genealogical base from which to test Western methods of chronology.

In both attempts it was found that accessing genealogy was certainly not a simple task. The degree of effort required to obtain whakapapa varied according to where the material was housed. Without listing all the various repositories, it can be said that where the real difficulty arose was with manuscripts in family possessions. Each family had its own restrictions regarding those who were able to access their records as often the whakapapa had been recorded in manuscripts fifty to one hundred years old. But the main reason why these restrictions existed was not

because of the frail condition of the manuscripts but because of the close cultural ties the Maori has with traditional knowledge.

It is not my desire to explain here the rituals and conventions that result from such ties, nor to list the restrictions or the steps I took to meet them, as to do so would fill this book twice over. It is sufficient for the purpose of this enquiry to know that restrictions do exist in many cases where Maori genealogy is concerned, that the whakapapa tables recorded herein, particularly those in the Appendix, are of a sensitive nature to those to whom they belong and therefore, should be treated accordingly.

The appendix alone boasts over one hundred and fifty lines of Te Aitanga-a-Mate whakapapa. These genealogies have been recorded here not just to trial methods of chronology or to support claims lobbied by the writer, but more importantly for the sake of posterity, so that the descendants upon whom the lines descend may read and learn. If there is one thing I have learnt in my dealings with whakapapa it is this: always give back to the descendants of those who gave, that which was given.

The whakapapa used throughout this thesis deals solely with the human story (Te Kauaeraro), particularly of those ancestors of the recent past. Researchers of tribal history in all parts of the country have found that whakapapa is reasonably reliable and consistent where they relate to ancestors of the Hawaiki migration or to others after the introduction of a Hawaiki strain. Therefore Maori genealogies relating to cosmogony, mythology and religion are not entered into in this thesis.

The Aitanga-a-Mate genealogies have been drawn from approximately 30 separate oral and written sources of which over 80% were original manuscripts. Due to the commingled nature of these genealogies, a complete adherence to a strict order of seniority, when setting out the whakapapa tables, was unobtainable. It should be remembered that both style of arrangement and accommodation of space have influenced the relative positions of people appearing in these tables. Although I have restricted the use of genealogies to those of Ngati Porou and more particularly the hapu Te Aitanga-a-Mate, I see no reason to believe that authentic Maori genealogies from other tribal areas would bring about differing results.

I am also well aware that no matter how accurate I have tried to be in the written compilation of these whakapapa, there remain genealogies in the possession of individuals which may confirm or deny the relationships shown in my tables. In defence of any error I may have incurred, I am reminded of the opening phrase in an old manuscript:

**"Let each error you find in this book be a feather in your cap."**

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## INTRODUCTION

"So little history has been written by the Maori themselves. But we are about to enter an era where the iwi or hapu history will be written by the tribe itself. Maori history is strongly hapu-based and already there is the notion that the iwi is the proprietor of that history."<sup>1</sup>

From the point of view of one who has been involved with a hapu in the writing of their history, Dr King's comments seem very accurate. He would have been more exact however, had he specified that we have already entered this era. In more recent times, it has been through the medium of academics that iwi have allowed aspects of their history to be put to print. Maori post-graduate students of history, anthropology, and Maori Studies disciplines have been granted approval by their people to research their own iwi or hapu history as the basis for theses topics. The cultural benefits that result from such endorsements are very clear.

Primarily the student fulfills the requirements for a degree. The iwi will share vicariously any acclaim which is the reward for quality research and they in turn will acknowledge the efforts of their mokopuna. Secondly, the hapu receive their history in print as a learning and teaching resource and as a premise from which to make further studies.

In addition to these benefits, some dilemmas arise through the way in which the written histories have been prepared. Principally the writer's audience is an academic one and consequently the language used in the thesis is often inappropriate to the descendants of those about whom it is written. Added to this, the student may be required to present a solution to a problem, or establish a particular point of view in the thesis which may or may not concur with the Maori view of the way in which history should be related. Whereas oral renditions of tribal histories are subjective narratives, a thesis is an objective exercise in inquiry.

Currently moves are afoot to entice more Maori from outside the university system to take up the task of writing history. Government sponsorship includes the annual employment, through the Department of Internal Affairs, of a Maori Fellowship in history. In addition, the creation of the Waitangi Tribunal has led to national focus on tribal traditions, both

written and oral. Researchers, particularly Maori, are being recruited regularly to work with the iwi and in turn the Tribunal. With the demand by more and more Maori to take control of their own culture, the tribal 'runanga' are also encouraging the training of researchers for the purpose of compiling their history. It was perhaps with such initiatives in mind that Dr King made his comments.

Considering this growing interest by Maori into iwi or hapu histories, it would be well for writers to review the methods of dating which have been used to sequence such histories. Maori writers particularly, as it is to them that the compilation of tribal histories will be entrusted, need to decide which frames of reference are best suited for the chronicling of their tribal traditions and whether or not the modern dating system is necessarily appropriate to their needs. It is in seeking answers to these questions that this thesis is undertaken.

*"Ma wai e rou ake te whetu i te rangi, ka taka kei raro."*

Who would be so brazen as to try and collect a star from the heavens?  
They that would dare would fall from above.

This favourite whakatauki is often given by kaumatua to describe the degree of difficulty involved in tasks of near impossibility. To take a star from the sky is a task not humanly achievable. It will be seen from the results of this thesis that this analogy can be applied to the matter of Maori chronology. For nor is it possible to fix European dates accurately upon a tradition which hitherto had no such dating system. Chapters one to four attempt to establish conclusively that methods of dating based on genealogies are inaccurate, that at best, all they are able to do is approximate dates and that those dates can be shown to differ by as much as one hundred years.

The questions to which answers are sought in these chapters are:

- (1) What are the methods, which up until now, have been used to fix Julian dates on Maori traditions?
- (2) What are the deficiencies in those methods which make them inaccurate?

Methods of dating based on genealogies have been debated ceaselessly ever since the first attempts by Western scholars at chronicling Polynesian traditions. Chapter one therefore seeks to provide an answer to the first question through a review of the literature relating to western modes of chronology. This review follows a chronological sequence commencing with the earliest nineteenth century writers through to the present day. Each writer's contribution is explained and then compared with other information by different authors.

In order to answer the second question, the methods of chronology determined in chapter one are reassessed in chapters two, three and four in the light of new information not available to the original authors, and with respect to controversial analysis brought to light by recent writers. In addition, each method is tested against an extensive body of Te Aitanga-a-Mate whakapapa and tradition and each is shown to be inaccurate. Because all iwi and hapu whakapapa are built upon the same principle, descent from a common ancestor, it should then follow that if these methods are applied to the whakapapa of other iwi similar inaccuracies will occur. These chapters attempt to show conclusively that with regard to the Julian Calendar, we are not yet in possession of sufficient data to arrive at anything other than a wide range of approximate dates and therefore these Western frames of referencing time are inappropriate.

Having dismissed them as inappropriate, chapter five attempts to facilitate a sympathetic appreciation for the Maori method of referencing time. It begins by examining why Western historians felt it necessary to put dates to Maori history. After advancing answers to this question, the focus moves to a description of some of the Maori terms that were used to reference the past. Finally, an attempt is made to compare Maori concepts of time with the Western sense of absolute time in order to encourage the further use of Maori time references in the recording of tribal histories.

In concluding, an analysis of some of the tribal histories which have been published during this century is undertaken to demonstrate the irregularity with which absolute dates have been employed by Maori writers and to illustrate the consistency with which these writers have dated events in relative time.

Dr Cleave Barlow has classified whakapapa into three categories; cosmic genealogies, primal genealogies, and human genealogies.<sup>2</sup> Cosmic genealogies relate to the "origin of all life and matter", the creation of the universe. Primal genealogies refer to Rangi, the sky father and Papa, the earth mother and the procreation of their children; while human genealogies apply to mortal ancestors who have inhabited the bosom of Papa from time immemorial to the present.

With regard to the study of chronology of tribal histories we are more interested in human genealogies particularly as they apply to Aotearoa. The whakapapa of each iwi or hapu converges upon an eponymous ancestor who, in most cases, was native to Aotearoa. Materoa was the progenitor of the Aitanga-a-Mate hapu and it is largely her whakapapa which is used throughout this thesis both to test methods of chronology and to support claims lobbied by the writer.

Te Aitanga-a-Mate are a hapu of the Ngati Porou tribe resident on the east coast of the North Island, between Gisborne and Potaka. Materoa lived some eighteen generations ago and her descendants populated the region in and about Mt Hikurangi (see Map no. 1).

The whakapapa of Te Aitanga-a-Mate has been selected to illustrate this thesis because it is the most accurate body of whakapapa available to the writer. The writer himself is a member of the hapu and it would be considered disrespectful for him to attempt to speak with authority on the whakapapa of a tribe to which he does not belong. As the ancient whakatauki says:

***"E moe i to tuahine (tungane) kia heke te toto ko korua tonu."***

Marry your cousin so that if blood is to be shed, it is only your own.

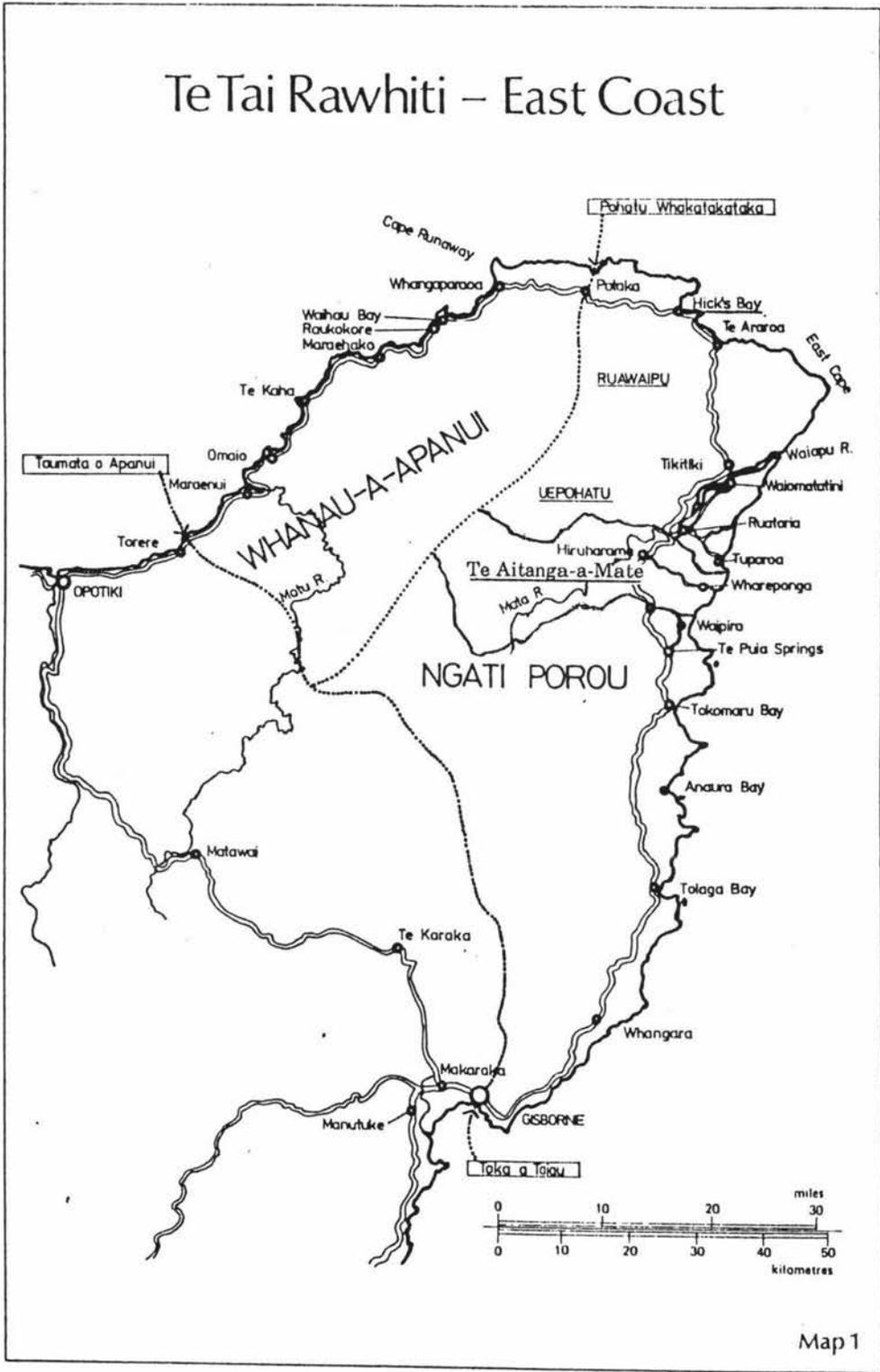
The message here, use your own whakapapa, that if you should draw criticism, it will be from your own relatives.

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**NOTES**

- 1 King, Micheal, Evening Post, 28 July, 1990, p9.
- 2 Barlow, Dr Cleave, "The Scope of Maori Genealogy", in New Zealand Genealogist, 18, 1987, pp34-6.

# Te Tai Rawhiti – East Coast



Map 1

## CHAPTER 1

### A Review of the Literature

The first European pioneers in New Zealand found the indigenous race to be ignorant of the science of calligraphy. Up until that period the Maori had preserved their records in the minds of special men, whose oral retention skills defy belief, particularly among the present generations who have come to rely so heavily upon written documents for the preservation of historical matter.

However, the absence of a written tradition among the Maori did not deter the early European writer who, accepting that there was some authenticity in the oral traditions, began to study the history, customs, and polity of the Maori. They produced a number of publications throughout the 1830s and 1840s.<sup>1</sup> However, their observations do "not carry conviction to the descendants of the people they passed in review".<sup>2</sup> These authors failed to acknowledge the dominance of kinship affiliations in understanding Maori society. None made use of the genealogical record, "the key to the mass of facts they saw before them".<sup>3</sup>

### **EARLY ATTEMPTS TO FORM A CHRONOLOGY**

#### Shortland, E.

It was perhaps Edward Shortland, in Traditions and Superstitions of the New Zealanders, published in 1854, who first used genealogies to fix dates in Maori history.<sup>4</sup> In an attempt to establish the date at which the Maori had colonized Aotearoa, he used his extensive collections of whakapapa tables to suggest the event had taken place some eighteen generations or five hundred years earlier.<sup>5</sup>

Shortland arrived at this conclusion after comparing a number of genealogical lines of descent from several Te Arawa chiefs back to their ancestors who composed the crew of the Arawa canoe. "It was found that they all nearly agreed in reckoning the same number of generations."<sup>6</sup>

Many chronologists who have since attempted to fix a date for the Great Migration, would concur with Shortland's findings. Experience shows, however, that the number of generations in genealogical lines leading back to the canoe ancestors do not agree within close proximity. In fact, far from it. This view is supported by a number of twentieth century scholars whose researches into whakapapa have spanned decades.<sup>7</sup>

Shortland asserted that his findings were not based on the whakapapa of one group alone. From collections of Tainui, Ngati Kahungunu, and Ngai Tahu genealogies, which he had access to, he claimed to have turned up comparatively similar results. However, Shortland failed to show his mathematical workings which helped him arrive at his date of five hundred years, or to furnish the genealogical tables which he had used. Such criteria is essential if the reliability of his findings is to be tested. Nevertheless, the credit must go to Shortland for having initiated the genealogical approach to chronology, which, subject to variations in the length of a generation, was to become the main way for dating Maori history.

Shortland's method in simple terms, is based on statistics. It consists of taking the average number of generations in a large number of descent lines from a common ancestor and multiplying it by a figure chosen to represent the length of a generation. In the following whakapapa Tamaihu can be said to have been born in approximately 1634.

W. 1

Tamaihu  
 |  
 Tutehurutea  
 |  
 Kuku  
 |  
 TeRangitawaea  
 |  
 Rongohaere  
 |  
 Te Apataki  
 |  
 Marangaiterangi  
 |  
 TeHapunohokino  
 |  
 Henare Nihoniho b.1834

The estimate has been made by multiplying eight (the number of generations from Henare Nihoniho back to Tamaihu) by twenty-five (a figure which, for the purpose of this illustration, has been selected arbitrarily to represent the interval between generations). The product of the two equals two hundred years and this figure is then subtracted from a known date in modern times (i.e. Henare Nihoniho's birth date). The accuracy of the statistical process lies in the date of birth for Tamaihu being derived not from the line of Henare Nihoniho alone, but indeed, from as many collateral lines as possible.

Grey, G., Sir

In the year following Shortland's publication, the Governor General, Sir George Grey presented an English edition to his Polynesian Mythology which contained a brief reference to the chronology of the Ngati Paoa of North Auckland:

...she was married to the young chief, and she bore him a daughter, named Tuparahaki, from whom in eleven generations, or in about 275 years have sprung all the principal chiefs of the Ngati Paoa tribe who are now alive (in 1853).<sup>8</sup>

It can be inferred from Grey's statement that he used a twenty-five year interval to arrive at his 275 years. It was this twenty-five-years-to-a-generation method, in the hands of Stephenson Percy Smith, that was later to become the mode by which an absolute chronology for the main events of Maori prehistory was established. However, this appears to be as far as Grey took the idea of a dated chronology based on genealogies.

Thomson, A.

The next attempt to apply the genealogical procedure came from the militia surgeon and army historian, Arthur Thomson, in his definitive history of New Zealand published in 1859. He also endeavoured to establish a date of arrival for the Maori in Aotearoa. Thomson was more explicit than Shortland in setting out his method, explaining precisely how he had determined the figure he used to represent a generation. That figure was twenty-two-and-one-thirty-fifth years which was ascertained by

equating the period of ascendancy of a rangatira with the average reign of an English sovereign. Thomson wrote:

Seeing that in England, from the days of William the Conqueror to William the Fourth, thirty-five sovereigns reigned in 771 years, it follows that including those who died violent deaths,  $22 \frac{1}{35}$  years, was the average period of each reign.<sup>9</sup>

By multiplying this figure by 20, the average number of generations of several genealogies from 1859 back to "the arrival of the first settlers from Hawaiki", Thomson calculated the advent of the Maori in Aotearoa as having taken place in approximately A.D.1419.<sup>10</sup> The genealogical trees which he used to determine this date related to the Bay of Plenty tribes Ngaiterangi and Ngati Whakaue. However, like Shortland before him, he failed to produce these charts in support of his findings.

As to how appropriate the English line of sovereignty is in drawing a comparison with the average life span of the Maori is a point worth addressing. Houghton (1980), having studied a number of prehistoric skeletal remains, has recently postulated that the premature wearing down of teeth caused by a fibrous diet and resulting in dental loss and infection, seriously effected the mortality rate in traditional Maori society.<sup>11</sup> In the light of this evidence, it would appear that Thomson's equating of the Maori with the English upper class, a people whose own diet nutritiously, could be expected to far exceed that of the Maori, is an overly presumptuous one. But, regardless of the interval he used, Thomson like Shortland, had again advanced the genealogical approach to dating, pointing the way for nineteenth century writers who were to follow, that in Maori genealogies it was possible to build a construct from which to apply Julian calendar dates.

Stack, J. W., Rev.

In 1877, the Reverend James Stack articulately set down the genealogical procedure which he had used to chronicle the traditions of the South Island Maori:

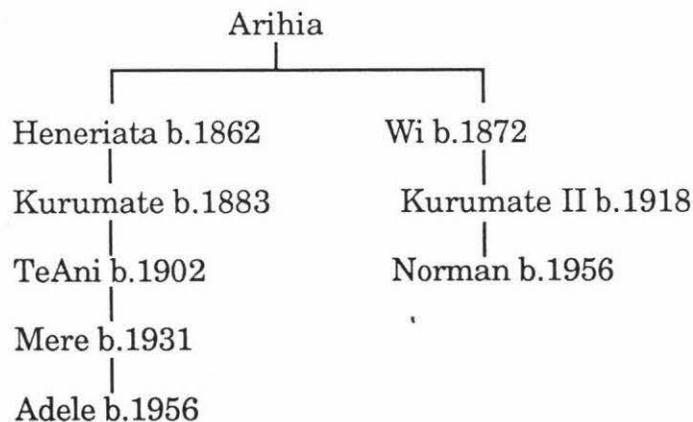
"The method I have adopted for ascertaining the chronological order in which the various events occurred has been first to form a

genealogical table, and then allowing twenty years for a generation, to count the generations from the present time, and thus fix the date of any event by the position of the table which the persons connected with it occupy. For instance, to ascertain the date of the death of Manawa, take Hakopa te Ata o Tu, now living and who is at least seventy years of age, counting back from his birth to Manawa's there are eight generations, equivalent to 160 years, which added to 70 gives a total of 210. Manawa, therefore, was born about 1667; and, as he had a grown-up son, he was probably not less than forty years old when he was killed. His death, then, occurred about 1707."<sup>12</sup>

Stack was careful to point out that this procedure could only produce approximate dates, but accepted that these dates were "sufficiently near to render the history intelligible".<sup>13</sup> Perhaps in anticipation of future criticism, he also proposed that further investigation might lead to alterations in his dates.

Stack in setting out his twenty-years-to-a-generation method, has indicated that single lines of descent might be used to fix dates. Simmons (1976) has shown that one line whakapapa cannot be regarded as accurate determinants of dates. Rather a group of lines should be selected as each offers an independent confirmation of a date.<sup>14</sup> Take, for example, the collateral branches from Arihia in the following whakapapa:

## W. 2



If Arihia was traced through Adele, using a twenty year interval, 1856 could be said to be the approximate year in which she was born. If the same was undertaken through Normans line, the year could be 1896, a difference of forty years. No doubt, other lines would produce various dates within this range. For this method to be effective, numerous lines of

descent have to be sought out to give an indication of the possible range in variation of the date. It is not clear whether Stack himself derived his dates from single line whakapapa, but this type of misapplication of the statistical procedure, was made by a number of twentieth century enthusiasts. Their estimates were often based on "one short line of from 3 or 4 up to 20 generations, a procedure capable of producing the most fantastic errors."<sup>15</sup> Such a procedure has brought strong criticism from recent writers, some of whom have advocated its dismissal, claiming that the way in which the procedure has been used, departs entirely from statistical principles.<sup>16</sup>

Fornander, A.

At this time in Hawaii, Abraham Fornander had also realised the statistical value of genealogies for dating purposes. He is accredited with being "the first to use statistics to obtain dates as landmarks in Polynesian history,"<sup>17</sup> Shortland's and Thomson's attempts being overlooked. What set Fornander apart from these earlier writers was the fact that he produced dates on a large scale supported by sample genealogical charts and voluminous traditions. His method was the same as that used by the New Zealanders, but he adopted the European standard of thirty years as the average length of a Hawaiian generation. In his trilogy of Hawaiian pre-history, published between 1878 and 1885, he used this standard to compute dates from as early as A.D.190.<sup>18</sup> The thirty-year standard remained a Hawaiian usage and was revived only fleetingly in this country during the 1960s.<sup>19</sup> It is based on the average for a European generation but there has never been any proof provided to suggest that it is suitable to New Zealand conditions.

Smith, S.P. and Gudgeon, W.E., Judge

In 1893 Fornander's lead was taken up in New Zealand by Stephenson Percy Smith who popularized the genealogical procedure in the early journals of the Polynesian Society of which he was the editor and major contributor until his death in 1922. Smith reduced the thirty year standard set by Fornander, considering twenty years to be the length of a

Maori generation.<sup>20</sup> He stressed that proper statistical precautions be taken when using genealogical procedures. Hence, many years later all procedures which attempted to apply an inflexible interval to descent lines became collectively known as the statistical method.

At this time, the Journal of the Polynesian Society was taken up as a conventional medium through which academics could contest and refine their theories relating to Polynesia. In volume two, W. E. Gudgeon, a judge of the Native Land Court, was interested enough in Smiths twenty-year estimation to submit an article of his own, offering a cautionary view on the subject of a Maori generation.<sup>21</sup> He argued that the twenty-year theory was unlikely, suggesting instead that a date nearer thirty years, certainly nothing less than twenty-five years, was more correct. In summary he wrote:

I submit, that if all circumstances of Maori life are taken into consideration - viz., the continual state of war, the scarcity of food among nearly all tribes during the winter months, and the fact admitted by all old Maoris, that although betrothals were common even in infancy, young people did not cohabit until both men and women had arrived at maturity, - we must then conclude that a less number of years than 25 cannot safely be assigned to a generation, and that 30 years might probably be nearer to the truth.<sup>22</sup>

Speculation aside, Gudgeon must be credited with having turned to the Maori's own traditions, rather than those of a foreign culture, to determine the length of a generation. This figure is most important in any method of chronology as it effects the outcome of a date markedly. For example, using an interval of twenty years the whakapapa below would set down the date of existence for TeAuiti as 1770AD, whereas an interval of thirty years would put it at 1730AD.

### W. 3

TeAuiti  
|  
Rangikamatau  
|  
TeInapuku  
|  
Heeni  
|  
Tuta Nihoniho b.1850

Reasonable though his argument seems, the question needs to be asked at what age did the average Maori reach maturity? One suspects that Gudgeon has assumed that the average Maori reached maturity at an age not unequal to that of the nineteenth century European.

Smith certainly paid heed to the Judge's comments and by 1894 he had shifted his ground.<sup>23</sup> After considerable consultation among "several people who knew the race well" (no doubt Gudgeon was one of these), he had increased his standard to twenty-five years, and reapplied the genealogical procedure to the reservoir of whakapapa which he had collected from both Maori and Rarotongan informants.<sup>24</sup>

In Hawaiki: The Original Home of the Maori, Smith used the statistical method with a twenty-five year interval representing the length of a generation, and deduced from more than "50 genealogical tables", AD925, AD1125, and AD1350 as the dates which Kupe, Toi, and the Great Fleet respectively reached Aotearoa.<sup>25</sup> With regard to the method he used to determine these dates he explained:

... the great and last migration to New Zealand took place at 21-22 generations back from the year 1900, or in about the year 1350. This date is arrived at by taking the mean number contained in over 50 genealogical tables going back to those who came here in the fleet, all of which will agree to within 4 or 5 generations in number. Where many women come into the lines, they are naturally longer. This gives us a fairly well fixed date from which others may be adduced.<sup>26</sup>

Here Smith has made reference to the variation in descent lines, some being longer than others, a point that Gudgeon had also cautioned chronologists about. Smith writes the variation off to the fact that numerous women populated the longer lines and claims that as a result the lines were only put out by four or five generations over a five-hundred-and-fifty year period. In fact there are several reasons why the whakapapa lines differ and experience has shown that over the same period they can vary by as much as ten generations.<sup>27</sup>

Smith's work will be examined more fully later. Here it is sufficient to realise that in New Zealand he popularized the statistical method using a twenty-five interval. Several writers, both Pakeha and Maori alike, were induced to follow his example. Even today this method remains the

*modus operandi* for those writers still concerned with dating Maori traditions.<sup>28</sup> Although he often omitted to produce the genealogical tables from which he had worked, for many years Percy Smith's dates remained unquestioned as the authentic chronology for the discovery of New Zealand. So much so, that at present for many people, including Maori, the Great Migration date AD1350 is still recognised as valid.

## CRITICS OF EARLY METHODS

### Stokes, J.F.G.

Among New Zealand writers Smith was considered the father-figure of Polynesian history and no one openly challenged his chronology during his lifetime. His control over the Journal of the Polynesian Society meant that he was also able to obstruct the publication of articles that were in contrast with his own romantic ideals of the past.<sup>29</sup> In fact it was not until 1930 that the dates he had proposed were publicly scrutinized. The attack came from John F. G. Stokes, at the time the Curator-in-charge of the Bishop Museum, Honolulu. Stokes drew attention to discrepancies in the genealogies and traditions used by both Smith and Fornander:

The contribution of these men are most valuable and will, I hope, stand as monuments in Polynesian research and continue to guide many students. They will stand better, I believe, if the weak places be pointed out. These weak places are certain genealogies or traditions which affect in particular the chronologies suggested by Fornander and Smith ... It would be expected that since Fornander and Smith were writing sketch-histories of the Polynesian people, there would be, in order to to assure a tolerable accuracy for chronology, a fair agreement in 1, the number of generations; 2, cosmogonic and mythical human names; and 3, human names down to the traditional separations through migrations.<sup>30</sup>

Stokes found the agreements were negligible. On the varying number of generations in genealogies he produced a table listing some fantastic divergences between Polynesian genealogies, and wrote at length as to why he thought such dissonance may have occurred.<sup>31</sup> His theories were certainly a lot more in depth than the sole explanation given by Smith that the lines only differed because of the number of women progenitors in them. Stokes advised the student interested in Polynesian history that in

order to use whakapapa accurately as a resource from which to establish dates, one must first learn what the purpose of whakapapa in its cultural context was and the means by which it was preserved.

