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Towards an Explanation of Protohistoric Social Organisation and Settlement Patterns Amongst the Southern Ngai Tahu

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ABSTRACT

This paper is concerned with the protohistoric social organisation and relevant settlement patterns of the Ngai Tahu people living south of Lake Ellesmere (South Island). Drawing on a detailed case study of the Waitaki and Waiateruati (Temuka) districts and upon evidence from the southern South Island as a whole, it examines two closely related issues disclosed by the historical data. One is the interpretation of *hapu* ascriptions and the significance of widely spread *hapu* names, and the other is the evidence of social stratification and exchange. From these an explanatory hypothesis is derived in which it is argued that the protohistoric Ngai Tahu lived in a tribal chiefdom which was maintained by the reciprocal manipulation of wealth and prestige arising from specialised exploitation of Foveaux Strait muttonbirds.

Keywords: PROTOHISTORIC, NGAI TAHU, SOCIAL ORGANISATION, SETTLEMENT PATTERN, HAPU, STRATIFICATION, EXCHANGE, MUTTONBIRDS.

INTRODUCTION

In the mid-nineteenth century the Ngai Tahu and remnants of their predecessors, the Ngati Mamoe, occupied the South Island as far north as Kaikoura. They had arrived seven to ten generations earlier and, by the beginning of the eighteenth century, were established over the whole of their domain. Despite a piecemeal arrival, endemic feuding, and variable assimilation of the Ngati Mamoe, the various *hapu* of the Ngai Tahu were in fact, if not at first in name (Leach 1978), a closely related and homogeneous people. The distinctive patterns of their subsistence and material culture, especially in the non-horticultural region south of Banks Peninsula, have been revealed by archaeology (Leach and Hamel 1978), ethnology (Simmons 1973) and ethnography (Bathgate 1969a, Leach 1969).

This paper sets out to examine the framework of their social organisation and some aspects of its relationship to subsistence and settlement patterns. It is, perforce, a study of historical rather than archaeological data and it is confined to the protohistorical period — about A.D. 1810 to 1850 — in the southern South Island (south of Lake Ellesmere), whilst drawing particularly upon evidence from a case study of lower Waitaki (north Otago) and Waiateruati (Temuka, south Canterbury), in the decade 1844-1853.

The principal issues raised by the case study, and more generally by the contemporary data, revolve around the meaning of '*hapu*' and the way in which social units described as such are distributed within and amongst protohistoric communities. Discussion of these in turn prompts a wider examination of social organisation and settlement patterns in which evidence of multi-*hapu* settlement and of social stratification within a tribal framework is linked with a specialised exchange system. Along the way the relevance of European influence and band organisation are briefly considered.

CASE STUDY: WAITAKI AND WAIATERUATI

The location of the lower Waitaki valley and the district about Waiateruati are shown in Figure 1, on which the various settlements referred to in the text are also marked.