Concerning the length of a generation he was more inclined to accept Smith's twenty-five years offering as an analogy the twenty-six-and-one-third years mean of the Japanese royal family line. In his paper, entitled An Evaluation of Early Genealogies used for Polynesian History, he wrote:

Smith's adoption of twenty-five years for a Polynesian generation is preferable to Fornander's thirty years. However, the best comparison available to me is the Japanese royal line between A.D. 400 and A.D. 1900, following the detail in Brinkley's History of the Japanese People. After eliminating the lateral successions and counting down the direct line, I arrive at 57 generations averaging 26 1/3 years. The line was not infrequently carried through the younger sons - one of them the sixth.<sup>32</sup>

#### Fletcher, H.J.

But Stokes' findings went unheeded. So too did the findings of H.J.Fletcher who, in the same year, published an article titled, "The Use of Genealogies for the Purpose of Dating Polynesian History". Fletcher reiterated the urgent need for an inquiry into discrepancies between lists of genealogies. Until these were settled, he believed no degree of accuracy regarding the question of time could be agreed upon.<sup>33</sup> Taking the lead, Fletcher attempted to redress a number of discordant genealogies, and then, by using the statistical method with a twenty-five year interval, fixed the date of existence of Toi at a period somewhere between 850AD and 900AD, almost three hundred years earlier than the date set down by Smith.<sup>34</sup>

#### Williams, H., Bishop

Another critic of Smith's was Bishop Herbert Williams who made his criticisms through Smith's compatriot Elsdon Best. During Smith's lifetime, perhaps out of respect for the "old man", the Bishop was not apt to offer his views publicly and waited many years until long after the deaths of both Smith and Best before doing so.<sup>35</sup> Then in 1937 he published

a paper titled "The Maruiwi Myth".<sup>36</sup> This was concerned largely with the earliest settlers in New Zealand, the Maruiwi or Mouriuri, who pre-date the Maori by several generations. In it Williams turned his attention to Smith's method of chronology:

The fixing of dates in early Polynesian history is not a simple affair ... It is usual to compute twenty-five years for a generation, but this may easily prove too long; it all depends on whether the whakapapa is that of the main line or of a junior branch. Percy Smith as a rule, wisely took the mean of several lists, but he thought the difference between fifty and fifty-eight names in a list too much to admit of the mean being taken to fix the date.<sup>37</sup>

Williams correctly pointed out that such discrepancies were not abnormal and as an example mentioned two Ngati Porou rangatira whose lines effect serious margins of error in establishing the date of their common ancestor. Like Stokes before him, Williams subtly cautioned European enthusiasts against relying on the genealogical procedure to fix dates without first developing an understanding of how whakapapa was made up. In whakapapa, he said, there lay unsuspected traps for the unwary:

. . . it was possible, particularly in an important line, that the name of a wife might be introduced, or a few names from a collateral branch, an addition which would create no difficulty to the initiated, but would work disaster for the unsuspecting Pakeha searching after dates. As trustworthy indications, then, of actual dates, these whakapapa may often have to be abandoned.<sup>38</sup>

One can only agree with the learned Bishop. Imagine what confusion the following whakapapa might create for the uninitiated.

## W. 4

m. Mahutaiterangi

= Te Anaupare (1)

= Rangikarangatia (2)

= Hineamo (3)

= Hikaurunga (4)

= Tautangiao (5)

= Ruakitea (6)

Mahutaiterangi

1	—	Te Uhunuioterangi
1	—	Kohiku
1	—	Hinewaikawa
1	—	Korokaimatai
1	—	Te Ohonga
2	—	Tangaroaitapo
2	—	Hinetaitua
2	—	Tirohia
3	—	Uemakerewhatu
3	—	Mahioterangi
3	—	Mouira
3	—	Ngamiroi
5	—	Kohiku
5	—	TeKahuoterangi
6	—	Taimounu
6	—	Konohi

It shows Mahutaiterangi, his sixteen children and the mothers of those children. Even more difficult to trace are the marriages of these children and their immediate offspring. There are several examples of close inbreeding, endogamous marriages being common in traditional Maori society.<sup>39</sup>

Kelly, L.G.

Leslie G Kelly, of Maori descent, also seemed to echo Williams caution:

To the historian the Maori genealogical table has proved of great value in endeavouring to establish dates. In fact, having no written records to assist him, whakapapa became his only means of arriving at the approximate time of important events. It might be assumed that all one has to do is select the required line, allow twenty-five years to a generation, and then arrive at the appropriate date. This is far from the case ... several lines of descent must be used and due respect paid to whether they are senior or junior lines, before anything approaching the correct period can be attained.<sup>40</sup>

However, Kelly was not as ready as Williams to dismiss the genealogical procedure entirely as untrustworthy. He attempted to explain the many "inconsistencies and inaccuracies" in Maori genealogical tables, drawing from his own experiences of dealing with an unlimited number of Tainui whakapapa.<sup>41</sup> Like those before him, Kelly drew attention to the marked variation in the number of generations in descent lines from a common ancestor. He illustrated, with a number of whakapapa lines from the same tipuna, how inaccurate the statistical method could be. Fixing the date from a senior line and then proceeding to do the same by a junior line he demonstrated how dates differing by one hundred years or more could be arrived at.

### FURTHER THEORIES/DEVELOPMENTS

Robertson, J.B.W.

It was perhaps with Kelly's thoughts in mind that J.B.W. Robertson, in the 1950s, introduced an alternate method of chronology. This he termed the "analytical method", a complicated procedure requiring much genealogical study. It discarded the conventional twenty-five year interval, instead accommodating the periods between consecutive progenitors within the feasible physiological limits of the human life-span. For Robertson these periods could be represented by anything from twenty to eighty years.

Robertson claimed, that if taken up, the procedure would determine reliable chronologies, authenticate genealogies, and by so doing validate the reality and integrity of tribal tradition. He supplied a series of "working rules and limits" and demonstrated the effectiveness of the analytical method in his essay, "Genealogies as a Basis for Maori Chronology".<sup>42</sup> A detailed illustration of this method will be entered into in chapter three.

It was Robertson who collectively termed the previous attempts to apply inflexible intervals to descent lines as the "statistical method". He treated it with much the same caution as others before him. However he went one step further, and suggested that the statistical method be dismissed as having no real place in tribal histories, as any attempt to attain a chronology by applying the inflexible figure of twenty-five years to an individual line was quite unrealistic.<sup>43</sup>

Piddington, R.

Robertson's analytical method evoked an immediate response from other historians. Piddington<sup>44</sup>, Sharp<sup>45</sup>, and Pei TeHurunui<sup>46</sup>, are some whose replies deserve attention. Professor Ralph Piddington was the first to publish a rejoinder to Robertson's article. He claimed all Robertson had shown was that a few genealogies, after a certain amount of manipulation, could be made chronologically self-consistent. Piddington argued that the analytical method had to be applied to individual genealogies separately, each case being considered on its own merits. He suggested more attention be diverted to the question of why genealogies differed, as opposed to how they differed.

Sharp, A.

Andrew Sharp certainly did not spare the rod in attacking Robertson's analytical method. Sharp agreed that the statistical method was certainly inaccurate, but he was equally sceptical about Robertson's method. "All that Robertson's method can do," wrote Sharp, "is to establish a wide range

of possibilities" from which he can select cases in point to prove his conclusions.<sup>47</sup>

TeHurunui, P.

In 1958, Pei TeHurunui, interested enough by both Sharp's and Robertson's attempts to explain away the discrepancies in whakapapa tables, presented a paper offering a Maori perspective as to why descent lines from a common ancestor varied so markedly. In addition, he defended Smith's date of AD1350 for the arrival of the Great Fleet and endorsed the statistical method.<sup>48</sup> Sharp himself could not accept the theories of Pei Te Hurunui as logical explanations for these variations and repeated the axiom that until the inconsistencies in whakapapa were rectified, no accuracy in terms of European dates could be arrived at.<sup>49</sup>

Wilson, M.G.

The year 1962 saw a revival of Fornander's thirty-year-generation by Martin G. Wilson.<sup>50</sup> Wilson felt that no universal system of generational counting would ever meet with general approval and so offered the thirty-year generational count based on his own knowledge of post-contact traditions. It is interesting to note that Wilson suggested two figures might be of better use to represent the intervals between successive tipuna, one for the pre-contact generations and another for the post-contact generations. He explained:

The best arrangement might be to work from the Fleet onwards, say, 18 generations. On the generally accepted 25-year scale this would give A.D.1350 plus 450 years, or A.D.1800. On the 30-year scale, this would mean A.D.1250 plus 540 years, or A.D.1790, which is close enough to convention to be worth considering. But from the 18th generation, anything more than a 25-year scale is, I believe, completely unrealistic. Working backwards from A.D.1850 you would get the following:  $2 \times 25 = 50$  years, plus  $18 \times 30 = 540$  years. This would give A.D.1260 for the Fleet, which might be very close to the truth!<sup>51</sup>

Although at no stage did Wilson put his suggestion into practise, he recognized that the average life-span of post-European Maori differed

from that of the precontact Maori. This most important point has been emphasized more recently by way of the demographic features of precontact Maori communities ascertained through the study of a small sample of skeletal remains. This point is discussed more fully under the heading 'archaeology' in the following chapter.

Halbert, R.

1962 also saw the introduction of yet another method of chronology by Rongowhakaata Halbert.<sup>52</sup> Halbert offered his "classical method" of computing dates. A variation of the statistical method, it assigned dates to tipuna based on twenty-five years to a generation. The allocated dates however, represented the twenty-fifth birthday rather than the birth date. But where Halbert's system really differed was in allowing for the insertion or omission of ancestor's names to obtain what he felt was a more accurate chronology. In actual fact, what he was doing, as will be shown later, was manipulating the traditions to comply with his own pre-conceived patterns of the past.

Halbert considered the statistical method a "rough and ready" device based on averages which could not be expected to provide a dependable chronology, and Robertson's analytical method, he believed, was a "one-man system unsuitable for general use."<sup>53</sup> In a series of articles, using the Historical Review as their medium, both Robertson and Halbert debated at length the advantages of their own methods, exhausting their inquiries seemingly without reaching common ground.<sup>54</sup> In retrospect, Robertson's method never really achieved the recognition he would have liked, and the classical method, other than in the annals of the Historical Review, has yet to see the light of day.

Simmons, D.

More recently, David Simmons has, through a scholastic sifting of the tribal histories and genealogies of each iwi, discredited the statistical method as a "crude statistical device" which has taken "no advantage of some fairly obvious refinements."<sup>55</sup> In The Great New Zealand Myth, he

produced a mass of genealogies which not only debunked the theory of the Great Fleet, but also the dates set down by Percy Smith for the arrival in Aotearoa of Kupe and Toi.<sup>56</sup> To establish his dates Simmons resorted to the statistical method, but to his credit also gave the range of variation for each of those dates.

## ARCHAEOLOGICAL EVIDENCE

Since Simmons' contributions, archaeological evidence has come to light regarding the length of a Maori generation. From forensic studies of human bone, Houghton (1980) has found that Maori life was short by modern standards, most people being only in their twenties or thirties at age of death. A person forty years old would have been considered in old age.<sup>57</sup> Other archaeological data suggests a date approaching twenty years is a more accurate indication of the interval between successive progenitors. Although this data is so far only based on a relatively small sample of skeletal remains, at least one archaeologist expects that scientific methods of dating will provide the framework of New Zealand chronology.<sup>58</sup>

What, then, can one conclude are the methods which have been used to date Maori traditions? Our previous authorities line up as follows: Shortland used what can be termed the statistical method with an interval of about twenty-eight years. Thomson, also used the statistical method with a twenty-two-and-one-thirty-fifth interval. Stack, statistical, interval twenty years. Smith settled on the statistical method with a twenty-five year interval as did most historians who followed. Robertson may have come close to the heart of the matter when he distinguished between flexible and inflexible intervals. His analytical method allowed for an interval of between twenty and seventy years. Wilson used the statistical procedure opting for a thirty-year generational span. Recent archaeological data indicates twenty years to a generation. Halbert chose the classical method which was not too far removed from the statistical method and adopted an interval of twenty-five years.

On this evidence, three main methods of chronology exist: the conventional statistical method which has been characterized by the use of

numerous intervals to represent the average length of a generation; the analytical method invented by J.B.W. Robertson; and the classical method which was the construct of Rongowhakaata Halbert. To date, there still remains no universally accepted method of dating tribal traditions. In the following three chapters a critical analysis is undertaken to determine the inaccuracies within each of these methods.

NOTES

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- 1 e.g. Craik, John Lillie, The New Zealanders, 1830; Marshall, W. B., A Personal Narrative of Two Visits to New Zealand, 1836; Polack, J. S., New Zealand, Vol.I,1838; Fitzroy, R., Surveying Voyages of the Beagle, 1826-1836, Vol.II, 1839; Hamlin, J., "On the Mythology of the New Zealanders", Journal of Natural Science, 1842, Vol.I; Diffenbach, E., Travels in New Zealand, Vol.II, 1842.
  - 2 Ngata, Sir A. T., "The Genealogical Method as Applied to the Early History of New Zealand", (An address delivered to the Wellington Branch of the Historical Society 1928), 1988, p3.
  - 3 *ibid.*
  - 4 Shortland, E., Traditions and Superstitions of the New Zealanders, 1854, pp29-30.
  - 5 Most of the early attempts to design a method of chronology based on genealogies were undertaken by historians whose priorities were to date the arrival of the Maori in Aotearoa. Early theories suggested that their arrival was by way of a great fleet of canoes having set out from a Pacific Hawaiki. In this thesis, the fleet is often referred to as the "Great Migration" or the "Great Fleet".
  - 6 Shortland, E., p29.
  - 7 cf. Simmons, D.R., The Great New Zealand Myth, 1976, p.82; Williams, H.W., "The Maruiwi Myth", JPS, 46, 1937, p118; Kelly, L. G., "Some Problems in the Study of Maori Genealogies", JPS, 49, 1940, p.239; TeHurunui, P., "Maori Genealogies", JPS, 67, 1958, p162.
  - 8 Grey, Sir G., Polynesian Mythology, 1855, p.210.
  - 9 Thomson, A.S., The Story of New Zealand, Vol.II, 1859, 2d. ed., pp67-8.
  - 10 *ibid.*, p67.
  - 11 Houghton, P., "Prehistoric New Zealanders", NZ Medical Journal, 1978,87, p215.
  - 12 Stack, Rev., J.W., "Sketch of the Traditional History of the South Island Maoris", T&PNZI, 10, 1877, p59.
  - 13 *ibid.*, p.60.
  - 14 Simmons, p40.
  - 15 Robertson, J.W.B., "Genealogies as a Basis for Maori Chronology", JPS, 65, 1956, p46.
  - 16 Robertson, J.W.B., "The Chronology of Maori History", Historical Review, 1963, p193.
  - 17 Robertson, J.W.B., "Genealogies as a Basis for Maori Chronology", JPS, 65, 1956, p.46.
  - 18 Fornander, A., The Polynesian Race, 1878-85, 3 vols.

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- 19 Wilson, Martin G., "In Search of the Great Fleet", Historical Review, 1962, Memoir No.2, pp11.
- 20 Smith, S. P., Introductory Remarks in Rimini, T. W., "The Fall of Pukehina, Oreiwhata and Poutuia Pas, Bay of Plenty, New Zealand", JPS, 2, 1893, p43. Also Smith's notes in JPS, 2, 1893, p41.
- 21 Gudgeon, Judge W. E., "A Maori Generation", JPS, 2, 1893, pp113-5.
- 22 *ibid.*, p115.
- 23 As early as 1894, in an editorial note to an article by Gudgeon, Smith was already indicating his preference for a 25 year interval. cf. Gudgeon, W., "The Maori Tribes of the East Coast", JPS, 3, 1894, p208.
- 24 Smith, S.P., "Hawaiki - The Whence of the Maori", JPS, 7, 1898, p201.
- 25 Smith, S. P., Hawaiki: The Original Home of the Maori, 1921, pp19, 216, 229.
- 26 *ibid.*, p19.
- 27 Simmons has shown countless examples of how the generations differ in collateral branches. cf. Simmons, pp83 ff.
- 28 Some of the twentieth century historians and amateur historians who used the twenty-five years method were: Downes, T.W., Old Whanganui, 1915, 2d. ed., p?; Best, E. Tuhoe: The Children of the Mist, 1925 2d ed., pp12-3; Te Awarau, W.M., "Tuwhakairiora", M.A. thesis in History, University of Canterbury, 1927, pII; Prentice W.T., The Maori History of the Hawkes Bay, in The History of Hawkes Bay, Wilson, J.G., 1939, 2d. ed.1976, p20; Mitchell, J.H., Takitimu, 1944, 2d. ed., p20; Elvy, W.J., Kaikoura Coast, 1950, p13; Bagnall, A.G., Wairarapa: An Historical Excursion, 1976, p5; Steedman, J.A.W., Nga Ohaki o nga Whanau o Tauranga Moana, 1984, pp12-3.
- 29 Sorrenson, M.P.K., "The Whence of the Maori", JPS, 86, 1977, p476.
- 30 Stokes, J. F. G., "An Evaluation of Early Genealogies used for Polynesian History", JPS, 39, 1930, pp1-2.
- 31 *ibid.*, p2.
- 32 *ibid.*, pp37-8.
- 33 Fletcher, H. J., "The Use of Genealogies for the Purpose of Dating Polynesian History", JPS, 39, 1930, pp189-194.
- 34 Fletcher, H. J., "A Review of the Toi Kairakau Genealogies", JPS, 39, 1930, pp315-321.
- 35 Sorrenson, M.P.K., Maori Origins and Migrations, 1979, 2d. ed.1983, pp52-3.
- 36 Williams, H.W. "The Maruiwi Myth", JPS, 46, 1937, pp105-22.
- 37 *ibid.*, p118.

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- 38     ibid.
- 39     Sorrenson, M. P. K., Na to Hoa Aroha: From Your Dear Friend, 1987, Vol. 2, p156.
- 40     Kelly, L. G., "Some Problems in the Study of Maori Genealogies, JPS, 49, 1940, p239.
- 41     ibid.,pp235-42.
- 42     Roberton, "Genealogies as a Basis for Maori Chronology" pp45-54.
- 43     Roberton, "Chronology", Historical Review, 1963, pp193-4.
- 44     Piddington, R., "A Note on the Validity and Significance of Polynesian Traditions", JPS, 65, 1956, pp200-3.
- 45     Sharp, A., "Maori Genealogies and Canoe Traditions", JPS, 67, 1958, pp37-8.
- 46     Te Hurunui, P., "Maori Genealogies", JPS, 67, 1958, pp162-5.
- 47     Sharp, "Maori Genealogies and Canoe Traditions", p37.
- 48     pp164-5.
- 49     Sharp, A., "Maori Genealogies and the 'Fleet'", JPS, 68, 1959, p12-3.
- 50     Wilson, p11.
- 51     Wilson, Martin G., "The 30-Year Generational Span", Historical Review, 10, 1, 1963, p46.
- 52     Halbert, R.W., "Genealogies as a Means of Dating Maori Prehistory", Historical Review, 10, 1962, pp105-14.
- 53     ibid., pp105-6.
- 54     Roberton, J.W.B., "The Chronology of Maori History", Historical Review, 1963, 11, 4, pp193-8, and "The Chronology of Maori Tradition", Historical Review, 12, 3, 1964; Halbert, R.W., "The Chronology of Maori History", Historical Review, 12, 2, 1964, pp85-91, and "The Chronology of Maori Tradition", Historical Review, 12, 4, 1964.
- 55     Simmons, pp36-7.
- 56     ibid., pp15 ff.
- 57     Houghton, Philip, The First New Zealanders, 1980, pp95-7.
- 58     Golson, J., "Dating New Zealand's Prehistory", JPS, 64 , 1955, p130.

## CHAPTER 2

### The Statistical Method

This method involves taking a number of genealogical lines from a person traditionally said to have been living at the time of the event to be dated, calculating the average number of generations to the present day and, by allowing a fixed number of years to represent the length of a generation, arriving at a total number of years since the character in question lived. Assuming the genealogies used are authentic, the accuracy of this method becomes dependent on two factors:

- (1) The number of years chosen to represent the interval between successive progenitors usually taken to be the length of an average Maori generation.
- (2) The number of collateral branches chosen to determine the date.

In both of these areas writers who used the statistical method adopted independent practices, all of which overlooked certain obvious criteria which can be shown to effect serious margins of error in the accuracy of their results. A discussion on these two factors is now entered into to bring out the inaccuracies of the statistical method.

#### **1 A MAORI GENERATION**

A review of the literature has revealed that figures ranging between twenty and thirty have been used to represent the average length of a generation. Thomson's twenty-two-and-one-thirty-fifth years based on the average reign of an English sovereign, Stack's twenty years, Fornander's thirty years, and Stoke's twenty-six-and-one-third years taken from the Japanese royal line are some examples. There exists a situation now where, although one-hundred-and-forty years have passed since Shortland first advanced the genealogical procedure, there is still no consensus as to which of these figures will provide the most reliable results.

Although twenty-five years has been the popular interval, it has been paralleled by other arbitrary figures, whose users disclaim the twenty-five year figure as being too high or too low to represent an average Maori generation. Gudgeon was the first writer to address the question of the length of a generation, suggesting the average was close to thirty years. He believed that this was due to a number of factors, one being that the toa (warriors of note) did not marry until they reached middle age as "family ties tended to spoil a man as a fighter, by making him less anxious to engage in battle".<sup>1</sup> In Ngati Porou, where Gudgeon drew a great deal of his information, tradition provides numerous examples of warriors leaving their children behind as they departed for battle. There are many instances of fathers fronting the same battle ranks as sons.

At the battle of Te Maniaroa, Roro and his son Hikatoa fought side by side. Hikatoa himself was a father at the time. Rangitiketike, who was killed there, had left a wife and young son behind. Kuku, Korohau and Rongotangatake, three chiefly brothers who met their Waterloo at the same battle, all had children living, and the great general Tuwhakairiora, directing the Ngati Porou army, had several of his own sons under his command.

This might suggest that, while in some cases family ties may have prevented the warrior from venturing to battle, in others it strengthened his desire to attend. As the proverb says, "He puta taua ki te tane, he whanau tama ki te wahine." - Fighting with men and childbirth with women.<sup>2</sup> Perhaps Buck was more correct when he claimed in his time, that most authorities held that young men married from about the age of twenty-five.<sup>3</sup> Marriage is used here in the Maori sense of the word, cohabit probably being a more accurate term.

Gudgeon also felt that if a figure less than twenty-five was used, there was no allowance for the death of first-born children either in infancy, through the result of war, or as childless adults. The infant mortality rate in primitive societies was high - at least fifty percent according to one authority.<sup>4</sup> This was helped along by such population-control measures as abortion and infanticide. Infanticide was known to be practised in Ngati Porou. Te Umutangata, an unusually large flat rock in the Makarika basin, stands as testimony to the generations of infants in one

hapu whose lives were taken because of deformities or other such handicaps which were considered abnormalities.

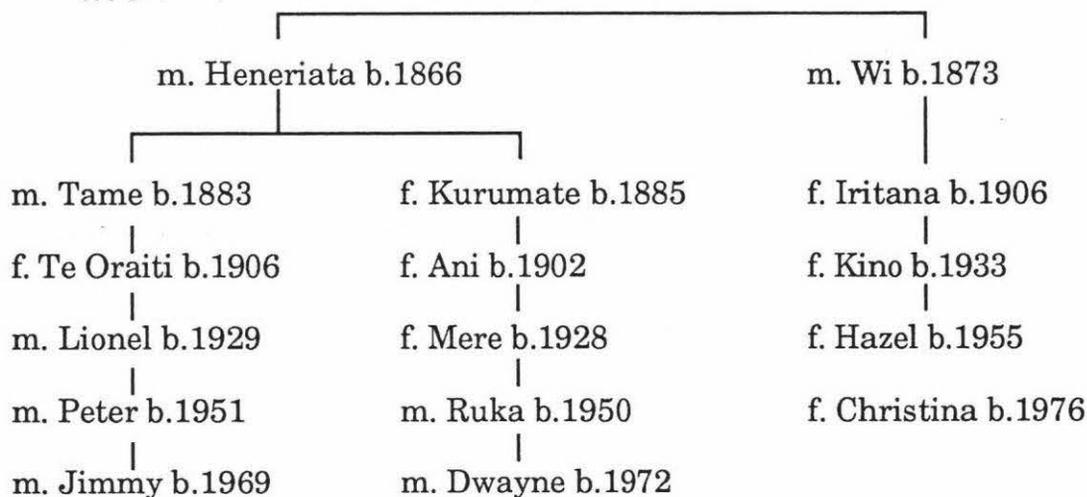
Sutton has suggested an infant mortality rate of between sixteen and twenty-five per cent for early communities of Palliser Bay, while studies of other Polynesian groups also indicate a fairly high infant mortality rate.<sup>5</sup> If these remarks can be taken to reflect traditional Maori society across the country, then it must follow that a reasonable percentage of first-born children died in infancy, and that there are grounds for Gudgeon's concern.

In contrast with Gudgeon's views, early writers like Stack, Shand, and Smith claimed that Maoris married early, "women in particular marrying very early".<sup>6</sup> These chronologists suggested twenty to twenty-five years as a more suitable figure for the average generation. Fletcher gave a curious example of how close this estimation might be:

At Wairoa, Hawkes Bay, I was conversing with a middle-aged Maori, who was nursing a baby about a year old. I asked him, "Is the baby yours?" "No," he said, "It is my grandson." "How old are you?" His reply was, "About fifty' but you see that old woman over there, she is my grandmother." I at once said, "How old is she?" He said, "I do not know; but she was a little girly about five years old when Te Wera came down here." He did not know the date of Te Wera's raid, but I was able to reckon that the old lady was between 98 and 100 - four generatons to the century.<sup>7</sup>

Fletcher's example is certainly not uncommon in Maori society both past or present. The writer has but to peruse his own whakapapa and he finds others.

## W. 5



But these examples are of Maori families who were not subjected to the circumstances of pre-contact Maori life and therefore these dates may not be true indications of an average generation for the pre-contact period.

One of the difficulties in dealing with 19th century views of the past is that those views assumed that the demographic features of the early Maori were similar to those of the 19th century or post-contact Maori. They assumed that length of life, age at first pregnancy, fecundability of women (ie. the monthly chance that a woman would conceive), birth interval, and infant mortality remained stable. Another view held that the pre-contact Maori, because he was free from disease and the effects of modern warfare, he therefore, enjoyed a longer and more healthier life.

However, when one turns to archaeology, which in this country has progressed to a stage which allows archaeologists themselves to offer their own view on pre-European Maori demography, the information one receives conflicts with both of these views.

### Archaeological Evidence of a Maori Life-span

Archaeological evidence to date has provided a somewhat different picture of the pre-contact Maori from the one we are accustomed to. The full and detailed picture of 'the Maori as he was', that which is common in the Maori historical section of our libraries, was drawn from comprehensive ethnographic records of the nineteenth century. A careful reassessment

of these sources, however, suggests that "this particular Maori may never have existed. He is a composite of Maori people from different times and different regions, some genuinely prehistoric, some more recent."<sup>8</sup>

The archaeologist with his scientific methods of carbon dating, dendrochronology or tree-ring dating, and forensic studies of human bone has unearthed what seems at first an implausible portrait of the tangata whenua of this country. Houghton, using particularly the method of ageing by evidence of tooth wear, has proposed that the average life-span of some forty individuals recovered during archaeological excavations at Wairau Bar, was "twenty-eight years for the men and twenty-nine years for the women".<sup>9</sup> He writes:

Startling though these findings may be, they are fairly typical of the country as a whole. All the time, in the small populations from Motutapu Island, from Opito, from Castlepoint, from Kaikoura and coastal Otago, we find we are dealing with what nowadays would be termed 'young' adults. The oldest individuals reach into the fifties, perhaps the rare sixty, the majority die by their late twenties. I would estimate that the average age at death for the country as a whole, in prehistoric, was a little higher than that revealed at Wairau Bar - perhaps thirty-one or thirty-two years of age.

While it would be fascinating to go back through time and assess the real accuracy of the figures, there yet seems little doubt of their validity. The results by the various methods, where they can be applied to the same individual, are in harmony - tooth wear and development, epiphyseal fusion, changes at the pubic symphysis, and the microscopic appearance, all give the same story. Very seldom is there any inconsistency.<sup>10</sup>

Similarly, in her publication The Prehistory of the Maori, Janet Davidson states:

Most adults died during their twenties or thirties and old age was attained by about forty. A few people reached their fifties, but a sixty-year-old would be a veritable Methuselah. The average adult age at death may have been about thirty-one or thirty-two over the whole country, although it varies from one small sample to another.<sup>11</sup>

Again, Sutton has found that thirty-eight was the average age at death for a very small group of adults who lived at Palliser Bay, and Phillips study of fifty-nine females from throughout New Zealand suggest a similar average of thirty-seven years.<sup>12</sup> As a rule, prehistoric societies, across the

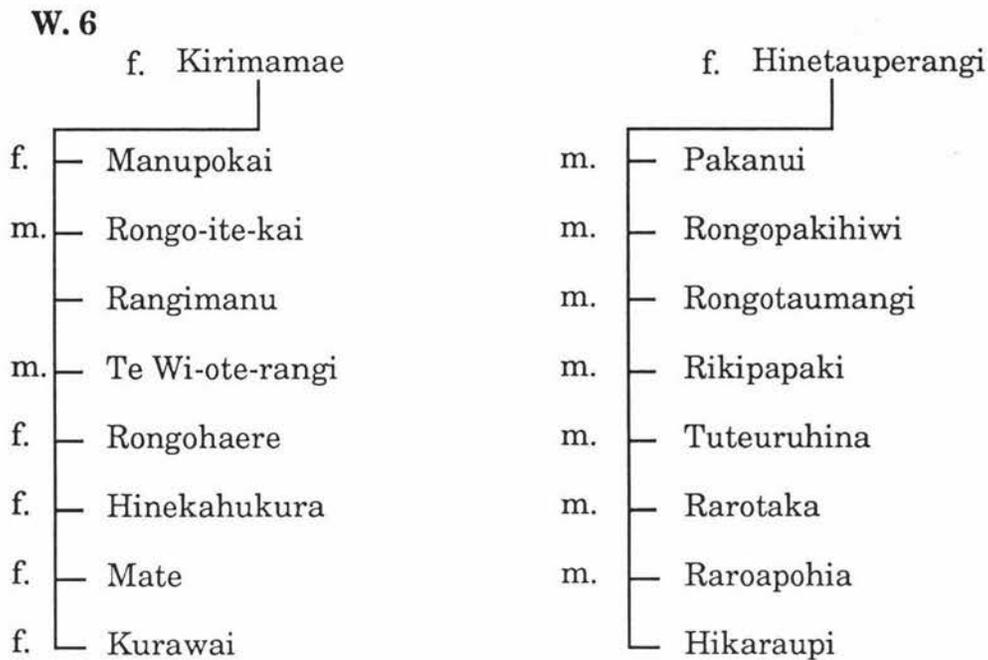
globe were generally characterized by an average age for adults at death of around thirty years.<sup>13</sup>

### **Fertility in Maori Women**

Add to this evidence regarding fertility in Maori women and one should be able to determine an appropriate interval based on archaeological evidence for the period between successive progenitors in genealogical descent lines.

Recent archaeological studies have shown that from certain bony alterations on the pelvis it is possible to estimate the number of children born to a woman. Using this process Phillips calculated that the average number of births for "prehistoric New Zealand women" was about three and that "the maximum number of pregnancies/births was only five".<sup>14</sup> Other studies have since supported this view.<sup>15</sup>

It is interesting to note that a genealogical study recorded from Ngati Porou provides evidence in contrast with these findings. For while many pre-contact families did total less than five children, it is not infrequent to find families of six and even up to ten or more continually cropping up on the charts. For example the tipuna Kirimamae lived approximately nine or ten generations ago and Hinetauperangi about fifteen generations back.



In most cases, these large families were the direct result of a deliberately accelerated breeding cycle. Ngati Porou history documents several accounts, particularly in times when the hapu had suffered heavy losses in battle, of the female survivors initiating the rapid reproduction of offspring in the attempt to provide a taua to revenge whatever defeat had been suffered. At least one Taranaki researcher was aware that this practise had occurred in his hapu<sup>16</sup> in the early nineteenth century.

### Age of Maori women at first pregnancy

Phillips, in her study of pre-contact Maori women, also concluded that eighteen or nineteen years was the probable age at which most women conceived their first child, while births were probably spaced at three or four year intervals.<sup>17</sup> A calculation using Phillips data indicates that an average generation might be close to twenty-two years, given that on average three children are born, the first when the mother is eighteen-and-a-half, and assuming that the birth interval given is best represented by its middle value, that is 3.5 years, the second child is born when the mother is twenty-two, and the third at age twenty-five-and-a-half.

### **Length of birth intervals**

Sutton claims that Phillips was incorrect in her calculation of the birth interval and offers an increased figure of 6.16 years.<sup>18</sup> Considering what has been said earlier regarding restricted ovulation due to long suckling in undernourished mothers and that in most cases children under primitive conditions suckle for a number of years, it could be expected that births would be limited and birth intervals widely spaced. In contrast, during periods of increased reproduction Phillips more regular intervals would appear more relevant. However, if 6.16 years is used, this would increase the above estimation to 24.66 years (18.5 + 6.16) an average remarkably close to the commonly used twenty-five year interval.

### **How reliable is archaeological evidence?**

The validity of these averages comes into question when it is realised all archaeological evidence to date, regarding demography, is based on a pitifully small amount of forensic evidence. The skeletal remains studied represent in total no more than one hundred individuals from but a sprinkling of archaeological sites. When one considers that hundreds of thousands of people have inhabited this country, forty individuals found buried on a beach front at Wairau Bar, covering three centuries, and containing not a single child or infant is obviously an insufficient basis from which to suggest norms for the whole country, especially over a period of one thousand years. Every archaeological method of dating has a high error rate. Where skeletal remains are concerned, dates for their existence can only be given as rough approximations. Even these approximations have a wide range of variability (e.g. 1650 ± 50). With these points in mind, one wonders whether the archaeologist is right to extrapolate such minimal results to cover Maori society in general.

However, what has been presented in the previous pages is the evidence available based on archaeological findings. In the absence of a statistically error-free dating method, this evidence should at least be considered as a contribution towards a better understanding of the Maori demographic past.

Archaeologists are yet to correlate their findings with Maori traditions. Tradition suggests that the pre-contact era was characterized by periods of irregular mortality rates, while there is clear evidence in whakapapa that the average size of families varied throughout the centuries.

Traditions "can provide a useful framework for the interpretation of archaeological data", while in turn, archaeology can be used to cast light upon "aspects of pre-history about which tradition remains silent".<sup>19</sup>

Golson, Houghton, Davidson, and Sutton have each expressed concern for the need to produce a "coherent synthesis" using both kinds of data.<sup>20</sup>

Maori tradition undoubtedly has much valuable information to offer in the unravelling of the early history of Aotearoa.<sup>21</sup> Unfortunately archaeologists do not yet have the necessary access to tribal traditions so as to undertake such a task. Perhaps the tribal specialist with a sound grasp of other evidence from pre-history may yet attempt the task.

Regardless of who carries out the study, until some correlation between archaeology and tradition has been established, the average length of a generation which archaeology provides, remains as speculative as the twenty-six-and-one-third years drawn from the Japanese royal line or the twenty-two-and-one-thirty-fifth years of the English line of sovereignty.

In summary, of what has been said concerning the length of a generation, it appears for many of the writers who believed a standard interval could be applied to the period between generations, the standard could be sought from any culture throughout the world. Thus there are averages drawn from European and Hawaiian cultures, English sovereignty, and even the Japanese royal line. The Maori in New Zealand, however, were an isolated race, unaffected by the diseases which ravaged the European continent, or by the disasters which struck the British Isles. There is nothing to suggest they had anything in common with Japanese royalty, least of all a similar life/death pattern.

For those authors who turned to the Maori's own traditions to discover the length of a generation, they too had differing views. This is revealed in the works written by Stack, Smith, and Gudgeon - the 'experts' on Maori tradition. As for the archaeologists they are yet to reach a stage where their findings can be applied convincingly to the country as a whole.

What is amazing about these researchers is the fact that all of them believed an inflexible figure could be applied to whakapapa in order to determine dates. They put the length of a generation variously at 20, 22, 24, 25, 26, and 30 years when in fact the generations had no quantitative aspect whatsoever. A generation existed purely as an indication of the fact of duration. A normal standard interval between progenitors does not exist and a fixed interval has no scientific basis, but has become conventional "only through persistent misapplication of a statistical procedure".<sup>22</sup>

The only researcher who applied flexible figures to whakapapa, was Dr J.B.W. Robertson. If his claim to be able to have set down whakapapa in chronological form, assigning a date of birth to each individual was practically possible, then obviously the length of a generation would be more accurate if it was regulated, as Robertson regulated it, within the limits of human biological possibility. In the next chapter Dr Robertson's method will be scrutinized to show that even his application of a flexible interval will provide nothing more than dates, which although they may be accurate, it is just as likely they are not.

## **2 THE NUMBER OF COLLATERAL BRANCHES CHOSEN TO DETERMINE THE DATE**

It might be possible to accept a date as a close approximation if it has been derived from a large number of collateral branches and provided an indication of the range of variation for the date which has been given. The basis for the statistical method lies in establishing dates through several lines of descent. However, in practice, the procedure was applied to individual lines in an attempt to form an accurate chronology and the results of the calculation were stated as "crude averages" with no hint as to the parameters of variance. It was in applying the process to single lines that Percy Smith and others who copied his methods departed completely from statistical principles.<sup>23</sup>

As an illustration of the difficulties encountered when fixing dates based upon a single genealogical line, consider the following whakapapa.

## W. 8

f. Makere  
 |  
 f. Riria  
 |  
 m. Otene  
 |  
 f. Celia b.1980

Using a twenty-five year interval, Makere can be said to have been born around 1905. Such a suggestion is utterly unrealistic. This is demonstrated easily by analysing collateral lines connecting other descendants to Makere, "so easily that it is difficult to conceive how so irrational a method has persisted for so long".<sup>24</sup>

## W. 9

f. Makere

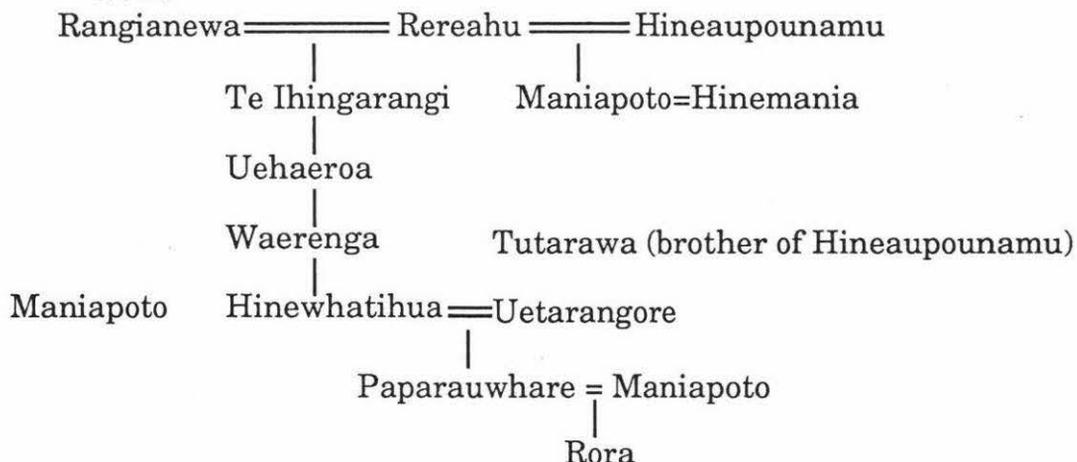
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  |
  +-----+-----+-----+-----+
  |         |         |         |
  m. Whetu b.1898  f. Iritana  f. Riria  f. Kurumate b.1918
  |               |         |         |
  |               +-----+-----+
  |               |         |         |
  m. Wi           f. Kino  f. Luana b.1959
  |               |         |
  f. Kino b.1987 f. Hazel
  |               |
  f. Christina b.1976
  
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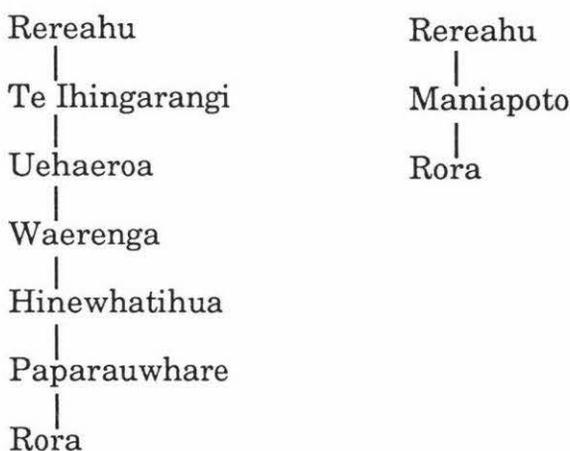
Observing the lines above from left to right, Makere can equally be shown to have been born in 1873, 1912, 1876, 1909 and 1893. The range of variation is thirty-nine years over a 113 year period (ie. given that the most recent mokopuna belonging to Makere was born in 1987) while Makere's actual birth date according to school records was 1874.

Numerous examples of different lines between two or more people have been given by several authors from various tribal traditions. The Tainui historian Kelly, offered the marriages of Maniapoto as still another example.<sup>25</sup>

## W. 10



Placed side by side the descent of Rora appears thus:



In commenting on these lines Kelly wrote:

With this example before us it can readily be seen how easily one can be led astray when relying on only one line to establish a date. The descent of Rora through Te Ihingarangi would appear to cover a period of nearly 150 years and again, Maniapoto is shown to marry his elder brother's great-great-grand-daughter! Yet, to Ngati-Maniapoto, there is no question regarding the reliability of his peculiar situation. Te Hurinui, commenting on the matter, says: "At first glance the marriage of Maniapoto with Paparauwhare would appear to be utterly ridiculous. According to the tribal elders, however, the marriage of Rereahu and Rangianewa took place early in life and Te Ihingarangi was already a grandfather when Maniapoto was born."

Maniapoto was therefore about the same age as Waerenga. The first wife of Maniapoto was Hinemania, after which he married Hinewhatihua on the death of her husband Uetarangore. His

marriage with Paparauwhare occurred late in life following the custom of supplying old chiefs with young wives.<sup>26</sup>

It is perfectly normal in any society that among the uri (descendants) of large families generations quickly become staggered. This is clearly brought out in Te Aitanga-a-Mate whakapapa. The Appendix shows one-hundred-and-seventy-five lines of descent from the ancestress Kapohanga converging on one hundred of her descendants. Kapohanga was a revered tipuna of the Aitanga-a-Mate iwi living in the Hiruharama region of Ngati Porou. The whare whakairo (carved house) situated at Hiruharama bears her name.

The persons listed all attended the local schools in that region, so that it has been possible to locate, through school admission registers, each one's date of birth. The accuracy of these registers may be in question, but from the researcher's experience, the birth dates stipulated are accurate to within eighteen months which, as will be seen, is more than sufficient for the purposes of this demonstration.

The one hundred persons on which the whakapapa lines diverge were contemporaries, they all being born in the 1880's. In fact, the matamua (eldest) of those chosen was born on 2.3.1880 while the potiki's (youngest) birth date is recorded as 11.12.1889. They have been chosen at random from the Waiomatatini, Akuaku, and Hiruharama school admission registers. No adherence has been paid to tuakana-teina (seniority) in the setting out of the whakapapa as both shortage of space and method of layout have influenced the associated positions of each tipuna.

As has been seen, archaeological evidence from a small number of regions indicate that in those areas in pre-European Maori society the possibility of early pregnancy, the length of birth interval, as well as the average life span of male and female differed markedly by modern standards. With this in mind, the chart has been focussed largely on ancestors who lived in the pre-contact period. It is because the demonstration requires known dates from the post-contact period that lines have been brought down to people born in the 1880's. The 1880's has been specifically selected as it represents the earliest period in which a sufficiently copious Ngati Porou register of birth dates can be located.

These charts show how marked staggering can be. Of the one-hundred-and-seventy-five descent lines listed, the longest line is eleven generations while the shortest is seven.

*Table 1:*

11 gens.	=	1
10 gens.	=	5
9 gens.	=	32
8 gens.	=	100
7 gens.	=	<u>37</u>
		<u>175</u> individuals

Therefore, if a writer, trying to establish a date for Kapohanga based on a single descent line, happened upon the Hoera Taitua line of eleven generations, they could date the birth of Kapohanga at approximately 1605AD. Conversely, if they chose the Tokena Pokai line of seven generations, it would be 1703AD, a difference of 100 years or four generations. This variation is so great it makes the results of the calculations, look, to say the least, very dubious.

**So why do the number of generations in collateral branches differ so notably?**

Although it may appear obvious, from the whakapapa tables supplied in the appendices, that descent lines from an ancestor in common are staggered because of the rate at which the progenitors on those lines reproduced, this reason alone is not the only explanation for such divergence. The Journal of the Polynesian Society over the years, has published a number of papers written by scholars, both Maori and Pakeha alike, which give other explanations.

Stokes believed that the Polynesian habit of 'name-changing' was one reason for divergent lines. "This was such that a chief might be referred to by many different names in as many genealogies."<sup>27</sup> This view was supported by Hare Hongi, scholar and one time authority on Ngapuhi genealogy and tradition,<sup>28</sup> and by the Tainui Historian, Leslie Kelly.

Kelly elaborating on this point, wrote:

It quite often happens that persons possessing two or more names figure in the tables of one tribe under one name, while in the records of another tribe they are called by a name entirely different. Among the more recent ancestors this fact is usually well known, and consequently no misunderstandings arise when Potatau is sometimes called Te Wherowhero, or when his aunt Rangianewa is referred to as Urumakawe.<sup>29</sup>

In Te Aitanga-a-Mate whakapapa there are several examples of name-changing. When Pouramua was killed at Omarumangamanga his son Rawiri was given the name of Te Wahamiia, while his brother Paki TeAhi took the additional name of Te Wharetakaha, that the event should be retained in the memory of their family. As has been stated, it is where "the possession of more than one name has been forgotten" that confusion takes place, especially so where the lines of descent come down through different persons.<sup>30</sup>

In addition to this problem, sometimes where a descendant has been given the same name as their tipuna, the generations between them are forgotten and the tipuna is mistakenly thought to have lived in the time of the descendant, "we thus have Tinirau I, a contemporary of Maui and Tinirau II, who lived at the time of Whakatau. It is quite clear that in the legends as collected by Grey in 'Polynesian Mythology' the two have become greatly confused".<sup>31</sup>

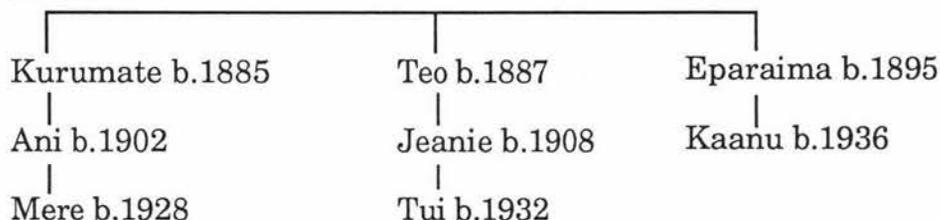
There is still the further confusion of entirely different ancestors being known under the same name, or some slight variation.<sup>32</sup> A recent case in point being the Raharuhi befuddlement in 1976, where at a hearing held before the Tairawhiti Apellate Court, two separate tipuna, one Raharuhi Rukupo and the other Raharuhi Tapore, were claimed to be the master carver, Raharuhi.

Another of the great Maori scholars, Pei TeHurunui, "who oftimes sat at the feet of our departed *tohunga*", explained the wide variations in the generations of tribal whakapapa as being "the result of a preponderance or lack of female progenitors in the various lines of descent,"<sup>33</sup> a view which had been previously expounded by Smith.<sup>34</sup> According to Te Hurunui, where descent lines are longer they are usually characterized by a majority of female progenitors, where they are shorter more males

appear in the line.<sup>35</sup> Although experience suggests that Pei Te Hurunui's theory is correct, it is interesting to note that the tables in the appendices do not clearly confirm this. With reference to these whakapapa tables the gender of the tipuna where it is known, has been listed alongside their name as "m" for male and "f" for female.

Pei Te Hurunui also held the same view as the early European writers like Stack, Smith, and Shand, that Maori women married early. He maintained that it was "quite common to find sisters with grandchildren of the same age or older than the children of brothers," which results in the wide variation in the number of generations in their lines of descent.<sup>36</sup> One need look no further than one's own family to see that such commonalities do exist. In the following table both Mere and Tui are shown to be older than their aunt Kaanu.

**W. 11**

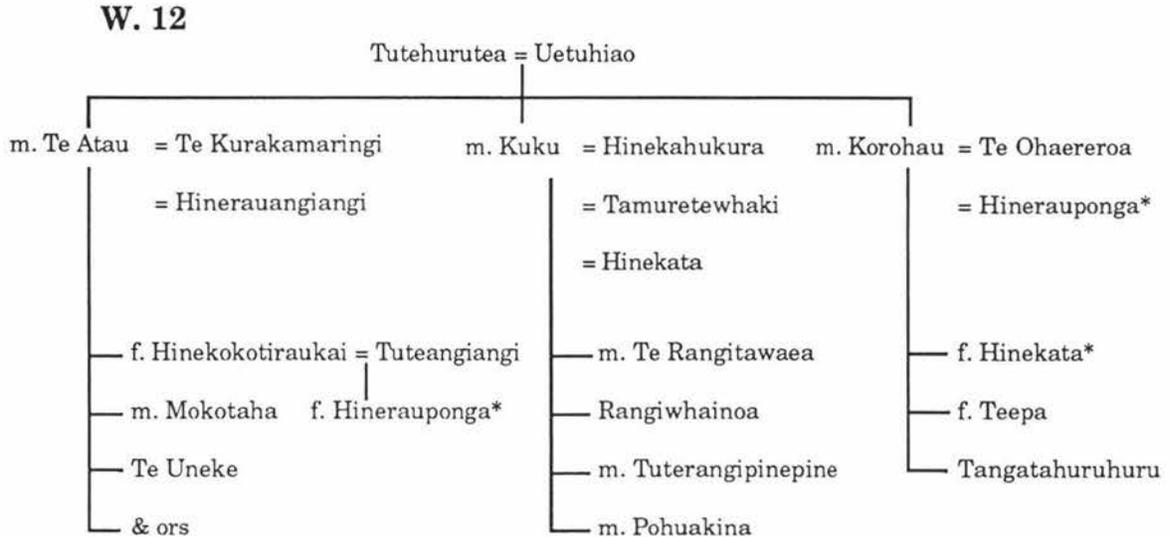


However, it should be noted that the tables in Appendix B also show brothers with grandchildren older than their younger sisters' children (cf. tables G1 and G2 as with table G5). This too is not uncommon. Perhaps it is more correct to say that the lines descending from a tuakana (elder member) of the family will usually be found to be longer than those of a teina (younger member). However, as to whether or not these examples are truly characteristic of families who lived during the pre-European period, is a matter for further investigation.

Both Pei Te Hurunui and Leslie Kelly made the important point that it was customary to supply the older chiefs with younger wives, so that a rangatira might have several wives and the younger wives were often of the same age or younger than the grandchildren by the senior wives.<sup>37</sup> Ngati Porou whakapapa and tradition abounds with such examples. None is more well-known than the account of the great Tuwhakairiora who in his old age took as a fourth wife his youthful daughter-in-law.

Strange though this procedure may seem, it was quite in accord with the Maori custom of the day.<sup>38</sup>

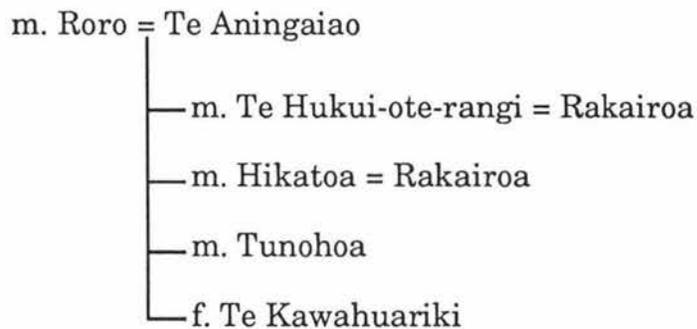
The Maori also practised the Levite custom of taking to wife the widow of a close relative (eg. brother, cousin, nephew, or son), as well as close in-breeding in the form of marriages between half-brothers and sisters, first cousins, uncles with nieces, and aunts with nephews.<sup>39</sup> This is exemplified in the following chart:



The three brothers Te Atau, Kuku, and Korohau were the rangatira of Te Aitanga-a-Mate. Te Atau had two wives that are known of. Kuku had three, one being his niece Hinekata and tradition records Korohau as having had two wives, one of which was his grandniece Hinerauponga. It is no wonder the generations in descent lines vary so markedly.

In another example, the table below discloses the issue from the marriage of Roro to Te Aningaiao.

**W. 13**



Te Hukui married Rakairoa and two children were born of the union. On the death of Te Hukui, Hikatoa took Rakairoa to wife. They too had two children. Hikatoa joined his father at the battle of Te Maniaroa and there was killed. Roro returned to Rakairoa with the news of the tragedy. Bereft Rakairoa replied, "It is a fortunate thing that it should chance to be you who comes to tell me of my husband's death. I now propose that you take me yourself."<sup>40</sup> They married and their offspring were Nukutaurua and Te Ketemingi. Where tradition is not so coherent, families like this are frequently recorded incorrectly. Half-brothers are shown as full-brothers, while the position of father and son, mother and daughter are unintentionally reversed. Very often the researcher requires the skills of a 'Sherlock Holmes' to set down whakapapa in its correct generations.

The omission of names was another explanation given for the wide variation in the number of generations in descent lines. Fletcher proposed that names were omitted as a result of memory failure, while Robertson postulated the frequent elimination of whole generations leaving the shorter junior branches to carry on the family lines.<sup>41</sup> In contrast, Pei Te Hurunui, defending the authenticity of Maori genealogies emphasized that it was fallacious to deduce from the wide variations that there must have been missing links in the descent lines or that certain events in Maori history did not take place.<sup>42</sup> He explained:

Sometimes mistakes in the order of births of members of a family may be found but such errors are due to faulty recording, or incomplete knowledge of the *whakapapa*.<sup>43</sup>

Kelly and Hongi believed genealogies sometimes contained fictitious generations, inserted for the purpose of increasing family social status.<sup>44</sup> In traditional Maori society chieftainship was derived through birthright and measured in whakapapa. "The most senior family was that which could trace its descent from the founding ancestor of the tribe or sub-tribe through as many first-born antecedents as possible in chiefly genealogies."<sup>45</sup> The distorting of whakapapa for the purpose of claiming seniority of descent was also cited by Mr Tita Wetere in correspondence to Robertson. He wrote:

... after the demise of the *tohunga* the common people acquired the whakapapa, and played havoc with them from their propensity to claim seniority of descent, and manipulating the genealogical lines to prove such seniority, however fictitious they may be.<sup>46</sup>

In an attempt to aspire to this higher social position, there have been some families who have either added names to their whakapapa in order to lengthen a junior line, or "have conveniently changed an ancestor from his rightful place as younger brother to that of elder brother".<sup>47</sup>

From the foregoing discussion it can be seen that there are several reasons why genealogies differ in the number of generations in collateral branches. The differences are shown to be so great that their time-depths can neither be proved nor disproved.