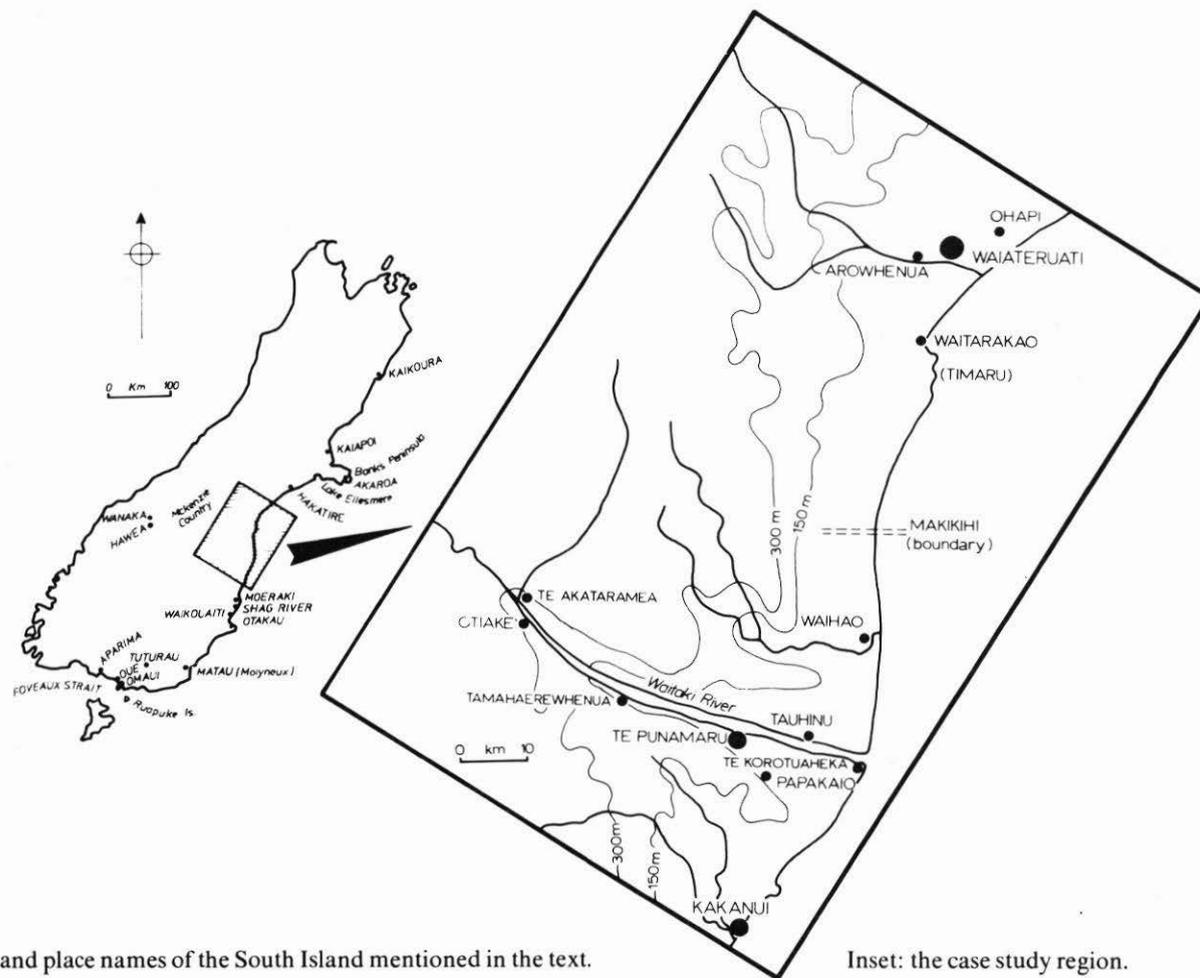


Figure 1: Sites and place names of the South Island mentioned in the text.

Inset: the case study region.

The region lies on the southern margins of the dry eastern plains of the South Island which, at the time of European discovery, were clothed in short grassland dotted with patches of shrubland and cabbage trees (*Cordyline australis*). For this district the protohistoric period was particularly brief. There was a whaling station at Timaru for a few years prior to the financial collapse of the Weller Brothers in 1840 (Andersen 1916), but the first records are those of Shortland (1844) and Selwyn (n.d.) from the summer of 1844. Only ten years later the land they walked through as the first European visitors had been alienated to the Crown and was being split up into runs for European pastoralists.

SUBSISTENCE AND SEASONALITY

By the 1840s European food resources had been known for some time in north Otago and south Canterbury, having been disseminated most recently from whaling stations at Waikouaiti, Moeraki (Onekakara) and Timaru. Apart from some pigs at Waiateruati (Shortland 1851:229), however, the only significant European food seems to have been potatoes.

Potatoes were frequently planted at some distance from the settlements, for example at Papakaio and at Arowhenua Wood (Shortland 1851:196,230), and were sometimes tended to only in the course of other economic activities, as was the case at Waianakarua Bluff (Shortland 1851:193) and possibly in the Waitaki valley. Mantell, who was laying out reserves there in 1848, advised Rakitawine and Te Wharekorari (see App. I) to "... gradually concentrate their gardens round their kaika [=kainga]..." (MacKay 1873:I:217) and abandon their outlying cultivations. Indications such as these need not mean, of course, that European crops were unimportant, although some comments of Mantell (MacKay 1873:I:231) about the so-called 'laziness' of the lower Waitaki people in this respect suggest so, but they probably do mean that traditional economic activities were not greatly disrupted to accommodate the cultivation of them (cf. Leach, 1969:78).