### Taking the mean

Yet it might be argued, based on the figures displayed in Table 1 (page 13), that in all probability the date of birth for Kapohanga could be approximated by counting 200 years back from the 1880's, since the eight generation line, which is in fact the mean, appears to be the most regular. However, it must be remembered that the individuals upon which the lines descend, were born between 1880 and 1889, and that there are several other iwi, eight generations removed, who were born decades before the 1880's and decades after it. For example, the following whakapapa shows Norman Booth eight generations removed from Kapohanga and he was born in 1956.

## W. 14

f. Kapohanga  
 |  
 f. Hinewairere  
 |  
 m. Tuameko  
 |  
 f. Hineaute  
 |  
 m. Te Teira  
 |  
 f. Arihia  
 |  
 m. Wi  
 |  
 f. Kurumate  
 |  
 m. Norman

The whakapapa of the descendants of Heneriata Makarini, elucidates this very point. Born in 1866, Heneriata had eighteen children over a duration of thirty years, while some of her mokopuna had just as many, if not larger families.

Using the twenty-five year interval the maximum and minimum for Heneriata's date of birth was calculated from the birth dates of each generation of her descendants and the following table resulted:

*Table 2*

	1840	1850	1860	1870	1880	1890	1900	1910
Children (1 gen. removed)			1858	_____	1888			
Grandchildren (2 gens.)		1852	_____	_____	_____	_____	1898	
Great-grandchildren (3 gens.)		1848	_____	_____	_____	_____	_____	1900
(4 generations)		1844	_____	_____	_____	_____	_____	?
(5 generations)		1842	_____	_____	_____	_____	_____	?

This chart indicates that the further back in time one tries to establish a date, the greater the range of variation in that date.

In Simmons 'scholarly sifting' of the tribal genealogies back to the canoe ancestors, it is not surprising to learn that he found that ancestors such as

the eponymous Ngati Porou tipuna Paikea, could have lived anywhere between sixteen and twenty-five generations ago. As a result, Simmons concluded, that the twenty-five year interval placed Paikea "at the earliest about 1000, at the latest 1650".<sup>48</sup> This is as accurate a date as genealogy can provide. To go further, as Simmons did, by stating a probability of about 1400 for Paikea's existence is possible only if a large number of genealogies have been consulted, but is at best only a reasonable guess which can neither be proved nor disproved.

### Percy Smith

With these thoughts in mind, it is difficult to imagine how the statistical method made popular by Percy Smith has persisted for so long. Smith was a great enthusiast and his contribution to Polynesian research must stand as a monument to researchers throughout the Pacific. However, as Simmons has shown in The Great New Zealand Myth, Smith suffered the great disability of accepting too readily without critical analysis any material which seemed to support his extravagant suppositions.

The classic example was the *single* genealogical line upon which he proposed 925AD as the year in which Kupe discovered New Zealand. Of it Simmons wrote:

Smith's acceptance of the 925 date for Kupe was based on such slender evidence as to have no validity as a conclusion.<sup>49</sup>

Equally difficult to fathom is Smith's great faith in the number of generations in collateral branches being relatively the same. In over fifty genealogical tables he found for the period from 1900 back to the Great Fleet, a span of 550 years, that the generations agreed to within four or five of each other, the mean being twenty-two generations.<sup>50</sup> The Heneriata Makarini whakapapa (table 2) has already illustrated a three generation difference over a period of one hundred years, while the Kapohanga-arangi tables (appendix) show a five generation difference over a period of approximately two hundred years. Experience shows that although in some lines these variations are short term only and tend to cancel out, in others the variation increases. It would be expected that over a 550 year period the difference could increase to ten generations or more.

Simmons has shown how accurate this surmise might be. From a mass of tribal genealogical evidence he produced the following chart showing the minimum, maximum and median number of generations in lines descending from supposed Fleet ancestors.<sup>51</sup>

*Table 3<sup>52</sup>*

	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Kahungunu						15																		
Whironui													?											
Paikea														21										
Paoa																								
Toroa																								
Tamakihikurangi																								
Tamatekapua																								
Hoturoa																								
Mokotorea																								
Rakeiora																								
Ruatea																								
Te Moungaroa																								
Turi																								
Nukutawhiti																								
Po																								
Moekakara																								
Kupe																								

In no case do they agree within four or five generations.

How then could Smith claim that, in spite of these disparities, that the descent lines show a correspondence in time depth. As Simmons has recently shown:

He first of all assumed that a large number of canoes arrived in New Zealand at approximately the same time, though nowhere in early Maori tradition is this said. By averaging the number of people on *all* of these canoes he then decided that they all arrived twenty-two generations ago, in spite of the fact that the genealogies of the descendants of certain people said to have come, for example on Mataatua canoe, are quite consistent in giving only fifteen and sixteen generations to 1900.<sup>53</sup>

Surely Smith, with *his* access to genealogical tables came across lines which did not agree within four or five generations of each other. These he must have ignored for to quote Williams, "he (Smith) thought the difference between fifty and fifty-eight names in a list too much to admit of

the mean being taken to fix the date".<sup>54</sup> Smith selected his genealogies and covered himself by not saying which genealogies he used.

Smith's dates are unreliable, as was his use of the statistical method. It is a pity that so many amateur historians, particularly Maori, who, carried away by the statistical method, have followed in Smith's footsteps, even calculating dates off the artificial 1350AD. So that we now have in Maori genealogy, a chronological consistency which does not in fact exist.<sup>55</sup> It is no wonder Dr Robertson was led to make the following statement in 1963:

The influence of Smith's irresponsible approach still persists as well as the influence of his enthusiasm, and many of his ideas are long overdue for reappraisal.<sup>56</sup>

The statistical method grew out of the Western historian's belief that dates could be derived from genealogies. While the Maori never intended whakapapa to be used for this purpose, it is not totally inconceivable that a sound method of dating based on whakapapa might one day be discovered. Perhaps the professional statisticians in conjunction with the genealogists may yet evolve a formula which can provide reasonably accurate dates. However, any method which follows the principles of the present statistical method by providing a single date without its variance, should never be accepted as reliable.

NOTES

- 
- 1 Gudgeon, pp113-4.
- 2 Nihoniho, T., Narrative of the Fighting on the East Coast, 1865-71, with a Monograph on Bush Fighting, [Annotated by Elsdon Best], 1913, p.51.
- 3 Buck, Sir P., The Coming of the Maori, 1949, 2d. ed., p366.
- 4 Fox, R. Kinship and Marriage, 1967, rpt 1971, p66.
- 5 Davidson, J., The Prehistory of New Zealand, 1984, 2d. ed., p48.
- 6 Stack, p57; Shand, A., "The Moriori People of the Chatham Islands: Their Traditions and History", JPS, 4, p34; Smith, S. P., Hawaiki: The Original Home of the Maori, 1921, p18.
- 7 Fletcher, H. J., "The Use of Genealogies", p189.
- 8 Davidson, J., p11.
- 9 Houghton, The First New Zealanders, p95.
- 10 *ibid*, p97.
- 11 pp48-49
- 12 Sutton, D., pp188-9; Phillips, M. A. L., "An Estimation of Fertility in Prehistoric New Zealanders", in New Zealand Journal of Archaeology, 2, 1980, p160.
- 13 Houghton, The First New Zealanders, p97.
- 14 Phillips, M. A. L., p155.
- 15 c.f. Houghton, The First New Zealanders, pp106-7; Davidson, J., p49; Sutton, D., pp294-8.
- 16 Ads, P., Pers Comm., 1990.
- 17 Phillips, pp160-4.
- 18 Sutton, pp297-8.
- 19 Davidson, J.,
- 20 Golson, p124; Houghton, The First New Zealanders, p76; Davidson, pp9-10; Sutton, p319.
- 21 Houghton, The First New Zealanders, p96.
- 22 Roberton, "The Chronology of Maori History", Historical Review, 1963, p294.
- 23 *ibid.*, p193.

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- 24    ibid., p194.
- 25    Kelly, "Some Problems", pp239-240.
- 26    ibid.
- 27    Stokes, p8.
- 28    Hongi, Hare, "Concerning Whare-kura: Its Philologies and Teachings", JPS, 7, 1898, p41.
- 29    Kelly, p237.
- 30    ibid.
- 31    ibid., p236.
- 32    Hongi, p41.
- 33    Te Hurunui, p162.
- 34    Smith, Hawaiki, p90.
- 35    Te Hurunui, p163.
- 36    ibid.
- 37    ibid.
- 38    Awarau, p76.
- 39    Ngata, Sir A. T., "The Genealogical Method", p14.
- 40    Waiapu MB no.7B, p296 of 26.3.1885.
- 41    Fletcher, "The Use of Genealogies", pp193-4; Robertson, J.B.W., "The Role of Tribal Tradition in New Zealand Prehistory", JPS 66, 1957, p256.
- 42    Te Hurunui, p165.
- 43    ibid.
- 44    Kelly, "Some Problems", p237; Hongi, p41.
- 45    Mahuika, Api, "Leadership: Inherited and Achieved", in King, Michael (ed.), Te Ao Hurihuri, 1977, 2d. ed., p65.
- 46    Robertson, "Genealogies as a Basis for Maori Chronology", p52.
- 47    Kelly, pp237-8.
- 48    Simmons, p263.
- 49    Simmons, p58.

- 50 Smith, Hawaiki, p19.
- 51 Simmons, p307.
- 52 Smith, Hawaiki, p19.
- 53 *ibid*, pp71-2.
- 54 Williams, p118.
- 55 Simmons, p72.
- 56 Robertson, "The Chronology of Maori History", Historical Review, 1963, p193.

## CHAPTER 3

### The Analytical Method

The analytical method as has been explained was the brainchild of Dr J.B.W. Robertson who offered it as a substitute for the statistical method. He proposed that if genealogies were in fact accurate, it should be possible to chart them with each individual set out in their appropriate chronological position along with their corresponding date of birth.<sup>1</sup> Further, he believed each person's birth date could be shown to be not only compatible with the date of birth of every other individual in the same genealogy, but also consistent with the genuine narratives pertinent to that whakapapa. If the dates were inconsistent with the narratives, or if they were inherently impossible, then they could be considered to be incorrect. Robertson concluded that the more genealogical tables referred to, the greater the chance of accuracy in the dates.

Working with the whakapapa charts and annals of the Tainui people, Robertson attempted to portray genealogy and tradition as real and reliable. To achieve this, he alleged to have dated several Tainui whakapapa complexes so that they were completely consistent with the main body of Tainui tradition and entirely compatible with their associated narratives. The dates which he arrived at were derived by way of the analytical method for which he had devised a series of "working rules and limits". These rules and limits were as follows:

(1) In round figures 20 years was considered to be the shortest average interval likely between generations which were closely spaced, and Robertson adopted this figure as the minimum interval. He pointed out that if this minimum were reduced to 18 years, the difference would be 10 per cent, or a matter of 50 years in the whole history from the great migration to the beginning of colonization.

(2) Robertson felt that there was no definite upper limit to the age at which a man could become a father, since it was a frequent custom for an old man to take a young wife. The interval between father and child he claimed, may therefore have been anything from 20 to 70 or occasionally 80 years. He added that tradition often provides a guide as to what the interval should be.

(3) According to Robertson, the physiological limit for a woman to bear children was 50 years. However, he believed that this limit could not

have been reached often, and chose 40 years, as a much more reasonable limit.

(4) The average interval between members of a large family, he suggested, was likely to be 1 1/2 years, and this was taken as a minimum. On the basis of (1) and (3) Roberton explained that the longest interval between children of the same mother could have been 20 years.

(5) As a safeguard, Roberton insisted that where tradition was available it must be taken into account.

Regarding the fixing of dates he stated:

Dates are derived primarily from known dates in recent times. Starting from these, numerous points can be fixed fairly closely in earlier times by application of the limits formulated. For example:-

- (1) A single long line sets a minimum limit to the period covered by the line, i.e. not less than 20 years for each generation.
- (2) A single short line with obvious long intervals between some of the generations sets a maximum limit.
- (3) When two lines connect two individuals, one line being much shorter than the other, the possible length of the period is confined between definite limits.
- (4) By making use of interconnections between genealogies, long and short lines can frequently be chosen at will for the purpose of defining limits.
- (5) The limits are progressively reduced as different "pieces" are put in juxtaposition.
- (6) On occasion it is justifiable to use known contemporaries for defining limits.

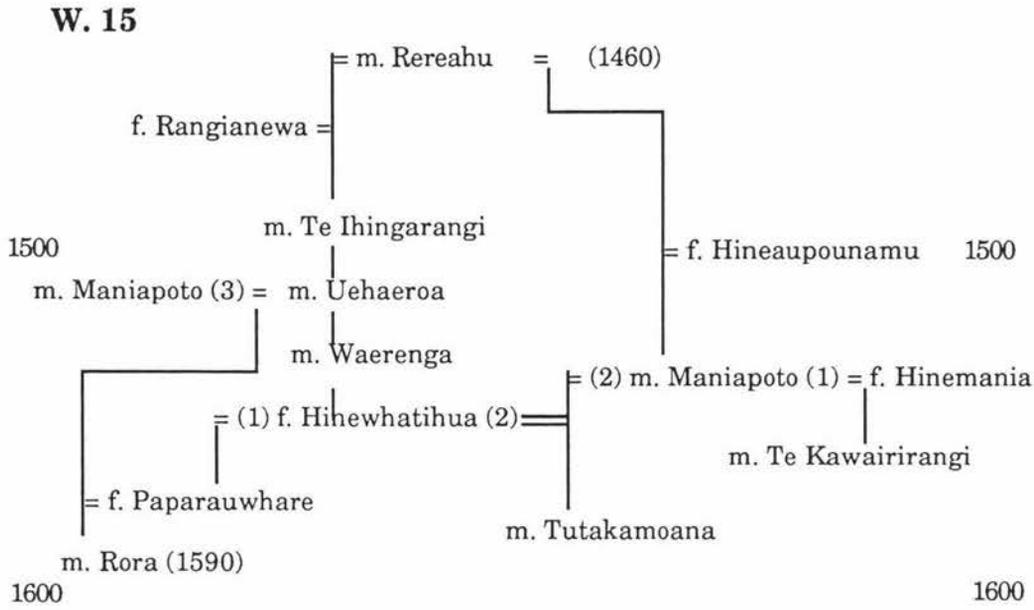
With the large number of genealogies available, many individuals can be assigned dates within very close limits as far back as about 1400.<sup>2</sup>

To show how the analytical method works take whakapapa no. 10 (p25). In reference to the varied lengths of the two lines descending upon Rora, Dr Roberton wrote:

There are two lines from Rereahu to Rora, one through Te Ihingarangi and one through Maniapoto. In the first there are six intervals; therefore the period from the birth of Rereahu to the Birth of Rora must be at least 120 years. In the second there are two intervals, and in both intervals the parent is a male; therefore the

maximum for the period is 160 years (extreme), with 140 years a more likely limit.<sup>3</sup>

In order to set out these intervals accurately, Roberton made some minor alterations to the standard genealogical layout particularly with regard to spouses born at different times. So that whakapapa no. 10 rearranged in chronological form appeared thus:



It will be understood that the exact positions here of the individuals have been dictated by reference to numerous others not in this table.<sup>4</sup>

On the face of it, Roberton's analytical method appears quite sound and reflects the most progressive thought by anyone in the last four decades on the matter of dating genealogies. But to look closer at his working rules and limits, one finds that all is not plain sailing.

As has been mentioned earlier, archaeological evidence, although scanty, suggests for some areas within New Zealand, the average life span for a Maori was thirty one or thirty two years, while women were said to have given birth from age nineteen at an average interval of 6.16 years.<sup>5</sup> By correlating this information with Roberton's limits, there is a suggestion that he has been too generous in allocating seventy or occasionally eighty years to the upper limit at which a man could father a child. Similarly he has been lavish in his one-and-a-half years for the minimum interval between children of the same mother, and in his twenty years as the maximum interval.

It appears Roberton has based his limits on the types of averages displayed in conventional demography. However, it is believed the averages which characterize modern Maori demography, have been brought about largely through dietary change provided by European food, and these averages were not the same for the pre-contact Maori period.<sup>6</sup>

Sutton has shown how, during the transition stage from pre-contact to post-European times, the fecundability in the post-contact female became more probable due to increased protein intake, reducing the suggested 6.16 years to a figure much nearer the theoretical gestation period of eleven months.<sup>7</sup> This figure is certainly very close to Roberton's one-and-a-half-years. Sutton found that dietary change in post-European times also lead to women being able to have children well beyond the thirty-five years set down for the pre-contact period.<sup>8</sup> This suggests that Roberton's allowance of fifty years for the physiological limit for a woman to bear children might be more characteristic of the post-contact period. The life-expectancy for adults was also estimated by Sutton to have increased during this transition stage, so that Roberton's upper limit of seventy years again is characteristic not of the pre-contact Maori, but the post-European Maori.<sup>9</sup>

Not only does Roberton's working rules and limits raise doubts, but also the way in which he interpreted the traditions. Regarding the intervals between successive progenitors, Roberton stated that "if one cares to look for it, tradition does indirectly give sufficient information to make fairly close approximations to the intervals".<sup>10</sup>

Tradition certainly does provide clues concerning age as is evidenced in the following quotes from a monograph by Tuta Nihoniho on the East Coast Wars of 1865-71:

- (i) I uru ano a Hikurangi ki te ope i Toka-a-kuku ... I roto ia i nga whakaekenga e rua o Pukemaire, engari ka *koroheke*, ...<sup>11</sup>
- (ii) ... i mua o tona hemonga ka hoatu e ia tona pu raiwhara a te Kawanantanga ki tona *tipuna* ki a Te Teira Pikiuha, ...<sup>12</sup>
- (iii) ... a ko Rapata Wahawaha to ratou *kaumatua* ... engari kei roto raua ko tona *mokopuna* ko Tuta Nihoniho.<sup>13</sup>

(italics mine)

The first passage refers to Tuta's grandfather Hikurangi who was considered a *koroheke* during the engagements with the Hauhau at Pukemaire pa in 1865. A *koroheke* refers to an elderly man. Depending on the chronologist's view as to what age a man was when he was considered old, would determine the approximate age Hikurangi was in 1865. The fact that Hikurangi was still active in battle might lead one to imagine that he was in the more youthful stage of old age. It is surprising to learn then, that he was about eighty years of age at the time.<sup>14</sup>

Similarly, in the second passage, Te Teira Pikiuha is regarded as a *tipuna* (ie. a grandparent or elderly relative). The third passage refers to Rapata Wahawaha, a *kaumatua* (ie. an elder), and Tuta Nihoniho himself when he was but a *mokopuna* (a grandchild or relative in the same generation). All of these men, at the time, were soldiers. Yet both Rapata and Te Teira turn out to be a lot older than one would expect, while Tuta, by today's standards was certainly very young to be part of the military, fourteen years of age.

Such misconceptions about the past are not only the result of modern day interpretation, but also cultural ignorance. Contemporary studies by Europeans of primitive communities living in Africa, such as the Bushman, show fit elderly people. In some cases, from records of the mission stations where they were born, it has been possible to ascertain the age of these elders who then turn out to be in their early forties.<sup>15</sup> Likewise, Davidson has found that here in New Zealand "the early explorers described agile and healthy old people among the Maori communities they visited. Today we might imagine such people to be in their sixties or seventies; in fact they were probably in their forties".<sup>16</sup>

Roberton was not alone in his conviction that tradition could be used to clarify dates and peoples ages. Simmons, who had the advantage of hindsight, regarding Roberton's work, also held this view. He recommended "allowing a different number of years for a male and a female, for a first child as against a later child, for the child of a second wife, and so on", believing that "tradition often contains clues to the ages of people when certain named children were born to them".<sup>17</sup> Simmons' and Roberton's elaborate theories may have credibility when dealing with genealogies back to the early nineteenth century where there are at least a

few dated events from which to construct an accurate chronology. Beyond this point, however, although tradition supplies some indication of an individual age (eg. he tamaiti - a child, he matua - a parent) there are no sign posts (eg. 1769 AD) from which to fix birth dates. One must work back from a known date in post-European times. Experience has shown that the further into the past one goes the more speculative the dates arrived at become.

Robertson was also guilty of manipulating whakapapa to fit with his own pre-conceived ideas of the past. In an article titled "The Role of Tribal Tradition in New Zealand Prehistory", he cited seven descent lines from the ancestors who came in the alleged Great Fleet down to the Maori King, Mahuta. The lines were contrasting in terms of the number of generations in each. The Arawa line contained eighteen generations, the Mataatua line, twenty generations, Kurahaupo, twenty-four generations, Tainui, Takitimu, and Aotea, twenty-five generations each and Tokomaru, twenty-six generations.<sup>18</sup>

With respect to the shorter Arawa line, Robertson claimed that it could be stretched sufficiently within the limits of his analytical method to show a common time-depth back to the thirteenth century.<sup>19</sup> The presupposition Robertson has made here is that the Arawa canoe arrived in New Zealand about the same time as these other waka. However, Simmons has shown that the idea of a great fleet of canoes arriving together in New Zealand was a man-made myth.<sup>20</sup> The point here is, that if Robertson believed that the Arawa canoe came here in the fifteenth century, his method of dating allowed him to compress the time-depth of the Arawa canoe to a period within that century. It all depended on what Robertson believed, as to what he could prove.

Sharp was most accurate in his criticisms of Robertson's use of the analytical method. He wrote:

Robertson's method of bringing descent lines of markedly varying length into conformity with the alleged arrival of the founding canoes at the same time by flexibly adapting the intervals between the progenitors is a process of suiting his adaptations to what he wishes to prove and then saying he proves it. All that Robertson's method can do is to establish a wide range of possibilities, out of which he arbitrarily chooses those possibilities which fit in with his conclusions. Robertson is no doubt right in saying that an inflexible

figure of twenty-five years for the intervals between births is unsound. By flexibly adapting the intervals within the possible biological range, however, it can equally well be shown that the genealogies go back to various times ranging from 100 years before the supposed common date to 100 years after it.<sup>21</sup>

It can be said in summary of the analytical method, that theoretically its working rules and limits were sound. But in practise, its designer, Dr Roberton, displayed how it was just as vulnerable to human error as the statistical method. Roberton's working rules and limits reflected the "obvious refinements" which the interval between progenitors needed, but again the refinements he made were subject to the interpretation of terms such as tipuna, koroheke and matua, the so-called clues provided within tradition. While in most cases his genealogical arrangements could not be faulted on the score of inconsistency with tribal narratives, with all of them it was possible to make alternate tables which were also consistent with the traditional evidence.

The effectiveness of the analytical method depends on the availability of genealogical material and its corresponding historical narratives. For Roberton, one way of testing the accuracy of his own tables was to test it against every other relevant line known to him. Thus, his tables and dates were ever-changing because new genealogical information was always coming to light.

In an area such as Te Aitanga-a-Mate, where whakapapa and tradition are still virtually a closed book, the effectiveness of the analytical method is dependent on the degree of access the researcher has to their traditions, and then, how that researcher interprets those traditions. Yet even with a one hundred percent success rate in both access and interpretation, if that was at all possible, for every date that could be arrived at others, which might be altogether quite different, can be produced and shown to be equally sound. The analytical method was an attempt to improve on the statistical method, but unfortunately, in relying too heavily on assumptions and assertions it was just as fallible.

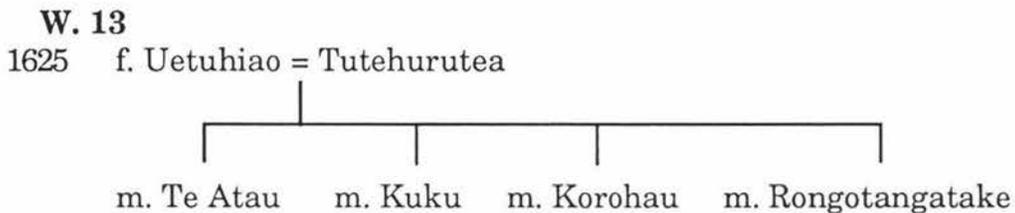
**NOTES**

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- 1     Robertson, "Genealogies", p47.
  - 2     ibid, pp47-8.
  - 3     ibid, p48.
  - 4     ibid, p49.
  - 5     Houghton, The First New Zealanders, p97; Phillips, p164; Sutton, pp297-8.
  - 6     Sutton, pp320-1.
  - 7     Sutton, p325.
  - 8     ibid.
  - 9     ibid.
  - 10    Robertson, "The Chronology of Maori Tradition", Historical Review, p139.
  - 11    Nihoniho, p1.
  - 12    ibid, p5.
  - 13    ibid, pp5-6.
  - 14    Nihoniho, p45.
  - 15    Houghton, P., "Prehistoric New Zealanders", New Zealand Medical Journal, 87, 1978, p214.
  - 16    Davidson, p49.
  - 17    Simmons, p37.
  - 18    Robertson, "The Role of Tribal Tradition in New Zealand Prehistory", 251-2.
  - 19    ibid, p263.
  - 20    Simmons, pp103-307.
  - 21    Sharp, "Maori Genealogies and Canoe Traditions", pp37-8.

## CHAPTER 4

### The Classical Method

Rongowhakaata Halbert introduced the classical method during the early 1960's as a response to Dr Roberton's analytical method. Mr Halbert's method was basically the same as the statistical method except that the dates allocated did not represent dates of birth. Instead, the dates which were determined by way of a twenty-five year interval, represented the twenty-fifth birthday of the particular ancestor concerned, as well as the date of marriage of that ancestor and the date of birth of all of his or her children.<sup>1</sup> So that in the following whakapapa 1625 is firstly, the twenty-fifth anniversary of the births of Tutehurutea and Uetuhiao, secondly, the date of their marriage, and thirdly, the date of birth of Te Atau and all of his brothers.



The classical method also differed from both the statistical and the analytical in layout because Mr Halbert tried, in most cases to show marriage partners as contemporaries. This often meant re-working the genealogies to include names which he felt had been omitted or to exclude names which he believed were extraneous insertions.

This chapter sets out to discuss the inaccuracies in the classical method under three headings:

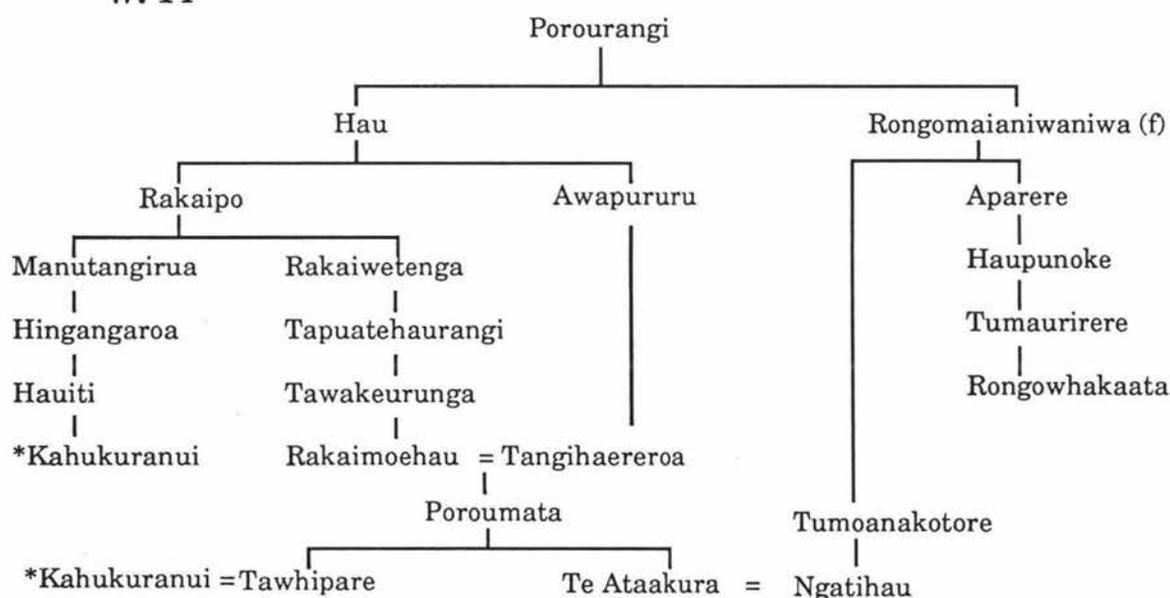
- 1    Layout
- 2    A twenty-five year interval
- 3    Date of birth or twenty-fifth birthday?
- 4    Authenticity of genealogies

## 1 LAYOUT

The classical method, if one follows Mr Halbert's example, allowed for the relocating on whakapapa charts of tipuna who were contemporaries by re-working traditional evidence. To achieve this, one had to omit certain names from descent lines or to add others to it. Mr Halbert's adherence to this practise (which he freely admits) is evidenced in the tenth volume of the Historical Review where he produced no less than six revamped genealogical charts of ancestors belonging to a number of separate iwi.<sup>2</sup>

In order to show two ancestors who had cohabited as contemporaries, often required some clever transposing of the whakapapa. As an example, take the following Ngati Porou whakapapa:

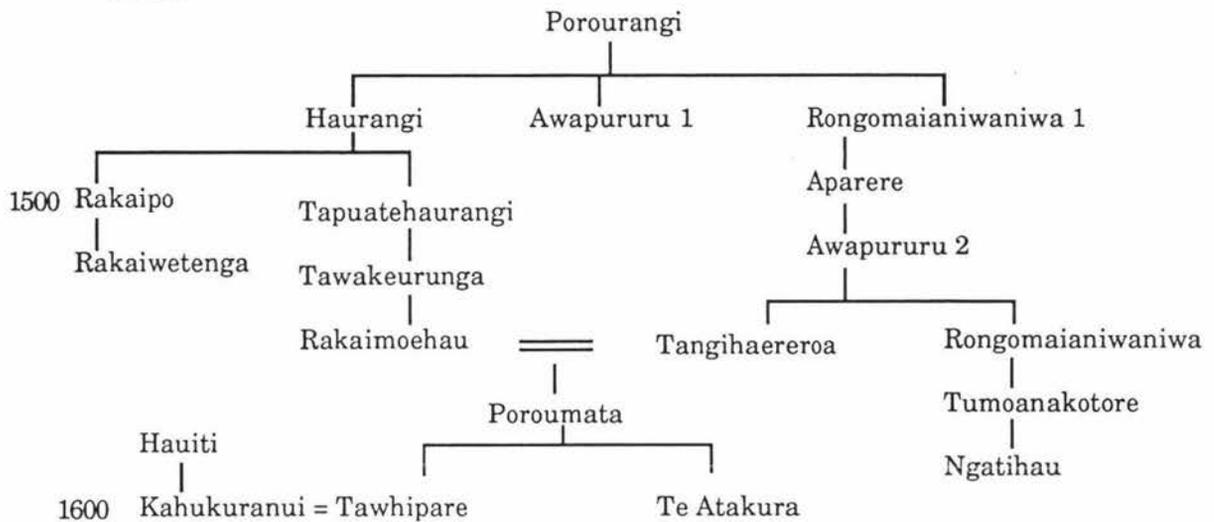
### W. 14



Whakapapa no. 14 is that which was recorded by Dr Roberton and can also be found in publications by Sir Apirana Ngata, an authority on Ngati Porou whakapapa.<sup>3</sup> It can be seen in this chart that Kahukuranui married Tawhipare, yet the two are actually two generations apart.

In an attempt to show them as contemporaries as well as to explain away the short Awapururu line and the lengthy interval between Rongomaianiwaniwa and Tumoanakotore, Mr Halbert produced the following chart:

## W. 15



By breaking the descen tline from Rakaipo at Rakaiwetenga, and moving Tapuatehaurangi up to become a brother of Rakaipo, Tawhipare has been shown to be in the same generation as her husband. This still left an interval of one generation in the Tangihaereroa line and a hiatus of three generations in the Tumoanakotore line. To solve the Tangihaere line Mr Halbert gave Hapunoke a brother, called him Awapururu II, and made Tangihaere his son. The Tumoana line he solved by introducing Rongomaianiwaniwa II as a sister of Tangihaere and made Tumoana her son.<sup>4</sup>

Mr Halbert could not validate this chart by showing that it had been recorded anywhere else and partially admitted that it was in fact based on his own intuition rather than tradition.<sup>5</sup> Dr Robertson in commenting on this whakapapa wrote, "this is very ingenious, but it is not tradition, and I would think that Mr Halbert knows it".<sup>6</sup>

If this is not sufficient to show how genuine tradition was manipulated by Mr Halbert, take whakapapa no. 10 (p39 and also set out by Robertson on p56). There is obviously a marked age difference between Maniapoto and his second wife Hinewhatihua and Maniapoto and his third wife Paparauwhare. To bring their ages closer together, Mr Halbert "simply pushed the Ithingarangi line upwards" so that Hinewhatihua became a contemporary of Maniapoto and Paparauwhare was now only one generation removed.<sup>7</sup> Thus, the whakapapa table looked like this:

## W. 16

	Whatihua	TeIhingarangi	
	Raukawa	Uehaeroa	1500
	Rereahu	Waerenga	
Hinemanian =	Maniapoto =	Hinewhatihua	
		Paparauwhare	
		Rora	1600

It will be noted that TeIhingarangi appears two generations before his father Rereahu. To explain this, Mr Halbert merely stated "all this means is that Ihingarangi is not the brother of Maniapoto" and therefore nor the son of Rereahu.<sup>8</sup>

However, Dr Robertson explained that "according to tradition TeIhingarangi *was* the half-brother of Maniapoto" and again accused Mr Halbert of tampering with traditional evidence to comply with his preconceived intervals.<sup>9</sup> Dr Robertson's criticisms of Mr Halbert's method were harsh but evidently well-founded as both the genealogical tables and traditional evidence that the Doctor was referring to had come from Tainui authorities and were also consistent with the main body of tradition.

## 2 A TWENTY-FIVE YEAR INTERVAL

Mr Halbert chose a twenty-five year interval based on the descent lines of tipuna whose birth dates were known. As his example he gave a descent line from his tipuna Wi Pere<sup>10</sup> :

Wi Pere b.1834  
 Hetekia b.1854  
 Rongo b.1894  
 Te Iho b.1917  
 Tahupo b.1937

The intervals between each ancestor averaged out to twenty-six years. Undoubtedly the dates are correct, but this is merely one example. The

genealogical charts used to compile table 2 (p47) contain lines which will produce average intervals of between twenty-one and thirty-four years. However admirable in intent, Mr Halbert's example was inappropriate because it related to individuals whose longevity of life was likely to be greater than that of the average pre-contact Maori due to the improved dietary conditions colonization had brought with it..

Because the classical method relied upon an arbitrary average to represent the interval between progenitors, regardless if that average stood for a persons twenty-fifth birthday or their date of birth, it like the statistical method can be considered with some scepticism. The twenty-five year span has no statistical basis since a normal standard interval between progenitors does not exist. The comments relating to the length of a generation and collateral branches discussed in chapter two must also apply here, particularly as Mr Halbert's dates were computed from single descent lines.

#### **DATE OF BIRTH OR TWENTY-FIFTH BIRTHDAY?**

Mr Halbert was critical of the fact that dates on genealogical charts should represent birth dates. This meant, to him, "that two newly born babies" could be joined together "in unholy marriage". Yet after studying what he offered in turn, it is this writer's opinion, that just as much criticism can be directed at the classical method. Mr Halbert claimed:

The selection of a definite figure as the equivalent of a generation obviated having to decide whether or not a progenitor was from a large or small family or was the first or last born. All brothers and sisters were on the same age level.<sup>11</sup>

One would have thought the object of any exercise in fixing dates would be to try and establish as accurate a date as possible. By not taking into consideration the intervals between children of the same family is a step away from accuracy.

When one recalls that the classical method shows marriages as having occurred on the twenty-fifth anniversary of the births of the spouses, imagine the difficulty of charting whakapapa no. 4 (p18) where Mahutaiterangi married six times and fathered sixteen children. To

present such a genealogy, showing Mahutaiterangi's marriages as well as his children's birth dates, as all having occurred in the same year, is both impractical and illogical.

### **AUTHENTICITY OF GENEALOGIES**

It was stated earlier that Rongo Halbert's genealogical chart (W. 15) could not be validated by any evidence either published, in manuscript form, or otherwise. In fact, the chart was really to be taken at Mr Halbert's word. No claim is made here to represent his chart as an impossibility, but it must be said that any method of dating - the classical, the analytical, or the statistical - would become totally useless if the whakapapa being used was not authentic.

A great deal of distorted whakapapa exists today and these are sometimes used by the unsuspecting historian keen on determining dates for past events. The distortion of whakapapa began to occur after the demise of the tohunga. Prior to the colonization of Aotearoa the tohunga were the principle repositories of both genealogy and tradition. These records were jealously guarded in their memories and accurately maintained through intense word-perfect recitals. In addition, "each chief and free man (or woman) was supposed to know his own lines of descent".<sup>12</sup> At that time, the genealogical record was very trustworthy due to the strong safeguard of tapu (fear of punishment by supernormal agencies).<sup>13</sup>

However, with the closing of the whare-kura and the resulting demise of the tohunga, genealogy became the property of "the common people".<sup>14</sup> For different reasons, some of these people began to tamper with the whakapapa. Some lines were manipulated in an attempt to claim seniority in descent from a common ancestor. When Europeans began to take an interest in Maori history some elders gave deliberately misleading genealogies to them.<sup>15</sup>

But the most intense distortion of the whakapapa occurred in the latter part of last century. The reason for such distortions was with the Government's policy of individualising Maori land title. The Native Land Court was the instrument through which Maori communal land rights

were replaced by the British system. Both whakapapa and tradition were readily manipulated by individuals for land-claim purposes before the Court. So many instances of false Land Court Record genealogies were recorded that if one had only these to depend on, the task of dating traditions might well have been abandoned long ago

No matter which method of dating is used, there can be no accuracy whatsoever if the genealogies referred to were not authentic. One must consider any genealogy then, in the light of its informant. Were they capable of giving authentic whakapapa and if so, were they willing to do so?<sup>16</sup>

Simmons has suggested some criteria for determining authentic tradition and these apply equally to whakapapa. By substituting the word whakapapa for tradition his criteria reads<sup>17</sup>:

First, any whakapapa which can be shown to be the result of creative authorship with no direct antecedents in the traditional record is obviously not authentic whakapapa... Secondly, any tradition which involves a confusion of Maori and European elements. In this case the European elements usually appear as extra touches on what may be authentic whakapapa. For example, the genealogy which shows Noa as the father of Hema. Here we have the confusion of the mythical ancestor Hema with the biblical Shem (Maori form Hema) whose father was of course, Noah. The authentic elements if any can be determined only by reference to other versions, or other whakapapa which do not show this adulteration by non-indigenous elements... Thirdly, whakapapa should not be the invention of one man ... authentic whakapapa is that which was widely known and accepted as such by any social group in the pre-European Maori society.

In this matter, a number of Mr Halbert's whakapapa were particularly questionable. If his whakapapa can be questioned, so can his use of the classical method. Perhaps the historians writing during his time also had doubts about the classical method as it was never used by any one other than Mr Halbert himself.

In the light of the voiced criticisms in this chapter, Mr Halbert's method appears to be a one-man system and any possibility of determining even approximate dates by using it, is highly improbable. Therefore, it must be classed with the statistical and analytical systems as methods capable of providing nothing other than speculative dates.

NOTES

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- 1 Halbert, "Genealogies", p106.
  - 2 *ibid.*, pp105-14.
  - 3 Roberton, "The Chronology of Maori Tradition", 12, 3, 1964, p141; Ngata, A. T., Rauru-nui-a-Toi Lectures, 1943, Whakapapa Tables, p1.
  - 4 Roberton, "The Chronology of Maori Tradition", 12, 3, 1964, p141.
  - 5 Halbert, "The Chronology of Maori Tradition", Historical Review, 12, 4, 1964, pp183-4.
  - 6 *ibid.*
  - 7 Halbert, "The Chronology of Maori History", Historical Review, 12, 2, 1964, pp189.
  - 8 *ibid.*
  - 9 Roberton, "The Chronology of Maori History", Historical Review, 12, 3, 1964, p139.
  - 10 Halbert, "Genealogies", p109.
  - 11 *ibid.*, p110.
  - 12 Tregear, E., The Maori Race, 1926, p383.
  - 13 Buck, P. H. (Te Rangihiroa), "The Value of Tradition in Polynesian Research", JPS 35, 1926, p186.
  - 14 Roberton, "Genealogies", p52.
  - 15 Mitcalfe, Barry, Maori, 1981, p119.
  - 16 Simmons, The Great New Zealand Myth, p9.
  - 17 *ibid.*, pp9-10

## CHAPTER 5

### ***"Poka ke te kororia o tetahi whetu i tetahi."***

*Each star has a brightness of its own.*

So far the main emphasis of this thesis has sought to magnify the inadequacies in the Western methods of dating which have been used to chronicle Maori traditions. The seriousness of these inadequacies raises a considerable degree of doubt as to the reliability of dating methods based on whakapapa. In the absence of an accurate Western method of dating, the ensuing chapter will seek to clarify three major points in the hope of producing both a sympathetic appreciation for the Maori method of referencing time and just vindication for its continued use in the recording of iwi and hapu histories.

The first point is that calendar dates are crucial only to Western historians who must understand the past in terms of an absolute time line. To many Maori, the fact that there are no calendar dates in their tribal histories is irrelevant. For them, it is the relationship one has with past events, not their distance from it, which is important. For example, in reply to the question when did a particular event occur, the Maori orator might answer "i te wa i a mea a tou tipuna, i reira hoki aia" - in the time of your ancestor so and so, for she was also there.

The second point is that the method of dating which the early European writers found the Maori in possession of, was not the result of a lack of a true sense of time, but the product of a concept of time which, while very different from the West's, is just as valid. This method, for want of a better term, will be referred to as *relative time-referencing*.<sup>1</sup> That is, where an occurrence is dated in relation to a significant physical event or around an important tipuna (eg. 'Ka whanau aia i mua i te taenga mai o Te Aomate' - He was born before the arrival of Te Aomate<sup>2</sup>).

The third point which needs to be clarified is that many Maori still consider relative time-references to be more appropriate than calendar years in the recording of their pre-European history.

## WHY DO WESTERN HISTORIANS NEED TO DATE MAORI TRADITIONS?

The dating of traditions, whether Maori or otherwise, is a distinctive Western contribution. It stems from the assumption that all historical events can be reduced to simple, primary facts which can be located accurately in time. Such an assumption was due in part to a dating system developed by a seventeenth century Jesuit scholar. This was the BC/AD dating system devised by Dominicus Petavius in 1627 and which, with some minor refinements, is the system in use today.<sup>3</sup>

This system uses as it's arbitrary point of reference the (supposed) birth of Christ from which all other events are measured and placed along an absolute time line. It allows one to quantify the relationship between any two incidents with a precision no ancient Maori historian could imagine and to express this precision with a single number.<sup>4</sup>

The BC/AD system came into general use toward the end of the seventeenth century with chronologers such as Issac Newton. Newton was intensely interested in dating past events precisely. He used the BC/AD system to construct a new chronology for the ancient kingdoms of the world. While his conclusions were incredulous to the scholars of his own day, his work had "a significance beyond the realm of historical theory, for he presented in it an implied temporal continuum stretching infinitely forwards and backwards in terms of which any event could be precisely and simply located".<sup>5</sup> Newton had introduced the concept of absolute time, a concept where time was a clear, quantifiable and independent factor.

Nearly a century after Newton, but as a direct result of his work, a histrocial methodology was developed among historians. This methodology held that the fundamental act of the historian was to present history from a totally objective point of view and that this was possible if one accepted the concept of an absolute time line. The time line in turn enabled the historian to determine the primary facts of any tradition. In other words, in order to take an objective view of a past event, the historian first had to locate when a date for that event. Thus, historians during this period began to see the most elemental act of their trade as being the

locating of historical events along the absolute time line. The great historian Bloch described their approach:

No historian would be satisfied to state that Caesar devoted eight years to the conquest of Gaul, or that it took fifteen years for Luther to change from the orthodox novice of Erfurt into the reformer of Wittenberg. It is of far greater importance to him to assign the conquest of Gaul its exact chronological place amid the vicissitudes of European societies; and ... he will feel that he has given a true picture of it only when he has plotted its precise moment upon the life charts of both the man who was its hero and the civilization, which was its climate.<sup>6</sup>

History's claim to objectivity was paralleled by the notion that an event became a historical fact once its precise calendar date could be determined. In a sense then, if the chronological indications of a tradition could not be converted into the time units of the Julian calendar, the tradition would never be fully accepted as reliable.

It was with a schooling in this methodology that New Zealand's own historians commenced an analysis of the Maori past. The Stacks, the Gudgeons, and the Greys, although they themselves treated Maori tribal traditions seriously as history, in their attempts to maintain historical objectivity they were often too concerned with converting the chronological references of Maori tradition into the Julian dates of their era. Others like Kelly, Wilson, and Robertson, saw the dating of individual events as a way of proving that Maori tribal traditions were reliable episodes of historical significance. Hence Robertson, in explaining why he had spent so many years trying to develop the analytical method, wrote:

My study of chronology was concerned with two things, firstly to investigate, and if possible, to establish a rational basis for the impression of reliability held by all who have studied tribal tradition at all closely, and secondly to establish a framework on which to build significant history.<sup>7</sup>

New Zealand historians who dealt with Maori traditions appear to have been unanimous in their views. For them, time was linear extending from the present backwards to the past and from the present forward to the future. Historical events became valid when their positions along the absolute time line could be located accurately. Locating the dates of events was the first step in their attempts to gain a better understanding of global history. Once tribal traditions were dated, comparisons could be made

across the country and then with what was happening in other parts of the world at the same time.

In essence then, the answer to the question *why do Western historians need to date Maori traditions* is that history's claim to objectivity and a place among the social sciences demands it as part of its methodology. For the Western historian, dates validated Maori traditions, located the indisputable concrete facts of the past, and enabled the historian to see the past from what they believed was a truly objective perspective.

### **Dating Maori Traditions - An Unconcoincidental Conspiracy?**

At the same time, there is concealed within some of the dates given to Maori history, a deeper esoteric meaning which is hidden and masked. These dates were provided by historians like Abraham Fornander and Percy Smith who used the statistical method to fix dates which supported their theory that the Polynesian race had been borne out of India. In Hawaiki: The Original Home of the Maori, Smith published a chronology which in short, proposed that in 450 BC the Polynesians were part of a larger group of people living in India.<sup>8</sup>

***Table 4***

450 BC	India
65 BC	Java
450 AD	Fiji-Samoa
650 AD	Hawaii
675 AD	Marquesas
850 AD	Maku visits New Zealand
1150 AD	Toi visits New Zealand
1350 AD	New Zealand settled by the Fleet

The accepted dogma at the time was that the races of man had diffused from a central cradleland.<sup>9</sup> The caucasians, the primeval race, had developed and reached a high standard of civilization. The races of darker hue, including the Polynesians, had made slow progress, while the darkest skinned races of all, the Aborigines and Africans had remained

almost static in development. All around the world in the struggle for survival there was contemporary evidence of the evolutionary superiority of the fairer race and in Maori depopulation there was an illustration of the inferior races being destined to be extinguished by the superior Anglo-saxons."<sup>10</sup>

Although Smith and Fornander were probably only concerned with locating India as the 'central cradleland' they were, in a sense, unwittingly reinforcing this dominant ideology that the superior supplants the inferior. By tracing the Maori back to a common point on the globe from which all races had sprung and claiming that inequality had been ordained by supernatural or natural destiny, was an unconcious conspiracy to legitimise the actions of the Government in this country.

If you have been told from birth that the harsh, but just laws of Nature decreed that it was the destiny of a greater race to conquer and civilise your people, or that God has created you inferior, you will be inclined to knuckle under without a fight when your land is confiscated, when you are deprived of your language, or when you are discriminated against because of your colour.

"The construction and dissemination of an ideology is not always - indeed not usually - a matter of concious design."<sup>11</sup> . Fornander, Smith, and many others of their time would be surprised and probably angry at such an analysis of their chronologies and assumptions. Their anger would in a sense be justified since they did not set out with the deliberate intention of putting up a smokescreen to mask their self interest. The ideological effect in this case, as in many others, was generated as it's authors were looking the other way.<sup>12</sup>

## **HOW DID THE MAORI THEMSELVES CHRONICLE THEIR TRADITIONS?**

Having studied the reasons why Western historians wished to date Maori traditions, consider now the Maori method of referencing time.

The old-time Maori had a very different value and calibration of time from what the Western mind regards as intuitively obvious. While they had no assured method of recording the passing years, they did have the means to define lapses of time. They punctuated the passage of time by regular recurring events or phenomena such as the tides, the morning song of birds, or the movements of the moon.<sup>13</sup> Elsdon Best gave as examples:

"Kaore ano kia ko te manu ka haere matau."  
(Ere the birds began to sing we departed.)

"Whatonga remained one Autumn with his sons."

"The old man was lying in the porch of the house, basking in the sun of Tatau-uruora (November), the division of the year that impinges upon Akaaka-nui (December)."<sup>14</sup>

Such examples are common throughout Maori literature both oral and written. *He waiata tawhito mo Whatitata*, song no.116 in the Nga Moteatea collection contains yet another reference:<sup>15</sup>

"Ka u Paikea ki uta	Paikea reached the shore
Tauwhanga mai ai ki a Ruatapu.	And there awaited Ruatapu.
E te iwa nei e!	Waited until the ninth moon!
Te ngahuru nei e!	Waiting for the tenth moon!
Te ngahuru potiki nei e!"	Ten moons for that youth!

As a more precise way of fixing a date, Best reported a further example which mentions not only the name of the lunar month, but also the night of the moon.<sup>16</sup>

"The vessel came to land at Rangitoto. Having remained at that place for some time, until the Akaakanui month of the season, on the Omutu night of the moon the vessel of Kahu sailed from Rangitoto."

Another way of indicating an event had taken place was to reference it to a past occasion of some significance. The records of the Maori Land Court give numerous examples of this.

During the Papatipu-ote-Ngaere case heard in 1877, Pita Rongo referred to the year in which he had left the land not by the Julian date of 1836 which was known to some, but rather as the time when Christianity was introduced among Ngati Porou.<sup>17</sup> Referring to the same date, Pine

Tamahori said, "about the time of Whakawhitira", Whakawhitira being the pa in which many of Ngati Porou were assembled when the Gospel was first preached.<sup>18</sup>

But more often than not Maori history was referred to in terms of an ancestor or ancestors.

"Chronology was gathered from the name of the important person in whose day the event took place, and the place that name occupied in the *whakapapa* of the family.<sup>19</sup>

So that if one was to ask, "when did such and such happen?" the reply would most probably have been, "i te wa i a mea," in the time of so and so. Tuta Nihoniho, in laying claim to the Puketoro land block, recited his whakapapa before the Court to show that the land had been in his family's possession for a very long period of time; eight generations.<sup>20</sup> Nepia Hurikara, in relating when his people had last populated the Waitahaia land block, stated that it was four generations earlier in the time of his great-grandfather. Nepia also have his lineage before the Court.<sup>21</sup>

The counting of generations, the hinging of chronology on some known time-point, whether an ancestor of notoriety or a well-known event, are subsidiaries of the simplest and most ancient method of dating: *relative time referencing*. Only recently Alex Hayley, author of the now famous novel *Roots*, found his Mandingo relatives still using this method of dating to record their tribal traditions. The comparisons between the *griot*, the name for Mandingo historians, and the Maori tohunga are remarkable. Hayley's description of the *griot* recounting the past could easily be of the tohunga reciting the lineage of his hapu:

The old man, the *griot*, ... 73 rains of age, ... began now to tell me the ancestral history of the Kinte clan as it had been told down across the centuries, from the times of the forefathers. It was as if a scroll was being read. It wasn't just talk as we talk. It was a very formal occasion ... Out of this man's head came spilling lineage details incredible to behold. Two, three centuries back. Who married whom, who had what children, what children married whom and their children, and so forth, just unbelievable. I was struck not only by the profusion of details, but also the biblical pattern of the way they expressed it. It would be something like: "and so and so took as a wife so and so and begat and begat and begat," and he'd name their mates and their children, and so forth. When they would date things it was not with calendar dates, but they would date things with physical events, such as, "in the year of

the big water he slew a water buffalo," the year of the big water referring to a flood. And if you wanted to know the date calendar-wise you had to find when the flood occurred."<sup>22</sup>

Relative time-referencing was not only used by the Maori and Mandingo cultures but by all the ancient empires the world over. The earliest Greek historians set up a chronological framework for their narratives by counting generations. Egyptian scholars, in order to measure the length of their hereditary groups of rulers, added up the life ages of successive court officials. Chinese historians did not assume the existence of an overarching time series independent of the events. They preferred to date from specific dynasties.<sup>23</sup> The rise and fall of Rome, the coming of Christianity, and the birth of European nations, all of these were conceived of in relative time.

Relative time-referencing was so widely used in earlier times it is surprising Western historians did not find anything of value to be learnt in this method of dating. Instead, because the method was incapable of measuring the distance of a past event from the present, the historians accused early man of "lacking a true sense of time, of viewing events from a framework in which only unchanging concepts had any reality".<sup>24</sup>

Today, although modern thought is altering, many historians still view relative time-referencing with condescension and continue to brand it as simple and primitive.<sup>25</sup> An example of this condescension can be seen in Best's, The Maori Division of Time. In this substantial contribution to an understanding of how the Maori measured time, Best patronized the Maori:

The Polynesian system of time was crude and incomplete.<sup>26</sup>

... (the Maori) had not evolved any true chronological system; he was still groping his age-long way on the dim path of progress when our forbears appeared from the great ocean and arrested his march.<sup>27</sup>

These were the difficulties encountered by barbaric man in his endeavours to mark the passage of time.<sup>28</sup>

The primitive measurement of the Maori.<sup>29</sup>

The impression gained from these popular conceptions or misconceptions of the Maori method of dating are sufficient to convince a prejudiced mind that Maori concepts of time have little or no value. However, just as each star in the sky has a brightness of its own, the Maori concept of time does have value.

## **MAORI CONCEPTS OF TIME AND THE DILEMMA OF WESTERN THOUGHT**

The point has often been argued that before studying a peoples concept of time, one must first study their language of time.<sup>30</sup> One's view of the world is greatly influenced by the language which they employ in talking and writing about that world.<sup>31</sup> Whorf, a linguist, who grasped the relationship between human language and thought noted how language indeed could shape one's innermost thoughts: "We are thus introduced to a new principle of relativity", he wrote, "which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way, be celebrated".<sup>32</sup>

The languages of Maori and English are structurally difficult, if not impossible to calibrate. One should not be surprised to find then, that speakers of Maori dissect nature and the universe differently from Western speakers. Time for the Western world is probably best represented as an arrow since the West emphasises progress and growth and views time "as an entity going forward in a straight line from the infinite past to the unknown future".<sup>33</sup>

In contrast, many Maori saw time as cyclic and eternally returning. Time was like a balloon with a vast array of spots painted on it being steadily blown up. One spot representing the individual, the others representing past events. As time passes, the balloon continues to expand. As more events occur additional spots appear on the surface of the balloon. Regardless of the degree of expansion of the balloon, the spots never disappear. They continue to surround the individual. In the same sense, many Maori believed that they were inextricably bound to their past. There is a whakatauki which expresses this concept:

*E kore te tangata e tu tahanga, kia tu aia me tona rau kotahi.*

When a person stands they are not alone their past is always with them.<sup>34</sup>

In Maori thought, the past was the essence of existence which one had recourse to in order to understand the reality of the present and to look forward to the future. The Maori certainly were not alone in their understanding of the past. The Greeks, wise before their time, saw in the past the makings of things to come:

"That which has been is that which shall be, and that which has been done, is that which shall be done, and there is no new thing under the sun."<sup>35</sup>

The Roman god Janus, the god of gates and transitions, looked with one face into the past and with the other into the future signifying that the individual must be responsible for the past and attempt to make good of it in the future.<sup>36</sup> While the Arabs for whom the distant past offers inspiring memories of glory, do not dare to talk about the future, or even the present. Their refuge is in the past.<sup>37</sup>

When Western historians record the past they seek to answer the question of when an event occurred before determining its meaning; judgement follows measurement. When the Maori recorded the past they reversed this order. The time of the event derived its shape and measure from the meaning of the event and its thematic relation to other events.