Amongst the traditional sources of subsistence, the lower Waitaki in summer provided *ti* (*Cordyline australis*) along the base of the hills and in the Kakaunui tributaries (MacDonald 1940), fernroot and raupo along the floodplain, eels in the rivers, ducks in the estuaries, kahawai in the river mouths, and *tutu* (*Coriaria* spp.) berries along the trails (Shortland 1851:195-219; Selwyn n.d.; Moore 1978). Wekas could be obtained inland in the early winter and potatoes were harvested in the autumn. Winter as a whole and spring, until the availability of *ti* at about the end of October (Taylor 1946), were difficult seasons and the Waitaki people abandoned some or all of their settlements during this period.

Creed, in October 1845, found a few people at Tauhinu but none at Punaamaru (Creed n.d.); Mantell, in October 1848, found Tauhinu and Punaamaru deserted and only rotten fish and a few potatoes in the storehouses (MacKay 1873:I:217), and Valpy, in May 1852, crossed the Waitaki at a 'ruined' Maori settlement which was probably Tauhina (Taylor 1950:59). This situation contrasts markedly with the summertime experiences of Shortland (1844) and Selwyn (n.d.) a few days later, as well as Mantell in 1852-53 (MacKay 1873:I:216-219), all of whom found the settlement occupied or their usual occupants in the vicinity.

At Waiateruati there were similar subsistence pursuits: potato gardening, exploitation of *ti*, eeling, fishing in the estuaries, *tutu* berry collection and duck driving were all recorded as summertime activities by Shortland (1851) and Selwyn (n.d.). In one important respect, however, Waiateruati differed strongly from the Waitaki area — it was a permanently occupied, nucleated settlement. The censuses indicate that numbers may have declined a little in the winter-spring, but not by much. Creed (n.d.) gave the population at about 80 in October 1845, compared with 113 by Selwyn and 130 by Shortland in the preceding summer.¹ Waiateruati was evidently able to mobilise

an effective exploitation of interior resources in the winter since there are records of three tons of preserved wekas being taken out of the MacKenzie country in 1869 (Andersen 1916:37) and again in 1899 (Taylor 1950) – though possibly by horse and dray – and it may have been on such preserved and stored resources that settlement permanence was founded.

SETTLEMENT PATTERNS

The settlement patterns appear to have been quite straightforward. In the lower Waitaki there were three or four permanent hamlets: Tauhinu, Te Punaamaru, Te Akatarama and possibly Tamahaerewhenua as well as two fishing camps (Waihao and Te Korotuaheka) and several occasionally used camps such as Otiake and Papakaio (Fig 1). The best described hamlet is Tauhinu which Mantell says consisted of two huts, a *wata*, (raised storage structure), a grave and several garden plots (Stevenson 1947:127). Papakaio consisted of a single hut and garden (Shortland 1851:196), although it is probably the settlement referred to by Mantell (Stevenson 1947:128) as consisting of several fishing huts and a *wata*. Punaamaru and Akatarama are both referred to as 'kaika' but seem to have been little larger than Tauhinu, while the Waihao camp consisted only of a single 'shed' (Shortland 1851:217).

These sites were occupied during the summer (see above), but where did the people go in the winter and spring? There is some evidence to suggest that Kakaunui and especially Waikouaiti were regarded as winter bases. In October of 1848 Mantell found the Waitaki people at Kakaunui, where they were waiting for their chief (Huruhuru, see App.1), who was ill with influenza at Waikouaiti. Huruhuru did not arrive to accept Mantell's payment for his Waitaki lands but sent, as his representative, Horomona Pohio, a leading figure in the Waikouaiti community. Pohio, and others from Waikouaiti and Kakaunui, attempted to get a further reserve at Waihao (Huruhuru's eeling camp), and eventually accepted payment on behalf of Huruhuru and the Tauhinu head man, Te Kapa. It may be noticed that neither Moeraki nor Waiateruati people were involved although both settlements are closer to Waitaki than Waikouaiti. A second piece of evidence is that Tumutu, betrothed to Wharekorari's son (App.1), was the daughter of Te Kihī, a Waikouaiti man. Thirdly, Ihaia, and possibly Pounuku and Te Hira – Waitaki people recorded in 1844 or 1853 – seem to be referred to in the Waikouaiti census for 1848; no Waitaki people can be found, as far as I can tell, on the rolls of other settlements (A.J.H.R. 1886).