Those who have read Mohi Turei's account of the great Ngati Porou general Tuwhakairiora often see first the famous event which has formed such a vital part of Ngati Porou pride - Tuwhakairiora's victory over the Ngati Ruanuku iwi at Tongaanu.<sup>38</sup> When Mohi described the conflict between Tuwhakairiora and Ngati Ruanuku, he chose not to see the war itself as the primary event, but to look beyond the war to the deeper issues which brought it to being. This involved a focus on events which had occurred generations before the war. Events which were difficult to separate out and place accurately in chronological order, let alone on a single time line. The dating of the narrative however, was not of real concern to Mohi. It was the process that produced the final result that Mohi sought to capture. He explained the reasons why each incident had

occurred and the relationship between those involved. Relationships were important, for while no Maori knew how old they were, the structure of their society demanded that each person knew who was older than who in the group.

This apparent lack of concern for the precise measurement of the past coupled with the Maori's avid interest in the meaning of past events and their relationship to the players in those events, is difficult for the Western mind to comprehend. So entrenched is the Western historian in their sense of absolute time, that their view of the world has become coloured, re-shaping their consciousness of self and society.

The misunderstandings which presently exist between the West and the Arab nations of the world is analogous to the Maori situation. Differences in language, rhetoric, religion, freedom, honour, trust, family, friendship, hospitality - all account for these misunderstandings. But they are not the core of the incomprehension. The essence can be summed up in a single word: history. In Dickey's (1991) opinion:

It (History) is an always present force in Arab life, and this is what so many Westerner's find impossible to grasp. Americans, especially have very little sense of their own past, and virtually no sense of the Middle East's. Given a problem to confront an American typically will ask what comes next. An Arab will talk about what came before.<sup>39</sup>

Time in the West has become a commodity, but only present time. The past is useless, the future of interest only as a potentially better present. The concept of time's arrow shot into eternity symbolizes for many Westerners the feeling of an irreversible fate and the hasty agitation of life that devours man minute after minute:

Time is for them the moving river that drags ... all to an unknown future. Time's arrow symbolizes the finality of (their) individual death.<sup>40</sup>

American culture cuts away the sensitivity to death and grief, to suicide and immortality, emphasizing the here-and-now as it emphasizes youth and action.<sup>41</sup>

In contrast, the Arabs do not shrill from such sensitive issues. Death, particularly in the interests of religion, brings martyrdom and eternal

life. The very notion of Islam, with its doctrine of holy wars and martyrdom, seems suicidal in cultures grown comfortable with tidy suburban churches and perfunctory devotions.<sup>42</sup>

But the Maori have similar notions of death which would also seem suicidal to modern New Zealand society. An example of this disregard for death is seen in a sons explanation for his mothers participation in battles after her husband had been killed by an invading party.

"He rite tonu te whakaaro o tenei wahine ki tona tama, ... te tuku whakarere i te tinana ki te mate i te kawenga a te aroha o te ngakau pouri ki tana koroheke, ... ka riro ra i te ringa o hoariri, no reira kaore he tirohanga ake ki te ao marama".<sup>43</sup>

(This woman held similar views to those of her son, ... namely, to hand the body over to the clutches of death, a feeling prompted by the affection of the saddened heart ... for her husband, ... who had fallen by the hand of the enemy; therefore life was not prized by these survivors.)<sup>44</sup>

Both the woman and her son fought in several engagements throughout the war with the Hauhau. Like the Arabs, the Maori welcomed death, seeing it as a continuation not an end. Their language teems with subtle reminders of death.

"Ko tenei taonga ko te mate  
he tino kakahu no tenei hanga no te toa."<sup>45</sup>  
Death is ever the particular garment of the warrior.

"Kaua e mate wheke, me mate ururoa."  
Do not die like an octopus, die like a shark.

"Haere i tai o te ata, mo tai o te ahiahi au i whanatu ai."  
Depart on the morning tide (to the next world),  
for I shall follow on the evening tide.

Most Maori placed great importance in the commemoration of ancestors, who though deceased, are believed to live on in the next world. Such a tradition required some knowledge of ones tipuna and of their past, but not the precise time of past events. In fact, when many Maori recount the past, time often disappears.

However, because some Maori narratives appear to be timeless, it does not necessarily follow that the audience for whom it was intended found it so.

The time and place told about in a narrative was often known only subjectively or mentally by an audience, the narrator orientating them by naming the ancestors involved, and if necessary, locating those ancestors in relation to other tipuna with whom the audience could make a connection. This enabled them to place the event as having taken place a short time ago, a long time ago, or a long, long time ago. And this was sufficient, for the Maori realised and even expressed in their grammar that the things told of in past traditions did not have the same kind of reality or validity as things of the present day, the things of practical concern.

Mohi Turei's account of Tuwhakairiora is an example where the time period which the narrative covers seems gravely compressed. To show the passing of time, Mohi incorporated relative time-references:

Kia taka te tau, kia pirau ...<sup>46</sup>  
When one year had passed and the flesh decomposed ...

While the reference to the Maori year may seem reassuring, the figure measures only duration. It does not locate the incident anywhere in time. It appears Mohi used it more for literary effect.

The Western historian sees the past behind them, separated from them, and irretrievable. The Maori view was that the past was able to be called into the present. When one sees the past in this way, time loses its property of depth. As an example, at the Takitimu Festival of Maori entertainment in 1982, in the prelude to one group's item, a male leader pranced out to the centre of the stage, produced a musket and defiantly commenced to chant at the crowd:

<p>He pu! He pu! Na te pu i mate ai au a Ngati Porou i a Ngapuhi Mehemea he taiaha ki te taiaha  kaore i mate au</p>	<p>O' the musket! The musket! T'was by the musket that I Ngati Porou was killed by Ngapuhi If it had been with traditional weapons I would not have been defeated.</p>
--	--

The spokesman was, of course, referring to the Ngapuhi raids of the early nineteenth century of which he could not have played a part. Yet in the context of his speech he had played a role.

Consider as a further example the Maori orator on the marae. Often the people will hear him retell an event which occurred in the dim distanced past. Yet as he narrates, he unfolds the tale before them seemingly, as if the event had only happened that very day and almost as if he was actually there. At the tangi he can often be seen placating death by recalling the dead as companions for the deceased - "kei konei ratau e tutu ana" (here they all are standing about) - or summoning the deceased into the present - "E te amokura e! Maranga mai ki runga ki te ao e hora nei! Horahia ou patu!" (O' cherished amokura! Rise up before us! Show us your weapons of fame!)

This ability to cross the barriers of time has been elucidated by the late Mr Paka Tawhai. He saw both the past and the future as capable of being called into the present and gave the *whare tipuna* as an example of where this was done:

The world of the Maori of old comprised one physical and spiritual component, one creation in which dwelt te hunga mate (those who had passed on; the past), te hunga ora (those living; the present) and nga uri (those to come; the future). We the living dwell upon our plane, the bosom of Papatuanuku, and the others on theirs. The messages in the house are for all three categories, and provided the rites associated with the construction of the house had been observed, the house would possess the spiritual and physical attributes that would enable its messages to reach all three categories. It is unusual for a house to serve a commemorative function, which amounts to the function of calling whatever is being commemorated into the here and now.<sup>47</sup>

(brackets mine)

Mr Tawhai's explanation suggests that the past, present and future are not as straightforward as one would tend to think. It is perhaps more correct to say that for the Maori, there does not exist three times in the form of past, present and future, but a presence of things past, a presence of things present, and a presence of things future.

By its very nature, this view of time is difficult to incorporate into the Western historians own experience. Yet many traditional societies throughout the world have a view of time which is much closer to this perspective. For example, the Trobriand Islanders are said to lack temporal distinctions between verbs, and speak neither of the past nor of

history as the West does. "Past events, real and mythical alike, are included in the universal present."<sup>48</sup> The notion of time in India is much the same as that of the Maori:

In Indian thought, time like other phenomena, is conceived statically rather than dynamically. It is, of course, recognised that the things of this world are always moving and changing. But the substance of things is seen as basically unchanging, its underlying reality unaffected by the ceaseless flux. The Indian does not concede that we never step into the same river twice; he directs our attention not to the flow of water, but to the river itself, the unchanging universal.<sup>49</sup>

Some of society's more contemporary thinkers are slowly coming to acknowledge the value of such views. Whorf, in his study of the Hopi group of American Indians, identified a sense of time that is similar to the Maori and he believed it to be closer to that which underlies the Einsteinian universe than the one Westerners use in everyday life.<sup>50</sup> Even one or two psychologists, physicists, and philosophers are beginning to challenge their own sense of time as objective, continuous, all-embracing, and absolute. In place of absolute time they wish to substitute a new view, one which sees time as subjective, fragmented, relative, overlapping and disconnected.<sup>51</sup> Whatever views develop, it remains to be whether Western historians are willing to modify their methodology to take in these views. The belief that one can remain totally objective in recording the past and that history can be verified through elaborate dating methods, are still as real a methodology for historians today, as it was for Smith and Fornander last century.

The Maori method of relative time-referencing served a useful purpose in the recording of Maori history. One cannot hope to understand this method entirely until they overcome the tendency to look on it as a primitive version of their own, noting its clumsiness and vagueness but not seeing the functions it served for the historians who used it. For while it is undoubtedly true that the Maori could have dated their stories more precisely with the modern dating system, it is not true that they would have preferred it or would have seen in that system a greater truthfulness than their own.

NOTES

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- 1 cf. Beckerman, E.J., Chronology of the Ancient World, 1968, rpt 1969, p62.
  - 2 Te Aomate was a canoe which brought Paratene Turangi and his party to Waipiro Bay for the purpose of plundering the Ngati Rangi hapu at Reporua.
  - 3 Wilcox, D. J., The Measure of Times Past, 1987, p8.
  - 4 ibid.
  - 5 ibid. p23.
  - 6 Bloch, Marc, The Historians Craft, translated by Peter Putman, 1954, pp27-8.
  - 7 Robertson, "The Significance", p41.
  - 8 Sorrenson, Maori Origins, p28.
  - 9 ibid., p17.
  - 10 ibid.
  - 11 Beatson, Peter, "Culture and Ideology" in 76.102 New Zealand Society Study Guide 8, 1990, p75.
  - 12 ibid.
  - 13 Best, Elsdon, The Maori Division of Time, Dominion Museum Monograph No. 4, 1986, p51.
  - 14 ibid., p10.
  - 15 Ngata, A.T. and TeHurunui, P., Nga Moteatea, II, 1961, pp64-7.
  - 16 ibid., p11.
  - 17 Waiapu MB 3/180 of 12.4.1877.
  - 18 Waiapu MB 1/663 of 19.5.1876.
  - 19 Williams, p118.
  - 20 Waiapu MB 3/255 of 20.4.1877.
  - 21 Waiapu MB 1/660 of 19.5.1876.
  - 22 Hayley, Alex, "Black History, Oral History, and Genealogy", in Oral History, (eds) David K. Dunaway and illa K. Baum, p278.
  - 23 Wilcox, p12.
  - 24 Wilcox, p10.

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- 25     ibid.
- 26     ibid., p5.
- 27     Best, The Maori Division of Time, p51.
- 28     ibid., p50.
- 29     ibid.
- 30     Cornelious, Benjamin, "Ideas of Time in History of Philosophy", in The Voices of Time, J. T. Fraser (ed.), 1966, p4.
- 31     ibid.
- 32     Whorf, Benjamin Lee, Languages, Thought and Reality, John Carroll (ed.), 1954, rpt 1974.
- 33     Meerloo, Joost A. M., "The Time Sense in Psychiatry", in The Voices of Time, J. T. Fraser (ed.), 1966, p248.
- 34     Tibble, Waho, Personal Communication, 1990.
- 35     Needham, Joseph, "Time and Knowledge in China and the West", in The Voices of Time, J. T. Fraser (ed.), 1966, p129.
- 36     Meerloo, pp248-9.
- 37     Dickey, Christopher, The New Zealand Herald, 14 Jan. 1991, p8.
- 38     Turei, Mohi, "Tuwhakairiora", JPS 20, 1911, pp17-34.
- 39     Dickey, Christopher, The New Zealand Herald, 14 Jan., 1991, Section 1, p8.
- 40     Meerloo, p248.
- 41     Lerner, Max, America as a Civilization, 1957, p620.
- 42     Dickey, p8.
- 43     Nihoniho, p16.
- 44     Nihoniho, p44.
- 45     Nihoniho, p45.
- 46     ibid., p18.
- 47     Tawhai, Te Pakaka, "Lecture 46.214 Maori Visual Arts", in 46.214 Maori Visual Arts Books, 1985, p33.
- 48     Cohen, John, "Subjective Time", in The Voices of Time, J. T. Fraser (ed.), 1966, p272.

## CONCLUSION

From the outset, this presentation sought to highlight the inadequacies in those Western modes of chronology which were dependent on whakapapa for the dating of Maori traditions. Both the statistical and classical methods were shown to be unreliable since each used an arbitrary average which had no statistical basis whatsoever to represent a standard genealogical interval. Secondly, they departed further from the rules governing statistics, because dates were determined from single lines of descent and expressed without any indication of their range of variability. The analytical method, while it sought to improve on earlier dating methods, was too dependent on assumptions and assertions to be regarded as a suitable system for the fixing of dates in Maori history. For every date which it could make comply with tradition, an equally fantastic date could be shown to correspond with the same tradition.

The dates which these methods determined, particularly 'AD 1350', were bred into generations of school children so that we now have a population, the majority of which, are largely misinformed about New Zealand's past. The only validity of these dates in New Zealand's history are as exercises in mathematics.

However, with so much time and effort having gone into the establishment of a reliable method of dating, it was deemed necessary to spend some time discussing the reasons for such interest. It was clarified, almost immediately, that the interest in dating the past in terms of the Julian calendar was not a Maori interest, but a Western one. The Western school of thought saw events as becoming historically valid when they could be allocated a numerical position along an absolute time line. Hence, according to Western historical methodology, Maori traditions would remain forever under a shadow of doubt unless some system of dating was devised.

For the Maori themselves, the validity of their traditions have never been in question. Therefore, they have had little need to record the corresponding date of a historical event. Their dating methods have been described in this thesis as a form of relative time-referencing.

This method, while it is no more accurate than the Western methods of dating, has been advanced by this writer as the most appropriate method for the chronicling of Maori traditions. It is not so much the terms of reference which characterize this method that make it appropriate, but more the reasons why those terms were used.

To understand these reasons it was necessary to enter into some discussion on Maori concepts of time and to contrast them with the Western sense of absolute time. It was shown that the Maori, who knew only their own language and the cultural ideas of their own society, had different notions of time from the Westerner. They had no intuition of time as a smooth flowing continuum in which everything in the universe proceeded at the same rate, out of a past, through a present, and into a future. Their own concept of the past was in stark contrast to that of the West.

In this day and age Maori academics are reaching maturity more aware of the Western sense of absolute time and less aware of their inherent sense of relative time. So accustomed are they to applying absolute time to the quotidian details of everyday life, they are beginning to look to their own traditions in the same manner. For example, even though the date AD 1350 has been dismissed for all time as the year in which the Great Fleet arrived, it is still very much a part of the vocabulary of Maori students when they are referring to their past. Many do not readily appreciate the extent to which absolute dates change the focus of their history, depersonalize it and remove it from immediate contact with life.

It may be recalled that the writer began this presentation by focusing in on future tribal historians. With what has been said in this thesis regarding the use of dates, it is hoped that these historians will continue to record their traditions in the manner in which it is passed on to them. If their sense of absolute time still restricts them, so that they are not totally convinced that dates provided through genealogies are inaccurate and inappropriate, they should look to the published tribal histories written by their own tipuna.

Very few iwi histories have been published to date and only a handful of these have been written by Maori. However, they are available for consultation. Awarau (1927)<sup>1</sup>, Ngata (1934)<sup>2</sup>, Mitchell (1944)<sup>3</sup>, and Broughton (1979)<sup>4</sup> were the Maori authors consulted by this writer. None of these historians, and these were men trained in historical objectivity, chose to intersperse their presentation with Julian dates. Although some discussed the issue in the introduction to their texts, not one of them found it necessary to include dates in the text itself. With this in mind, the statement made in the last chapter certainly has a ring of truth to it:

While it is undoubtedly true that the Maori could have dated their stories more precisely with the modern dating system, it is not true that they would have preferred it or would have seen in that system a greater truthfulness than their own.

Even an analysis of those Maori histories which were written by Europeans display the use of relative time-references. Prentice's "Maori History of Hawkes Bay", for example, while using Julian dates to locate episodes, relied on relative-time references to orient the reader through the events in those episodes.

It can be expected that with the Maori themselves undertaking the writing of tribal histories for their own iwi or hapu, there will not be a concern for events to be dated. This being the case, it is hoped that the points brought out in this presentation serve to complement the further use of relative time-references in iwi histories. It is also hoped that non-Maori researching aspects of Maori society and its past, have gained a better understanding of the Maori conception of time and how it influences their view of the past. Finally, it should be said that as long as Western dating methods are based on whakapapa they will never fulfil their purpose.

***Ehara i te ti, e wana ake!***

For unlike the ti, they can never bud!

If the reader accepts this as fact and at the same time carries away from this thesis an appreciation for the Maori method of relative time-referencing, then its purpose has been served.

**NOTES**

- 
- 1 TeAwarau, W. M., "Tuwhakairiora" a thesis presented for the degree of Master of Arts, 1927.
  - 2 Ngata, Sir A. T., Rauru-nui-a-Toi Lectures, rpt 1972.
  - 3 Mitchell, J. H., Takitimu, 1944.
  - 4 Broughton, Ruka, Nga Rauru Kiihahi, 1979.

## APPENDIX

The following list of names and corresponding page numbers refer to the Ngati Kapohanga-a-rangi genealogical tables contained in this appendix. (See chapter two).

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**G1 HENI POKINO (b.1880)**  
**HATI WHANGAPIRITA (b.1886)**

f. Kapohanga				
f. Hinewehe	f. Manukaipo	f. Hinewairere	m. Tamokai	f. Hinewairere
m. Wharetuatea	m. Takangaiwaho	m. Tuameko	m. Korokaingatua	m. Tuameko
Auahinui	m. Kairakau	m. Kahumai	m. Te Auiti	m. Mahia
Matahori	Moahuru	m. Whaita	m. Whaita	f. Hepora Paniwha
f. Miriama	m. Tamati Moihe	m. Paipapa	m. Paipapa	f. Mereana Kanukanu
m. Eruera Pirita	m. Eruera Pirita	m. Pita Panipani	m. Pita Panipani	f. Kararaina Ngawati
		f. Mereana Kanukanu	f. Mereana Kanukanu	
f. - Heni Pokino	f. - Heni Pokino	f. Kararaina Ngawati	f. Kararaina Ngawati	f. - Heni Pokino
m. - Hati Whangapirita	m. - Hati Whangapirita			m. - Hati Whangapirita
(7 gens)	(7 gens)	f. - Heni Pokino	f. - Heni Pokino	(7 gens)
		m. - Hati Whangapirita	m. - Hati Whangapirita	
		(9 gens)	(9 gens)	

**G2 HOERA TAITUA (b. 1880)**

f. Kapohanga	f. Kapohanga	f. Kapohanga
m. TePokinga	f. Hinewairere	m. Tamokai
f. Tuharaua	m. Tuameko	m. Korokaingatua
f. Kuraweherau	f. Kahumai	f. Te Auiti
f. Kokahuriwai	m. TeRangikamatau	m. TeRangikamatau
m. Kahutara	f. Ripeka TeIrikaraka	f. Ripeka TeIrikaraka
Te Puawhe	f. Aramata Pongahuru	f. Aramata Pongahuru
m. Ngarangimatamua	m. Hoera Taitua	m. Hoera Taitua
f. Aramata Pongahuru	f. Wharau Taitua	f. Wharau Taitua
m. Hoera Taitua	m. Hoera Taitua	m. Hoera Taitua
f. Wharau Taitua	(9 gens)	(9 gens)
m. Hoera Taitua		
(11 gens)		

**G3 HONE TIEKI FERRIS (b. 1880)**

- |                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| f. Kapohanga         |
| f. Manukaipo         | f. Manukaipo         | f. Hinewairere       | f. Hinewehe          | f. Hinewairerere     |
| m. Takangaiwaho      | f. Whakamahuru       | m. Ikangaheru        | Kauika               | m. Tuameko           |
| m. Urikore           | f. Hinataona         | f. Hinataona         | f. Hinetengaronoa    | f. Kahumai           |
| f. Kirimaru          | f. Kirimaru          | f. Kirimaru          | m. Wiremu Tukawa     | m. Pouramua          |
| f. Tahuri            | f. Tahuri            | f. Tahuri            | m. Watene Tuhura     | f. Ihipera Pohiri    |
| m. Watene Tuhura     | m. Watene Tuhura     | m. Watene Tuhura     | f. Erana Kaunga      | f. Erana Kaunga      |
| f. Erana Kaunga      | f. Erana Kaunga      | f. Erana Kaunga      | m. Hone Tieki Ferris | m. Hone Tieki Ferris |
| m. Hone Tieki Ferris | m. Hone Tieki Ferris | m. Hone Tieki Ferris | (7gens)              | (7 gens)             |
| (8 gens)             | (8 gens)             | (8 gens)             |                      |                      |
|                      |                      |                      |                      |                      |
| f. Kapohanga         |                      |                      |                      |                      |
| m. Tamokai           |                      |                      |                      |                      |
| m. Korokaingatua     |                      |                      |                      |                      |
| m. Te Auiti          |                      |                      |                      |                      |
| m. Pouramua          |                      |                      |                      |                      |
| f. Ihipera Pohiri    |                      |                      |                      |                      |
| f. Erana Kaunga      |                      |                      |                      |                      |
| m. Hone Tieki Ferris |                      |                      |                      |                      |
| (7 gens)             |                      |                      |                      |                      |

**G4 ERANA PAHAU (b. 1884)**  
**WATENE PAHAU (b. 1888)**

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
 m. Urikore  
 f. Kirimaru  
 f. Tahuri  
 m. Watene Tuhura  
 m. Wi Pahau  
 |  
 f. - Erana Pahau  
 m. - Watene Pahau  
 (8 gens)

f. Kapohanga  
 f. Manukaipo  
 f. Whakamahuru  
 f. Hinataona  
 f. Kirimaru  
 f. Tahuri  
 m. Watene Tuhura  
 m. Wi Pahau  
 |  
 f. - Erana Pahau  
 m. - Watene Pahau  
 (8 gens)

f. Kapohanga  
 f. Hinewairere  
 m. Ikangaheru  
 f. Hinataona  
 f. Kirimaru  
 f. Tahuri  
 m. Watene Tuhura  
 m. Wi Pahau  
 |  
 f. - Erana Pahau  
 m. - Watene Pahau  
 (8 gens)

f. Kapohanga  
 f. Hinewehe  
 Kauika  
 f. Hinetengaronoa  
 m. Wiremu Tukawa  
 m. Watene Tuhura  
 m. Wi Pahau  
 |  
 f. - Erana Pahau  
 m. - Watene Pahau  
 (7 gens)

f. Kapohanga  
 f. Hinewairerere  
 m. Tuameko  
 f. Kahumai  
 m. Pouramua  
 f. Ihipera Pohiri  
 m. Wi Pahau  
 |  
 f. - Erana Pahau  
 m. - Watene Pahau  
 (7 gens)

f. Kapohanga  
 m. Tamokai  
 m. Korokaingatua  
 m. Te Auiti  
 m. Pouramua  
 f. Ihipera Pohiri  
 m. Wi Pahau  
 |  
 f. - Erana Pahau  
 m. - Watene Pahau  
 (7 gens)

**G5 MATEROA NGARIMU (b. 1881)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Manukaipo	f. Manukaipo	f. Hinewehe	f. Hinewehe	f. Hinewairere
m. Takangaiwaho	f. Taputeariki	m. Wharetuatea	m. Wharetuatea	m. Tuameko
m. Urikore	f. Hineaute	f. Hinemanu	Hakiterangi	f. Kahumai
TeKauruoterangi	f. Rangimotokia	m. Pera Terangiamaru	m. Hona TeKahukino	TeMuiora
f. Hinekukurangi	f. Atareta	f. Awhengaterangi	m. Hoera Kaniheretu	f. Hinekukurangi
m. Manana Kauaterangi	m. Hoera Kaniheretu	m. Hohepa Rairi	f. Heni Herewaka	m. Turuhira Whakina
m. Hamiora Ngarimu	f. Heni Herewaka	f. Makere Rairi	m. Tuta Ngarimu	m. Hamiora Ngarimu
m. Tuta Ngarimu	m. Tuta Ngarimu	f. Materoa Ngarimu	f. Materoa Ngarimu	m. Tuta Ngarimu
f. Materoa Ngarimu	f. Materoa Ngarimu	(8 gens)	(8 gens)	f. Materoa Ngarimu
(9 gens)	(9 gens)			(9 gens)
f. Kapohanga				
m. Tamokai				
m. Korokaingatua				
m. Te Auiti				
Te Muiora				
f. Hinekukurangi				
m. Turuhira Whakina				
m. Hamiora Ngarimu				
m. Tuta Ngarimu				
f. Materoa Ngarimu				
(9 gens)				

**G6 MANAKITERANGI (b. 1885)**  
**HEENI NGAROPI WHITE (b. 1889)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Hinewehe	f. Manukaipo	m. Tamokai	f. Hinewairere	f. Manukaipo
m. Wharetuatea	f. Taputeariki	Te Rehuao	m. Tuameko	f. Takangaiwaho
Takatakahioterangi	f. Hinetete	f. Uruhei	m. Whaita	m. Tamawahakapekapeka
Taurakanakana	m. Whetukura	m. Paipapa	m. Whetukura	m. Pehaauetonga
m. TeRakahuramai	f. Riria Turiwhewhe	f. Hinetapuariki	f. Riria Turiwhewhe	m. Aria
f. Hiria TeRa	f. Hiria TeRa	m. Koroniria Wehenga	f. Hiria TeRa	m. Paora Tahuna
f. Rora Rangi	f. Rora Rangi	f. Rora Rangi	f. Rora Rangi	f. Ritihia
				m. Pire Rangi
m. - Manakiterangi	m. - Manakiterangi	m. - Manakiterangi	m. - Manakiterangi	
f. - Heeni Ngaropi	f. - Heeni Ngaropi	f. - Heeni Ngaropi	f. - Heeni Ngaropi	m. - Manakiterangi
(8 gens)	(8 gens)	(8 gens)	(8 gens)	f. - Heeni Ngaropi
				(9gens)
f. Kapohanga	f. Kapohanga			
f. Hinewairere	f. Hinewairere			
m. Tuameko	m. Tuameko			
m. Whaita	f. Manupokai II			
m. Paipapa	m. Aria			
f. Hinetapuariki	m. Paora Tahuna			
m. Koroniria Wehenga	f. Ritihia			
f. Rora Rangi	m. Pire Rangi			
m. - Manakiterangi	m. - Manakiterangi			
f. - Heeni Ngaropi	f. - Heeni Ngaropi			
(8 gens)	(8 gens)			

**G7 WHARE ERIKI KEMARA (b. 1889)**

- |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| f. Kapohanga          |
| f. Manukaipo          | f. Hinewehe           | f. Hinewairere        | f. Hinewairere        | m. TePokinga          |
| m. Takangaiwaho       | m. Wharetuatea        | m. Tuameko            | m. Ikangaheru         | f. Tuharaua           |
| f. Hinepaea           | m. Toitehuatahi       | m. Purehua            | f. Hinemania          | f. Kuraweherau        |
| f. Whakaawhe          | m. TeRangiipaea       | f. Hamuri             | m. Ngarangikatotohu   | f. Kokahuriwai        |
| m. TeRangiipaea       | f. Marara Poki        | m. Te Karaka Rangi    | m. Horomona TeOrooro  | m. Kahutara           |
| f. Marara Poki        | m. Renata Hape        | f. Erana              | m. Renata Hape        | m. Ngarangikatotohu   |
| m. Renata Hape        | f. Marara Poki        | f. Marara Poki        | f. Marara Poki        | m. Horomona TeOrooro  |
| f. Marara Poki        | m. Whare Eriki Kemara | m. Whare Eriki Kemara | m. Whare Eriki Kemara | m. Renata Hape        |
| m. Whare Eriki Kemara | (8 gens)              | (8 gens)              | (8 gens)              | f. Marara Poki        |
| (9 gens)              |                       |                       |                       | m. Whare Eriki Kemara |
|                       |                       |                       |                       | (10 gens)             |
| <br>                  |                       |                       |                       |                       |
| f. Kapohanga          |                       |                       |                       |                       |
| m. TePokinga          |                       |                       |                       |                       |
| f. Whariungarangi     |                       |                       |                       |                       |
| Tumatatangitangi      |                       |                       |                       |                       |
| f. Kuraweherau II     |                       |                       |                       |                       |
| m. Horomona TeOrooro  |                       |                       |                       |                       |
| m. Renata Hape        |                       |                       |                       |                       |
| f. Marara Poki        |                       |                       |                       |                       |
| m. Whare Eriki Kemara |                       |                       |                       |                       |
| (8 gens)              |                       |                       |                       |                       |

**G8 RUTENE RONGO (b. 1883)**  
**TE RUAHUIHUI RONGO (b. 1887)**  
**ATARETA RONGO (b. 1887)**  
**TE AOWERA RONGO (b. 1888)**

f. Kapohanga				
m. Tamokai	f. Hinewairere	m. TePokinga	f. Manukaipo	f. Hinewairere
m. Korokaingatua	m. Tuameko	f. Tuharaua	f. Whakamahuru	m. Ikangaheru
m. Te Auiti	f. Kahumai	f. Whariungarangi	f. Hinemania	f. Hinemania
f. Hinehuruhuru	f. Hinehuruhuru	m. Te Pokinga II	f. TeHahaeora	f. TeHahaeora
f. Hinemanihirangi	f. Hinemanihirangi	f. Hineauina	m. Pita Rongo	m. Pita Rongo
m. Rutene Taniwha	m. Rutene Taniwha	m. Ropiha	m. Reupena Rongo	m. Reupena Rongo
f. Mere Tauwi	f. Mere Tauwi	m. Rutene Taniwha		
		f. Mere Tauwi	m. - Rutene Rongo	m. - Rutene Rongo
m. - Rutene Rongo	m. - Rutene Rongo		m. - TeRuahuihui Rongo	m. - TeRuahuihui Rongo
m. - TeRuahuihui Rongo	m. - TeRuahuihui Rongo	m. - Rutene Rongo	f. - Atareta Rongo	f. - Atareta Rongo
f. - Atareta Rongo	f. - Atareta Rongo	m. - TeRuahuihui Rongo	m. - TeAowera Rongo	m. - TeAowera Rongo
m. - TeAowera Rongo	m. - TeAowera Rongo	f. - Atareta Rongo	(7 gens)	(7 gens)
(8 gens)	(8 gens)	m. - TeAowera Rongo		
		(9 gens)		

**G9 TAME PUHATA (b. 1883)**  
**PAORA WHAREKURA (b. 1883)**  
**KURUMATE TEOWAI (b. 1885)**  
**TEO PUHATA (b. 1886)**  
**PUHATA MAKARINI (b. 1887)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
m. Te Pokinga	f. Manukaipo	f. Hinewairere	f. Hinewairere
Taupapani	f. Whakamahuru	m. Ikangaheru	m. Tuameko
Tauhori	f. Hinataona	f. Hinataona	f. Hineaute
f. Ngoi	f. Tangatahaua	f. Tangatahaua	m. TeIra Pikiuha
f. TeHunawerawera	m. TeMaaha	m. TeMaaha	f. Arihia Kaurapa
f. Arihia Kaurapa	f. TeHunawerawera	f. TeHunawerawera	f. Heneriata TeAngihau
f. Heneriata TeAngihau	f. Arihia Kaurapa	f. Arihia Kaurapa	
	f. Heneriata TeAngihau	f. Heneriata TeAngihau	m. - Tame Puhata
m. - Tame Puhata			m. - Paora Wharekura
m. - Paora Wharekura	m. - Tame Puhata	m. - Tame Puhata	f. - Kurumate TeOwai
f. - Kurumate TeOwai	m. - Paora Wharekura	m. - Paora Wharekura	f. - Teo Puhata
f. - Teo Puhata	f. - Kurumate TeOwai	f. - Kurumate TeOwai	m. - Puhata Makarini
m. - Puhata Makarini	f. - Teo Puhata	f. - Teo Puhata	<i>(7 gens)</i>
<i>(8 gens)</i>	m. - Puhata Makarini	m. - Puhata Makarini	
	<i>(9 gens)</i>	<i>(9 gens)</i>	

### G10 RIPEKA PIKIUHA (b. 1888)

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
m. Te Pokinga	f. Manukaipo	f. Hinewairere	f. Hinewairere
Taupapani	f. Whakamahuru	m. Ikangaheru	m. Tuameko
Tauhori	f. Hinataona	f. Hinataona	f. Hineaute
f. Ngoi	f. Tangatahaua	f. Tangatahaua	m. TeIra Pikiuha
f. TeHunawerawera	m. TeMaaha	m. TeMaaha	m. Popata Pikiuha
m. Popata Pikiuha	f. TeHunawerawera	f. TeHunawerawera	f. Hoana Pikiuha
f. Hoana Pikiuha	m. Popata Pikiuha	m. Popata Pikiuha	f. Ripeka Pikiuha
f. Ripeka Pikiuha	f. Hoana Pikiuha	f. Hoana Pikiuha	(7 gens)
(8 gens)	f. Ripeka Pikiuha	f. Ripeka Pikiuha	
	(9 gens)	(9 gens)	

### G11 HUKARERE TE MOANA (b. 1881)

f. Kapohanga	f. Kapohanga	f. Kapohanga
m. TePokinga	f. Hinewairere	m. Tamokai
f. Tuharaua	m. Tuameko	m. Korokaingatua
f. Kuraweherau	f. Kahumai	f. Te Auiti
f. Kokahuriwai	m. TeRangikamatau	m. TeRangikamatau
m. Kahutara	f. Ripeka TeIrikaraka	f. Ripeka TeIrikaraka
Te Puawhe	f. Aramata Pongahuru	f. Aramata Pongahuru
m. Ngarangimatamua	m. Himiona TeMoana	m. Himiona TeMoana
f. Aramata Pongahuru	f. Hukarere TeMoana	f. Hukarere TeMoana
m. Himiona TeMoana	(8 gens)	(8 gens)
f. Hukarere TeMoana		
(10 gens)		

**G12 HOHUA KAHU (b. 1884)**  
**TE RINA KAHU (b. 1889)**  
**HENERIATA KAHU (b. 1889)**

f. Kapohanga  
 m. Te Pokinga  
   Taupapani  
   Tauhori  
 f. Ngoi  
 f. TeHunawerawera  
 m. Popata Pikiuha  
 f. Matire Pikiuha  
   |  
 m. - Hohua Kahu  
 f. - TeRina Kahu  
 f. - Heneriata Kahu  
   (8 gens)

f. Kapohanga  
 m. Tamokai  
   TeRehuao  
 f. Uruhei  
 m. Paipapa  
 f. Hinetapuariki  
 m. Paora Kahu  
 m. Matenga Kahu  
   |  
 m. - Hohua Kahu  
 f. - TeRina Kahu  
 f. - Heneriata Kahu  
   (8 gens)

f. Kapohanga  
 f. Manukaipo  
 f. Whakamahuru  
 f. Hinataona  
 f. Tangatahaua  
 m. TeMaaha  
 f. TeHunawerawera  
 m. Popata Pikiuha  
 f. Matire Pikiuha  
   |  
 m. - Hohua Kahu  
 f. - TeRina Kahu  
 f. - Heneriata Kahu  
   (9 gens)

f. Kapohanga  
 f. Hinewairere  
 m. I kangaheru  
 f. Hinataona  
 f. Tangatahaua  
 m. TeMaaha  
 f. TeHunawerawera  
 m. Popata Pikiuha  
 f. Matire Pikiuha  
   |  
 m. - Hohua Kahu  
 f. - TeRina Kahu  
 f. - Heneriata Kahu  
   (9 gens)

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 f. Hineaute  
 m. TeIra Pikiuha  
 m. Popata Pikiuha  
 f. Matire Pikiuha  
   |  
 m. - Hohua Kahu  
 f. - TeRina Kahu  
 f. - Heneriata Kahu  
   (7 gens)

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 m. Whaita  
 m. Paipapa  
 f. Hinetapuariki  
 m. Paora Kahu  
 m. Matenga Kahu  
   |  
 m. - Hohua Kahu  
 f. - TeRina Kahu  
 f. - Heneriata Kahu  
   (8 gens)

**G13 PAKANUI NIHONIHO (b.1889)**

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 f. Kahumai  
 m. Pouramua  
 m. Rawiri Hikarukutai  
 m. Pirika TeKaiwi  
 m. Watene Tuhura  
 m. Pakanui Nihoniho  
*(8 gens)*

f. Kapohanga  
 m. Tamokai  
 m. Korokaingatua  
 m. TeAuiti  
 m. Pouramua  
 m. Rawiri Hikarukutai  
 m. Pirika TeKaiwi  
 m. Watene Tuhura  
 m. Pakanui Nihoniho  
*(8 gens)*

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
 Kairakau  
 Koparehuia  
 f. Arapera Kaimahi  
 m. Pirika TeKaiwi  
 m. Watene Tuhura  
 m. Pakanui Nihoniho  
*(8 gens)*

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 m. Whaita  
 Whetukura  
 f. Hinematikotai  
 f. Oriwia TeHaua  
 m. Hori Tuhere  
 m. Watene Tuhura  
 m. Pakanui Nihoniho  
*(9 gens)*

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
 Tupurupuru  
 Waiotemarama  
 f. Hineweku  
 m. Peta TeWa  
 f. Peti Kokahauai  
 m. Pakanui Nihoniho  
*(8 gens)*

f. Kapohanga  
 f. Manukaipo  
 f. Taputeariki  
 Rangimotokia  
 f. Atareta  
 f. Katarina Pakawe  
 f. Mere Katene Taiapa  
 f. Peti Kokahauai  
 m. Pakanui Nihoniho  
*(8 gens)*

f. Kapohanga  
 f. Hinewehe  
 m. Wharetuatea  
 Hakiterangi  
 m. Hona Kahukino  
 f. Katarina Pakawe  
 f. Mere Katene Taiapa  
 f. Peti Kokahauai  
 m. Pakanui Nihoniho  
*(8 gens)*

**G14 KAA WAITI (b. 1884)**  
**ERU HAURAKI WAITI (b. 1887)**

f. Kapohanga	f. Kapohanga
f. Manukaipo	f. Hinewairere
f. Whakamahuru	m. Ikangaheru
Tiraokarika	Tiraokarika
m. Rangiturorohi	m. Rangiturorohi
f. Ani Piki	f. Ani Piki
f. Matiria Toi	f. Matiria Toi
m. Pekama Waiti	m. Pekama Waiti
f. - Kaa Waiti	f. - Kaa Waiti
m. - Eru Hauraki	m. - Eru Hauraki
(8 gens)	(8 gens)

f. Kapohanga
f. Hinewairere
m. Tuameko
m. Purehua
f. TeIoio
f. Ani Piki
f. Matiria Toi
m. Pekama Waiti
f. - Kaa Waiti
m. - Eru Hauraki
(8 gens)

**G15 HAWI REHUTAI (b. 1880)**

f. Kapohanga
f. Hinewehe
m. Wharetuatea
Takatakahioterangi
m. Ruaumoko
m. Makoare
m. Riwai Rehutai
m. Hawi Rehutai
(7 gens)

**G16 IRA TE PIKI or IRANUI TOTO (b. 1889)**

f. Kapohanga	f. Kapohanga
f. Manukaipo	f. Hinewairere
f. Whakamahuru	m. Ikangaheru
Tiraokarika	Tiraokarika
m. Rangiturorohi	m. Rangiturorohi
f. Ani Piki	f. Ani Piki
f. Matiria Toi	f. Matiria Toi
f. Ani Piki II	f. Ani Piki II
m. Ira Te Piki	m. Ira Te Piki
(8 gens)	(8 gens)

f. Kapohanga
f. Hinewairere
m. Tuameko
m. Purehua
f. TeIoio
f. Ani Piki
f. Matiria Toi
f. Ani Piki II
m. Ira Te Piki
(8 gens)

**G17 WIKI HAUA (b. 1880)**  
**KERENA HAPUKU (b. 1882)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
m. Te Pokinga	f. Hinewairere	f. Manukaipo	f. Manukaipo	f. Hinewairere
f. Tuharaua	m. Tuameko	m. Takangaiwaho	f. Whakamahuru	m. Ikangaheru
f. Kuraweherau	m. Purehua	m. Kairakau	f. Hinataona	m. Urikore
f. Kokahuriwai	m. Ngahue	f. Manutawhiorangi	Kirimaru	Kirimaru
m. Kahutara	f. Puanga	f. Puanga	f. Tawhiwhirangi	f. Tawhiwhirangi
TePuawhe	m. Raniera Tuhua	m. Raniera Tuhua	m. Watene Tuhura	m. Watene Tuhura
f. Mata Kiriwai	m. Pekama Pahuru	m. Pekama Pahuru	f. Mere Ruawahine	f. Mere Ruawahine
f. Rora TeAmorutu				
m. Pekama Pahuru	m. - Wiki Haua	m. - Wiki Haua	m. - Wiki Haua	m. - Wiki Haua
	f. - Kerena Hapuku	f. - Kerena Hapuku	f. - Kerena Hapuku	f. - Kerena Hapuku
m. - Wiki Haua	(8 gens)	(8 gens)	(8 gens)	(8 gens)
f. - Kerena Hapuku				
(10 gens)				
f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Hinewehe	f. Hinewairere	m. Tamokai	f. Hinewairere	m. Tamokai
Kauika	m. Tuameko	m. Korokaingatua	m. Tuameko	m. Korokaingatua
f. Hinetengarono	f. Kahumai	f. Te Auiti	f. Kahumai	f. Te Auiti
m. Wiremu Tukawa	m. Pouramua	m. Pouramua	f. Hinehuruhuru	Hinehuruhuru
m. Watene Tuhura	f. Ihipera Koriritau	f. Ihipera Koriritau	m. Tahatu	m. Tahatu
f. Mere Ruawahine	f. Mere Ruawahine	f. Mere Ruawahine	Rora TeAmorutu	Rora TeAmorutu
			m. Pekama Pahuru	m. Pekama Pahuru
m. - Wiki Haua	m. - Wiki Haua	m. - Wiki Haua		
f. - Kerena Hapuku	f. - Kerena Hapuku	f. - Kerena Hapuku	m. - Wiki Haua	m. - Wiki Haua
(8 gens)	(8 gens)	(8 gens)	f. - Kerena Hapuku	f. - Kerena Hapuku
			(9 gens)	(9 gens)

**G18 RAWINIA MONIKA (b.1888)**  
**AUKAWA MONIKA (b. 1889)**

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 m. Purehua  
 m. Ngahue  
 f. Puanga  
 m. Raniera Tuhua  
 m. Rapata Monika  
 |  
 f. - Rawinia Monika  
 f. - Aukawa Monika  
 (8 gens)

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
 m. Kairakau  
 f. Manutawhiorangi  
 f. Puanga  
 m. Raniera Tuhua  
 m. Rapata Monika  
 |  
 f. - Rawinia Monika  
 f. - Aukawa Monika  
 (8 gens)

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 f. Kahumai  
 m. TeRangikamatau  
 m. TeHira Tiwhatiwha  
 f. Rawinia Kaiapu  
 m. Rapata Monika  
 |  
 f. - Rawinia Monika  
 f. - Aukawa Monika  
 (8 gens)

f. Kapohanga  
 m. Tamokai  
 m. Korokaingatua  
 m. Te Auiti  
 m. TeRangikamatau  
 m. TeHira Tiwhatiwha  
 f. Rawinia Kaiapu  
 m. Rapata Monika  
 |  
 f. - Rawinia Monika  
 f. - Aukawa Monika  
 (8 gens)

**G19 WARIHI HORUA (b. 1880)**  
**HIRINI HORUA (b. 1882)**  
**HAARE HORUA (b. 1883)**

f. Kapohanga	f. Kapohanga
f. Hinewairere	m. Te Pokinga
m. Tuameko	f. Tuharaua
m. Kuha	f. Kuraweherau
m. Mahia	f. Kokahuriwai
m. Mokena Kahu	m. Kahutara
f. Iritana Horua	TePuawhe
	m. Ngarangimatamua
m. - Warihi Horua	f. Aramata Pongahuru
m. - Hirini Horua	m. Mokena Horua
m. - Haare Horua	
f. - Raiha Horua	m. - Warihi Horua
- Ngaronoa Horua	m. - Hirini Horua
<i>(7 gens)</i>	m. - Haare Horua
	f. - Raiha Horua
	- Ngaronoa Horua
	<i>(10 gens)</i>

f. Kapohanga  
m. Tamokai  
m. Korokaingatua  
f. Te Auiti  
m. TeRangikamatau  
f. Ripeka TeIrikaraka  
f. Aramata Pongahuru  
m. Mokena Kahu  
|  
m. - Warihi Horua  
m. - Hirini Horua  
m. - Haare Horua  
f. - Raiha Horua  
- Ngaronoa Horua  
*(8 gens)*

**RAIHA HORUA (b. 1885)**  
**NGARONOA HORUA (b. 1889)**

f. Kapohanga	f. Kapohanga
f. Hinewairere	f. Hinewairere
m. Ikangaheru	m. Tuameko
f. Hinataona	f. Kahumai
TeHapunohokino	m. TeRangikamatau
f. Heneriata Ringakapu	f. Ripeka TeIrikaraka
f. Aramata TeTihi	f. Aramata Pongahuru
f. Iritana Horua	m. Mokena Kahu
m. - Warihi Horua	m. - Warihi Horua
m. - Hirini Horua	m. - Hirini Horua
m. - Haare Horua	m. - Haare Horua
f. - Raiha Horua	f. - Raiha Horua
- Ngaronoa Horua	- Ngaronoa Horua
<i>(8 gens)</i>	<i>(8 gens)</i>

**G20 MAHARATA PIRIOTE TE OWAI (b 1880)**  
**HENARE TE OWAI (b. 1883)**  
**ERETI TE OWAI (b. 1884)**

f. Kapohanga	f. Kapohanga
m. Tamokai	m. Hinewairere
m. Korokaingatua	m. Tuameko
f. Hineangina	f. Kahumai
m. Paengakai	m. Pouramua
f. Pane Korama	m. Rawiri Hikarukutai
m. Himiona Hapai	m. Himiona Hapai
f. - Maharata Piriote	f. - Maharata Piriote
m. - Henare TeOwai	m. - Henare TeOwai
f. - Ereti Te Owai	f. - Ereti TeOwai
f. - Turuhira TeHore	f. - Turuhira TeHore
f. - Raiha TeOwai	f. - Raiha TeOwai
(7 gens)	(7 gens)

**TURUHIRA TE HORE TE OWAI (b. 1886)**  
**RAIHA TE OWAI (b. 1886)**

f. Kapohanga
m. Tamokai
m. Korokaingatua
m. Te Auiti
m. Pouramua
m. Rawiri Hikarukutai
m. Himiona Hapai
f. - Maharata Piriote
m. - Henare TeOwai
f. - Ereti TeOwai
f. - Turuhira TeHore
f. - Raiha TeOwai
(7 gens)

**G21 ERANA KAWA MAHUIKA (b. 1882)**  
**RIPEKA MAHUIKA (b. 1884)**

f. Kapohanga	f. Kapohanga
m. TePokinga	f. Hinewairere
f. Tuharaua	m. Tuameko
Whariungarangi	f. Kahumai
m. TePokinga	TeMuiora
f. Hineauina	Makuratea
m. Ropiha	f. Miriama Haruru
f. Harata Taheke	f. Harata Taheke
m. Nepia Mahuika	m. Nepia Mahuika
f. - Erana Kawa	f. - Erana Kawa
f. - Ripeka Mahika	f. - Ripeka Mahika
m. - Hamana Mahuika	m. - Hamana Mahuika
(9 gens)	(9 gens)

**HAMANA MAHUIKA (b. 1886)**

f. Kapohanga	f. Kapohanga
m. Tamokai	f. Manukaipo
m. Korokaingatua	m. Takangaiwaho
m. TeAuiti	m. Kairakau
TeMuiora	Moteatea
Makuratea	f. Miriama Haruru
f. Miriama Haruru	f. Harata Taheke
f. Harata Taheke	m. Nepia Mahuika
m. Nepia Mahuika	
	f. - Erana Kawa
f. - Erana Kawa	f. - Ripeka Mahika
f. - Ripeka Mahika	m. - Hamana Mahuika
m. - Hamana Mahuika	(8 gens)
(9 gens)	

**G22 WHARE KAHAKI (b. 1884)**  
**NGAPARE KAHAKI (b. 1887)**  
**TUAKANA KAHAKI (b. 1888)**  
**RIRIA KAHAKI (b. 1889)**

f. Kapohanga	f. Kapohanga
m. Tamokai	f. Hinewairere
m. Korokaingatua	m. Tuameko
m. TeAuiti	f. Kahumai
TeMuiora	TeMuiora
f. Hinekukurangi	f. Hinekukurangi
Waikapakapa	Waikapakapa
m. Anaru Kahaki	m. Anaru Kahaki
- Whare Kahaki	- Whare Kahaki
- Ngapare Kahaki	- Ngapare Kahaki
- Tuakana Kahaki	- Tuakana Kahaki
f. - Riria Kahaki	f. - Riria Kahaki
(8 gens)	(8 gens)

**G23 HENARE POANANGA (b. 1882)**  
**KARARAINA KAHAKI (b. 1884)**  
**HOANI KAHAKI (b. 1889)**

f. Kapohanga	f. Kapohanga
m. Tamokai	f. Hinewairere
m. Korokaingatua	m. Tuameko
m. TeAuiti	f. Kahumai
TeMuiora	TeMuiora
f. Hinekukurangi	f. Hinekukurangi
Waikapakapa	Waikapakapa
m. Anaru Kahaki	m. Anaru Kahaki
f. Hinekino Kahaki	f. Hinekino Kahaki
m. - Henare Poananga	m. - Henare Poananga
f. - Kararaina Kahaki	f. - Kararaina Kahaki
m. - Hoani Kahaki	m. - Hoani Kahaki
(9 gens)	(9 gens)

**G24 TUHERE MARAKI (b. 1881)**  
**TURUHIRA MARAKI (b. 1884)**  
**KEITA MARAKI (b. 1886)**  
**WI MARAKI (b. 1887)**

f. Kapohanga	f. Kapohanga
m. Tamokai	f. Hinewairere
m. Korokaingatua	m. Tuameko
m. TeAuiti	f. Kahumai
TeMuiora	TeMuiora
Kohua Waitai	Kohua Waitai
f. Hepora	f. Hepora
m. Maraki Tautuhi	m. Maraki Tautuhi
m. - Tuhere Maraki	m. - Tuhere Maraki
f. - Turuhira Maraki	f. - Turuhira Maraki
f. - Keita Maraki	f. - Keita Maraki
m. - Wi Maraki	m. - Wi Maraki
(8 gens)	(8 gens)

**G25 RIPEKA PUIA (b. 1881)**  
**KEMARA URUPA (b. 1884)**  
**APIRANA PIPI (b. 1886)**

f. Kapohanga	f. Kapohanga
m. Tamokai	f. Hinewairere
m. Korokaingatua	m. Tuameko
m. TeAuiti	f. Kahumai
m. TeRangikamatau	m. TeRangikamatau
f. Ripeka TeIrikaraka	f. Ripeka TeIrikaraka
m. Wiremu TeUrupa	m. Wiremu TeUrupa
f. - Ripeka Puia	f. - Ripeka Puia
m. - Kemara Urupa	m. - Kemara Urupa
m. - Apirana Pipi	m. - Apirana Pipi
(7 gens)	(7 gens)

**G26 TERAU TEERA (b. 1889)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
m. Tamokai	f. Hinewairere	m. Te Pokinga	f. Manukaipo	f. Hinewairere
m. Korokaingatua	m. Tuameko	Taupapani	f. Whakamahuru	m. Ikangaheru
m. TeAuiti	f. Kahumai	Tauhuri	f. Hinataona	f. Hinataona
m. TeRangikamatau	m. TeRangikamatau	f. Ngoi	f. Tangatahaua	f. Tangatahaua
f. Ripeka TeIrikaraka	f. Ripeka TeIrikaraka	f. TeHunawerawera	m. TeMaaha	m. TeMaaha
m. Wiremu TeUrupa	m. Wiremu TeUrupa	m. Popata Pikiuha	f. TeHunawerawera	f. TeHunawerawera
m. Hori Teera	m. Hori Teera	f. Hoana Pikiuha	m. Popata Pikiuha	m. Popata Pikiuha
			f. Hoana Pikiuha	f. Hoana Pikiuha
f. - TeRau Teera	f. - TeRau Teera	f. TeRau Teera		
(8 gens)	(8 gens)	(8 gens)	f. TeRau Teera	f. TeRau Teera
			(9 gens)	(9 gens)

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 f. Hineaute  
 m. TeIra Pikiuha  
 m. Popata Pikiuha  
 f. Hoana Pikiuha  
 |  
 f. TeRau Teera  
 (7 gens)

**G27 TIMI TAMATI (b. 1882)**  
**RUAHUIHUI TAMATI (b. 1884)**  
**MAKARINI TAMATI (b. 1886)**  
**TERINA TEOTI TAMATI (b. 1887)**

f. Kapohanga  
 m. Tamokai  
 m. Korokaingatua  
 m. TeAuiti  
 Makuratea  
 f. Raiha Kowhaki  
 m. Tamihana Kakano  
 f. Mere Arihi Kakano  
 |  
 m. - Timi Tamati  
 - Ruahuihui Tamati  
 m. - Makarini Tamati  
 f. - TeRina Tamati  
 (8 gens)

f. Kapohanga  
 f. Hinewirere  
 m. Tuameko  
 f. Kahumai  
 Makuratea  
 f. Raiha Kowhaki  
 m. Tamihana Kakano  
 f. Mere Arihi Kakano  
 |  
 m. - Timi Tamati  
 - Ruahuihui Tamati  
 m. - Makarini Tamati  
 f. - TeRina Tamati  
 (8 gens)

f. Kapohanga  
 m. Manukaipo  
 f. Taputeariki  
 f. Hinetete  
 m. Paipapa  
 f. Hinetapuariki  
 f. Perenata TeHaupatahi  
 m. Tuta Tamati  
 |  
 m. -Timi Tamati  
 -Ruahuihui Tamati  
 m. -Makarini Tamati  
 f. -TeRina Tamati  
 (8 gens)

f. Kapohanga  
 f. Hinewairere  
 m. Tuameko  
 m. Whaita  
 f. Hinetete  
 m. Paipapa  
 f. Hinetapuariki  
 f. Perenata TeHaupatahi  
 m. Tuta Tamati  
 |  
 m. -Timi Tamati  
 -Ruahuihui Tamati  
 m. -Makarini Tamati  
 f. -TeRina Tamati  
 (9 gens)

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
 m. Kairakau  
 Moteatea  
 f. Raiha Kowhaki  
 m. Tamihana Kakano  
 f. Mere Arihi Kakano  
 |  
 m. -Timi Tamati  
 -Ruahuihui Tamati  
 m. -Makarini Tamati  
 f. -TeRina Tamati  
 (8 gens)

f. Kapohanga  
 f. Manukaipo  
 f. Taputeariki  
 f. Hinetete  
 m. Paipapa  
 f. Hinetapuariki  
 f. Perenata TeHaupatahi  
 m. Tuta Tamati  
 |  
 m. -Timi Tamati  
 -Ruahuihui Tamati  
 m. -Makarini Tamati  
 f. -TeRina Tamati  
 (8 gens)

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
 Tupurupuru  
 m. Tamawaiotini  
 m. Renata Rangiroroma  
 m. Tamihana Kakano  
 f. Mere Arihi Kakano  
 |  
 m. - Timi Tamati  
 - Ruahuihui Tamati  
 m. - Makarini Tamati  
 f. - TeRina Tamati  
 (8 gens)

**G28 POIWA KAKANO (b. 1888)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
m. Tamokai	f. Hinewirere	f. Manukaipo	f. Manukaipo
m. Korokaingatua	m. Tuameko	m. Takangaiwaho	m. Takangaiwaho
m. TeAuiti	f. Kahumai	m. Kairakau	Tupurupuru
Makuratea	Makuratea	Moteatea	m. Tamawaiotini
f. Raiha Kowhaki	f. Raiha Kowhaki	f. Raiha Kowhaki	m. Renata Rangiroroma
m. Tamihana Kakano	m. Tamihana Kakano	m. Tamihana Kakano	m. Tamihana Kakano
m. Tamihana Kakano II			
f. Poiwa Kakano	f. Poiwa Kakano	f. Poiwa Kakano	f. Poiwa Kakano
(8 gens)	(8 gens)	(8 gens)	(8 gens)
f. Kapohanga	f. Kapohanga		
m. Tamokai	f. Hinewirere		
m. Korokaingatua	m. Tuameko		
m. TeAuiti	f. Kahumai		
m. Pouramua	m. Pouramua		
Wikiriwhi	Wikiriwhi		
m. Eruera Kupenga	m. Eruera Kupenga		
f. Rutu Hinekaurangi	f. Rutu Hinekaurangi		
f. Poiwa Kakano	f. Poiwa Kakano		
(8 gens)	(8 gens)		

**G29 RANIERA KAWHIA (b. 1881)**  
**TOKENA POKAI (b. 1880)**  
**KATERINA POKAI (b. 1884)**

f. Kapohanga  
 f. Hinewehe  
 m. Wharetuatea  
   Moimoi  
 f. Pirihira  
   |  
 f. Mere Ngawaka           m. Mita Pokai  
 f. Mereana Tauke        m. Pahau Pokai  
 f. Riria Pouaka           |  
 m. Raniera Kawhia       - Tokena Pokai  
   (8 gens)                 f. - Katerina Pokai  
                               (7 gens)

**G31 KEITA MOEKE (b.1881)**           **PETA MOEKE (1885)**  
**HARIATA MOEKE (b.1883)**

f. Kapohanga	f. Kapohanga
f. Hinewairere	f. Manukaipo
m. Tuameko	f. Taputeariki
m. Whaita	f. Hinetete
m. Paipapa	m. Paipapa
m. Watene Moeke	m. Watene Moeke
m. Eruera Moeke	m. Eruera Moeke
f. -Keita Moeke	f. -Keita Moeke
f. -Hariata Moeke	f. -Hariata Moeke
m. -Peta Moeke	m. -Peta Moeke
(7 gens)	(7 gens)

**G30 KEITA REEDY (b. 1885)**  
**TOM REEDY (b. 1888)**

f. Kapohanga  
 f. Manukaipo  
 m. Takangaiwaho  
   Tupurupuru  
   Waiotemarama  
 m. Aperahama Tapatu  
 f. Makere Takawhenua  
 f. Mihi Hape Tuhou  
   |  
 f. - Keita Reedy  
 m. - Tom Reedy  
   (8 gens)

**G32 MERE ARIHI TINOTAHU (b. 1886)**

f. Kapohanga	f. Kapohanga
f. Manukaipo	f. Hinewehe
f. Taputeariki	m. Wharetuatea
f. Hineaute	Hakiterangi
f. Rangimotokia	m. Hona Kahukino
f. Atareta	f. Atareta
f. Katerina Pakawe	f. Katerina Pakawe
m. TePaea Pakawe	m. TePaea Pakawe
m. Himiona Tinotahi	m. Himiona Tinotahi
f. Mere Arihi Tinotahi	f. Mere Arihi Tinotahi
(9 gens)	(9 gens)

### G33 RAUWIRI TAEWA (b. 1886)

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Hinewairere	f. Manukaipo	f. Manukaipo	m. TePokinga
m. Ikangaheru	f. Whakamahuru	f. Whakamahuru	Taupapani
Tiraokarika	Tiraokarika	f. Hinataona	Tauhori
m. Matiu Tangatauia	m. Matiu Tangatauia	f. Tangata Haua	f. Ngoi
f. Ka Onewa	f. Ka Onewa	m. Te Maaha	f. Pipi TeManga
f. Riwia Haua	f. Riwia Haua	f. Pipi TeManga	f. Ka Onewa
m. Rauwiri Taewa	m. Rauwiri Taewa	f. Ka Onewa	f. Riwia Haua
(7 gens)	(7 gens)	f. Riwia Haua	m. Rauwiri Taewa
		m. Rauwiri Taewa	(8 gens)
		(9 gens)	

### G34 TUTA NGAMU (b. 1880)

f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Manukaipo	f. Manukaipo	f. Hinewehe
m. Takangaiwaho	f. Taputeariki	m. Wharetuatea
Tupurupuru	Rangimotokia	Hakiterangi
Waiotemarama	f. Atareta	m. Hona Kahukino
f. Hineweku	f. Katarina Pakawe	f. Katarina Pakawe
m. Peta TeWa	f. Mere Katene Taiapa	f. Mere Katene Taiapa
m. Anaru Ngamu	m. Anaru Ngamu	m. Anaru Ngamu
m. Tuta Ngamu	m. Tuta Ngamu	m. Tuta Ngamu
(8 gens)	(8 gens)	(8 gens)

**G35 TE RINA PARAE (b. 1888)**  
**PORANGI PARAE (b. 1889)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Hinewairere	f. Manukaipo	f. Manukaipo	m. TePokinga	f. Manukaipo
m. Ikangaheru	f. Whakamahuru	f. Whakamahuru	Taupapani	m. Takangaiwaho
Tiraokarika	Tiraokarika	f. Hinataona	Tauhori	Tupurupuru
m. Matiu Tangatauia	m. Matiu Tangatauia	f. Tangata Haua	f. Ngoi	Waiotemarama
f. Ka Onewa	f. Ka Onewa	m. Te Maaha	f. Pipi TeManga	f. Hineweku
f. Riwia Haua	f. Riwia Haua	f. Pipi TeManga	f. Ka Onewa	m. Peta TeWa
f. Heni Pere	f. Heni Pere	f. Ka Onewa	f. Riwia Haua	m. Whio Parae
		f. Riwia Haua	f. Heni Pere	
f. - TeRina Parae	f. - TeRina Parae	f. Heni Pere		f. - TeRina Parae
- Porangi Parae	- Porangi Parae		f. - TeRina Parae	- Porangi Parae
<b>(8 gens)</b>	<b>(8 gens)</b>	f. - TeRina Parae	- Porangi Parae	<b>(8 gens)</b>
		- Porangi Parae	<b>(9 gens)</b>	
		<b>(10 gens)</b>		
f. Kapohanga	f. Kapohanga			
f. Manukaipo	f. Hinewehe			
f. Taputeariki	m. Wharetuatea			
Rangimotokia	Hakiterangi			
f. Atareta	m. Hona Kahukino			
f. Katarina Pakawe	f. Katarina Pakawe			
f. Mere Katene Taiapa	f. Mere Katene Taiapa			
m. Whio Parae	m. Whio Parae			
f. - TeRina Parae	f. - TeRina Parae			
- Porangi Parae	- Porangi Parae			
<b>(8 gens)</b>	<b>(8 gens)</b>			

**G36 PINE TAOTU TIBBLE (b. 1881)**  
**HENERIATA HEEKI (b. 1884)**  
**HIRINI HEEKI (b. 1886)**

f. Kapohanga				
f. Manukaipo	f. Hinewairere	f. Hinewairere	f. Hinewairere	f. Manukaipo
f. Whakamahuru	m. Ikangaheru	m. Tuameko	m. Tuameko	f. Taputeariki
Tiraokarika	Tiraokarika	m. Purehua	m. Whaita	f. Hinetete
m. Rangiturorohi	m. Rangiturorohi	f. TeIoio	m. Paipapa	m. Paipapa
f. Ani Piki	f. Ani Piki	f. Ani Piki	m. Ihaia Tuawa	m. Ihaia Tuawa
f. Mere Nohoaka				
f. Meri Wharepapa				
m. - Pine Taotu Tibble				
f. - Heneriata Heeki				
m. - Hirini Heeki				
(8 gens)				

**G37 PETI TUKINO WAEROA (b. 1882)**  
**WATENE WAITITI (b. 1886)**  
**HENARE TUKINO (b. 1887)**  
**HEMI WAITITI (b. 1888)**

f. Kapohanga				
f. Manukaipo	f. Hinewairere	f. Hinewairere	f. Hinewairere	f. Manukaipo
f. Whakamahuru	m. Ikangaheru	m. Tuameko	m. Tuameko	f. Taputeariki
Tiraokarika	Tiraokarika	m. Purehua	m. Whaita	f. Hinetete
m. Rangiturorohi	m. Rangiturorohi	f. TeIoio	m. Paipapa	m. Paipapa
f. Ani Piki	f. Ani Piki	f. Ani Piki	m. Ihaia Tuawa	m. Ihaia Tuawa
f. Mere Nohoaka				
f. Ripeka Tukino				
f. - Peti Tukino Waeroa				
m. - Watene Waititi				
m. - Henare Tukino				
m. - Hemi Waititi				
(8 gens)				

**G38 MAREWA TIPUNA (b.1882)**  
**HAARE TIPUNA (b.1884)**

f. Kapohanga	f. Kapohanga	f. Kapohanga
m. Tamokai	m. Tamokai	f. Hinewairere
m. Korokaingatua	m. Korokaingatua	m. Tuameko
m. TeAuiti	m. TeAuiti	f. Kahumai
Makuratea	m. Pouramua	Makuratea
f. Wikitoria	TeKaha Kupenga	f. Wikitoria
f. Miria Whakaiti	m. Pineamine Tipuna	f. Miria Whakaiti
m. -Marewa Tipuha	m. -Marewa Tipuha	m. -Marewa Tipuha
m. -Haare Tipuna	m. -Haare Tipuna	m. -Haare Tipuna
(7 gens)	(7 gens)	(7 gens)

**G39 RIWAI HIWINUI TAWHIRI (b.1880)**

f. Kapohanga	f. Kapohanga	f. Kapohanga	f. Kapohanga
f. Hinewairere	f. Manukaipo	f. Manukaipo	f. Hinewairere
m. Tuameko	f. Taputeariki	f. Whakamahuru	m. Ikangaheru
m. Whaita	f. Hinetete	Tiraokarika	Tiraokarika
m. Paipapa	m. Paipapa	m. Rangiturorohi	m. Rangiturorohi
m. Ihaia Tuawa	m. Ihaia Tuawa	f. Ani Piki	f. Ani Piki
f. Mere Karaka Tuahu	f. Mere Karaka Tuahu	m. Tamati Tawhiri	m. Tamati Tawhiri
m. Riwai Hiwinui	m. Riwai Hiwinui	f. Tuihana Pekahinga	f. Tuihana Pekahinga
(7 gens)	(7 gens)	f. Mere Karaka Tuahu	f. Mere Karaka Tuahu
		m. Riwai Hiwinui	m. Riwai Hiwinui
		(8 gens)	(8 gens)



**G44 HAARE WAITI (b.1886)**

f. Kapohanga	f. Kapohanga
f. Hinewairere	f. Hinewehe
m. Tuameko	m. Wharetuatea
f. Manupokai II	Taipaku
m. Aria	m. Nopera Mokaka
f. Wiki Amotawa	f. Erana
m. Hori Waiti	f. Mihi Mahemahe
m. Paratene Waiti	m. Haare Waiti
m. Haare Waiti	(7 gens)
(8 gens)	

**G45 HOKIMATE TE HUI (b.1888)**

f. Kapohanga	f. Kapohanga
m. Hinewairere	m. Tamokai
m. Tuameko	m. Korokaingatua
f. Kahumai	m. Te Auiti
m. Pouramua	m. Pouramua
m. Rawiri Hikarukutai	m. Rawiri Hikarukutai
m. Horomona Hapai	m. Horomona Hapai
m. Horomona TeHui	m. Horomona TeHui
f. Hokimate TeHui	f. Hokimate TeHui
(8 gens)	(8 gens)

## BIBLIOGRAPHY

### UNPUBLISHED

#### (1) Official Records

Tairawhiti Maori Land Court (Gisborne)  
 Court Application Files  
 Gisborne Minute Books  
 Waiapu Minute Books

#### (2) Unofficial Records

##### Letters

Williams, H. W. to Best, E., 22 March 1913, Best Papers, Alexander Turnbull Library, 72/6.

#### (3) Theses

McCrae, Jane	1981	Participation: Native Committees and Papatupu Block Committees in Tai Tokerau. M.A. (AU)
Sutton, D. G.	1975	Ressurrection of the Prehistoric Dead. The Personal Histories of Sixteen Ancient Inhabitants of Eastern Palliser Bay. M.A. (OU)
Te Awarau, W. M.	1927	Tuwhakairiora. M.A. (CU)

### PUBLISHED

#### 1 Newspapers

<u>Evening Post</u>	28.7.90
<u>The Dominion</u>	3.11.90
<u>The New Zealand Herald</u>	14.1.91

#### 2 Other Material

Ngata, Sir A. T.	1972	<u>Rauru-nui-a-Toi Lectures</u>
	1988	The Genealogical Method as Applied to the Early History of New Zealand (An address delivered to the Wellington branch of the Historical Society, 1928).

### 3 Articles

- |                                 |      |  |
|---------------------------------|------|--|
| Barlow, Dr Cleve                | 1987 | The Scope of Maori Genealogy.<br>in <u>New Zealand Genealogist</u> , 18, 34-6.   |
| *Bately, R. A. L.               | 1950 | Inland Patea Genealogies.<br><u>JPS</u> 59, 63-75.   |
| Beatson, Peter                  | 1990 | "Study Guide 8: Culture and Ideology" in<br><u>76.102 New Zealand Society</u> , Book 3, 1-148,<br>Department of Sociology, Massey<br>University.   |
| *Best, Elsdon                   | 1906 | Maori Numeration.<br><u>T&amp;PNZI</u> , 39, 150-180.  |
|                                 | 1907 | Maori Numerations.<br><u>JPS</u> 16, 94-8.   |
| Buck, P. H. (Te Rangi<br>Hiroa) | 1926 | The Value of Tradition in Polynesian<br>Research.<br><u>JPS</u> 35, 181-203.   |
| Charlot, John                   | 1977 | The Application of Form and Redaction<br>Criticism to Hawaiian Literature.<br><u>JPS</u> 86, 479-501.  |
| Colenso, W.                     | 1879 | Contributions to a Better Knowledge of the<br>Maori Race. Proverbs and Proverbial<br>Sayings.<br><u>T&amp;PNZI</u> 12, 108-47.   |
| Davidson, Janet                 | 1987 | The Paa Maori Revisited.<br><u>JPS</u> 96, 7-26.   |
| Downes, T. W.                   | 1909 | Early History of Rangitikei.<br><u>T&amp;PNZI</u> 42, 74-114.<br>History of Ngati Kahungunu.<br><u>JPS</u> 23, 28-33, 111-25.<br>History of Ngati Kahungunu.<br><u>JPS</u> 24, 57-61, 121-9. |

\**JPS* *Journal of the Polynesian Society*

\**T&PNZI* *Transactions and Proceedings of the New Zealand Institute*

- Fletcher, H. J. 1930 The Use of Genealogies for the Purpose of Dating Polynesian History.  
JPS 39, 189-94.
- 1930 A Review of the Toi Kairakau Genealogies.  
JPS 39, 315-21.
- Gluckman, L. K. 1981 Abortion in the Nineteenth Century Maori: A Historical and Ethnopsychiatric Review.  
in New Zealand Medical Journal, 93, 384-6.
- Golson, J. 1955 Dating New Zealand's Prehistory.  
JPS 64, 113-36.
- Gudgeon, Judge W. E. 1893 A Maori Generation.  
JPS 2, 113-5.
- 1894 The Maori Tribes of the East Coast.  
JPS 3, 208.
- Halbert, R. W. 1961 Te Tino o Toi.  
Historical Review, X, 3, memoir no. 1.
- 1962 Genealogies as a Means of Dating Maori Prehistory.  
Historical Review, X, 4, 105-114.
- 1964 The Chronology of Maori Tradition.  
Historical Review, XII, 2, 85-91.
- 1964 The Chronology of Maori Tradition.  
Historical Review, XII, 4, 182-184.
- 1963 The 30-Year Generational Span,  
Historical Review, XI, 1, 45-46.
- Hamilin, Rev. J. 1842 On the Mythology of New Zealanders.  
in Tasman Journal of Natural Science, 1, 254-358.
- Hongi, Hare 1898 Concerning Whare-kura: Its Philosophies and Teachings.  
JPS 7, 35-41.
- Houghton, P. 1978 Prehistoric New Zealanders.  
in New Zealand Medical Journal, 87, 213-6.
- Kelly, L. G. 1940 Some Problems in the Study of Maori Genealogies.  
JPS 49, 235-42.
- Lian, Kwen Fee 1987 Interpreting Maori History: A Case for a Historical Sociology.  
JPS 96, 445-71.

- McCrae, Jane 1983 Maori Manuscripts - Whose Responsibility? in Archifacts 4, 2-6.
- Metge, Joan 1990 Te Rito o te Harakeke: Conceptions of the Whaanau. JPS 99, 55-92.
- Phillips, M. A. L. 1980 An Estimation of Fertility in Prehistoric New Zealanders. New Zealand Journal of Archaeology, 2.
- Piddington, Ralph 1951 Synchronic and Diachronic Dimensions in the Study of Polynesian Cultures. JPS 60, 108-121.  
1956 A Note of the Validity and Significance of Polynesian Traditions. JPS 65, 200-3.
- Porter, J. P. 1971 "Te Arawa": A Commentary on Don Stafford's History. Historical Review, 19, 44-59.
- Prentice, W. T. [1939] 1976 The Maori History of Hawke's Bay. in The History of Hawke's Bay, Wilson, J. G., Capper Press, Christchurch.
- Robertson, J. B. W. 1956 Genealogies as a Basis for Maori Chronology. JPS 65, 45-54.  
1957 The Role of Tribal Tradition in New Zealand Prehistory. JPS 66, 249-263.  
1958 The Significance of New Zealand Tribal Tradition. JPS 67, 39-57.  
1959 Correspondence. JPS 68, 153.  
1962 The Evaluation of Maori Tribal Tradition as History. JPS 71, 293-309.  
1963 The Chronology of Maori History. Historical Review XI, 4, 193-8.  
1963 Tauanui Pa, Taneatua. Historical Review, XI, 4, 214.  
1964 The Chronology of Maori Tradition, Historical Review, XII, 3, 139-43.
- Schwimmer, Eric 1990 The Maori Hapu: A Generative Model. JPS 99, 297-316.

- Shand, A. The Moriori People of the Chatham Islands: Their Traditions and History. JPS 5, 83-91.
- Sharp, Andrew 1958 Maori Genealogies and Canoe Traditions. JPS 67.  
1959 Maori Genealogies and the Fleet. JPS 67.  
1956 The Prehistory of the New Zealand Maoris. Some Possibilities. JPS 65, 155-60.
- Skelton, Kim Tracing Your Whakapapa through Maori Land Court Records. in New Zealand Genealogist, 18, 36-7.
- Smith, S. P. 1893 Notes in Orsmond, J. M., The Genealogy of the Pomare Family of Tahiti. JPS 2, 41.  
1893 Introductory Remarks in Rimini, T. W., The Fall of Pukehina, Oriwhata and Poutuia Pas, Bay of Plenty, New Zealand. JPS 2, 43-4.  
1898 Hawaiki: The Whence of the Maori. JPS 7.  
1899 Wars of the Northern Against the Southern Tribes. JPS 8, 141-64, 201-30.  
1900 Wars of the Northern Against the Southern Tribes. JPS 9, 1-37, 85-120, 145-168.  
1904 Wars of the Northern Against the Southern Tribes. JPS 13, 20-71.  
1921 The Polynesians in Indonesia. JPS 30, 19-27.
- Sorrenson, M. P. K. 1977 The Whence of the Maori. JPS 86, 449-78.
- Sparks, Roger 1989 Radiocarbon Dating Very Small Samples in Archaeology in Oceania. 24, 1, 39-40.
- Stack, Rev. J. W. 1877 Sketch of the Traditional History of the South Islander Maoris. T & PNZI, 10, 57-92.

- Stokes, J. G. F. 1930 An Evaluation of Early Genealogies used for Polynesian History. JPS 39, 1-42.
- 1930 The Use of Genealogies for the Purpose of Dating Polynesian History. JPS 39, 189-94.
- Sutton, Douglas G. 1986 Maori Demographic Change, 1769-1840. The Inner Workings of "A Picturesque but Illogical Simile". JPS 95, 291-339.
- Tawhai, TePakaka 1985 Lecture 46.214 Maori Visual Arts in 46.214 Maori Visual Arts, Book 3, pp33-5, Department of Maori Studies, Massey University.
- Te Hurunui, Pei 1958 Maori Genealogies. JPS 67, 162-5.
- Travers, W. T. T. 1871 Notes Upon the Historical Value of the "Traditions of the New Zealanders", as Collected by Sir George Grey, K. C. B., late Governor-in-Chief of New Zealand. T&PNZI, 4, 51-62.
- Webster, S. 1975 Cognatic Descent Groups and the Contemporary Maori: A Preliminary Reassessment. JPS 84, 121-151.
- Williams, H. R. 1937 The Maruiwi Myth. JPS 46, 105-22.
- Wilson, Martin G. 1962 In Search of the Great Fleet. Historical Review, X, 1, memoir no. 2.
- Wright-St Clair, R. E. 1969 Early Accounts of Maori Diet and Health: Part 2. New Zealand Medical Journal, 70, 415-9.

### **Books**

- Bagnall, A. G. 1976 Wairarapa: An Historical Excursion
- Beattie, Herries 1954 Our Southernmost Maoris, Otago Daily Times and Witness Newspapers Co., Dunedin.

- Best, Elsdon [1925] 1973 Tuhoe, The Children of the Mist, A. H. & A. W. Reed, Wellington.  
1986 The Maori Division of Time, Dominion Museum Monograph No. 4, Government Printer, Wellington.
- Bickerman, E. J. [1968] 1969 Chronology of the Ancient World, Cornell University Press, New York.
- Bloch, Marc 1954 The Historians Craft, translated by Peter Putman, Manchester University Press, Manchester.
- Broughton, Ruka 1979 Nga Rauru Kiitahi, Victoria University, Wellington.
- Buck, Sir Peter [1950] 1982 The Coming of the Maori, Maori Purposes Fund Board, Whitcoulls, Wellington.  
[1938] 1958 Vikings of the Sunrise, Whitcombe and Tombs, Christchurch.
- Cheney, C. R. (ed.) 1955 Handbook of Dates for Students of English History, Royal Historical Society, London.  
[1945]
- Craik, J. L. 1830 The New Zealanders. Charles Knight, London.
- Davidson, Janet [1984] 1987 The Prehistory of New Zealand, Longman Paul, Auckland.
- Diffenbach, E. 1842 Travels in New Zealand, Vol. II, John Murray, London.
- Downes, T. W. 1915 Old Whanganui, W. H. Parkinson, Hawera.
- Dunaway, David K., 1984 Oral History, American Association for  
and Baum, Willa (eds.) State and Local History.
- Elvy, W. J. 1950 Kaikoura Coast
- Firth, Raymond 1959 Economics of the New Zealand Maori, Whitcombe & Tombs, Wellington.
- Fitzroy, R. 1839 Surveying Voyages of the Beagle 1826-1836, Vol. II.
- Fornander, A. 1878-85 The Polynesian Race, 3 vols, London.
- Fowler, Leo 1974 Te Mana o Turanga, Penrose Printing & Publishing Co., Auckland,

- |                      |      |   |
|----------------------|------|---|
| Fox, R.              | 1967 | <u>Kinship and Marriage</u> , Penguin Books, Harmondsworth, Middlesex, England.     |
| Fraser, J. T. (ed.)  | 1966 | <u>The Voices of Time</u> , George Braziller, New York.                             |
| Grace, John          | 1959 | <u>Tuwharetoa</u> , A. H. & A. W. Reed, Wellington.                                 |
| Grey, Sir G.         | 1855 | <u>Polynesian Mythology</u> , J. Murray, London.                                    |
| Hawking, Stephen W.  | 1988 | <u>A Brief History of Time</u> , Bantam Press, London.                              |
| Hohepa, P. W. [1964] | 1970 | <u>A Maori Community in Northland</u> , A. H. & A. W. Reed, Wellington.             |
| Houghton, Philip     | 1980 | <u>The First New Zealander's</u> , Hodder & Stoughton, Auckland.                    |
| Kawharu, Ian Hugh    | 1975 | <u>Orakei: A Ngati Whatua Community</u> , Whitcoulls, Christchurch.                 |
| Kawharu, I. H. (ed.) | 1975 | <u>Conflict and Compromise</u> , A. H. & A. W. Reed, Wellington.                    |
| King, Michael (ed.)  | 1975 | <u>Te Ao Hurihuri</u> , Methuen.  |
| Larrain, J.          | 1979 | <u>The Concept of Ideology</u> , Hutchinson, London.                                |
| Lerner, Max          | 1957 | <u>America as a Civilization</u> , Simon & Schuster, New York.                      |
| Lyall, A. C.         | 1979 | <u>Whakatohea of Opotiki</u> ; A. H. & A. W. Reed, Wellington.                      |
| Manuel, Frank        | 1963 | <u>Issac Newton Historian</u> , Harvard University Press, Cambridge, Massachusetts. |
| Marshall, W. B.      | 1836 | <u>A Personal Narrative of Two Visits to New Zealand</u> .                          |
| Metge, J.            | 1964 | <u>The Maoris of New Zealand</u> , Melbourne University Press.                      |
| Michels, Joseph W.   | 1973 | <u>Dating Methods in Archaeology</u> , Seminar Press, New York.                     |
| Mitcalfe, Barry      | 1981 | <u>Maori</u> , Coromandel Press, Coromandel.  |

- Mitchell, J. H. [1944] 1972 Takitimu, A. H. & A. W. Reed, Wellington.
- Ngata, A. T. 1970 Nga Moteatea, Part III, The Polynesian Society Inc., Wellington.
- Ngata, A. T. and TeHurunui, P. 1961 Nga Moteatea, Part II, A. H. and A. W. Reed.
- Nihoniho, Tuta 1913 Narrative of the Fighting on the East Coast, 1865-71, with a Monograph on Bush Fighting, [Annotated by Elsdon Best], Government Printer, Wellington.
- Polack, J. S. 1838 New Zealand, Vol. I, Richard Bentley, London.
- Shortland, E. 1854 Traditions and Superstitions of the New Zealanders, Longman, Brown, Green & Longman, London.
- Simmons, D. R. 1976 The Great New Zealand Myth, Wright & Carman, Trentham.
- Smith, S. P. 1921 Hawaiki: The Original Home of the Maori
- Sorrenson, M. P. K. [1979] 1983 Maori Origins and Migrations, Auckland University Press.  
1986 Na to Hoa Aroha, 3 vols., Auckland University Press.
- Steedman, J. A. W. 1984 Nga Ohaki o Nga Wharau o Tauranga Moana
- Thomson, A. S. [1859] 1974 The Story of New Zealand, Vol II, Capper Press, Christchurch.
- Toulmin, Stephen and Goodfield, June. 1965 The Discovery of Time, Hutchinson, London.
- Tregear, E. 1926 The Maori Race, A. D. Willis, Wanganui.
- Walker, Ranginui 1990 Ka Whawhai Tonu Matou: Struggle Without End, Penguin Books, Auckland.
- Whorf, Benjamin [1956] 1974 Language, Thought, and Reality, John B. Carroll (ed.), Massachusetts Institute of Technology Press, Massachusetts.
- Wilcox, Donald, J. 1987 The Measure of Times Past, University of Chicago Press, Chicago.