Waiateruati was a small palisaded village, as it had been from at least the time of Te Rauparaha's raids on Banks Peninsula according to Taylor (1950:163). Its most striking feature to Selwyn were its lofty *watas*, "... at a distance looking like the ruins of ancient temples" (Selwyn n.d.). Within a short distance of the main settlement were fishing camps at Waitarakao and Ohapi, and possibly some dwellings at Arowhenua, which later became the main settlement (Andersen 1916). The Waiateruati people, although settled throughout the year, constituted a less stable population than that of Waitaki in the longer term. Of the 139 Waiateruati people recorded by Shortland in 1844, I can identify, with any confidence, only 77 on the 1853 roll of Mantell (A.J.H.R. 1886 and see App.1). These names, however, do include 17 of the original 22 heads of families. Where the others went, or newcomers came from, is very difficult to tell, but people from Waiateruati, as Shortland (1844) recorded, had close relatives at Stewart Island, Otakou, Waikouaiti, Moeraki and Akaroa, and Te Rehe, their chief, had land claims at Akaroa (Shortland 1851:302).² Waiateruati belongs, it would seem, with Waikouaiti and other permanently occupied villages as a higher order settlement than those of the Waitaki.

It must also be mentioned that Waiateruati lay beyond a territorial border. Its people laid claim to the east coast between Hakatire (mouth of Ashburton River) and the Makikihi river (Mantell in Mackay 1873:I:216) and probably the MacKenzie country

as well (Beattie, 1957). The country south of Makikihi, the lower and mid Waitaki valley, Wanaka and Hawea and the coast as far south as Shag Point (Taylor 1950:103) were the lands used, if not owned, by the Waitaki people, and there was probably a further important boundary somewhere between Waikouaiti and Otakou.

How long the east coast settlements had been in existence is very difficult to tell. Moeraki only became a significant settlement, at least in protohistoric times, with the settlement there of Kaiapoi refugees after the establishment of the whaling station (MacDonald 1940), but the other settlements are probably much older. Waiateruati is referred to in one of the feuds of the early 19th century (Andersen 1916) and may be the place in which Raureka first demonstrated the use of greenstone to the Ngai Tahu (Taylor, 1950:164). The Waitaki people, if not their actual settlements, may also claim some antiquity since there was a chief Huruhuru living there about A.D. 1700 (Stevenson 1947:53).

EVIDENCE OF SOCIAL ORGANISATION

In January of 1844 Shortland (1844, 1851) and Selwyn (n.d.) visited Tauhinu, Punaamaru and Waiateruati. From Huruhuru, Shortland collected the names of everyone in the Waitaki hamlets but not their *hapu* affiliations. At Waiateruati he collected both name and *hapu* of nearly everyone present. Some difficulties were encountered because the people were intensely interested in the sale of land at Akaroa, in which they had a claim, and they evinced "... a great disinclination ... to mention the names of persons who did not belong to families, whose right to part of the soil about the Peninsula was acknowledged by them" (Shortland 1851:230). Such people included those of purely Ngati Mamoe descent and a few slaves. Although he managed to get most of their names this problem, coupled with a few ambiguities in his field notes and errors in transcription (especially in Shortland n.d.), no doubt accounts for certain variations in the ascription of sex, in the spelling of names and in the calculations of numbers within the Shortland data. They are quite minor errors, however, and I have chosen to use the data as they are recorded in the original field notebook (Shortland 1844).

In October and November of 1848, Walter Mantell visited Punaamaru and Tauhinu where he recorded the names and *hapu* of all the lower Waitaki people (Stevenson 1947:127-131; A.J.H.R. 1886), and in December 1852 he visited Akataramea and brought the data from there up to date (MacKay, 1873:I:231-232). The next month he was at Waiateruati where he recorded names but not *hapu* (A.J.H.R. 1886).

Cross-correlating these data, it is therefore possible to obtain a reasonably complete census of the names, sex, relationship and *hapu* of most people in the Waitaki and Waiateruati settlements in the decade 1844-1853 and to observe the changes which took place during this period. These data are shown in Appendix 1.

SOCIO-ECONOMIC PATTERNS

Among the various conclusions which might be drawn from the information above and in Appendix 1, the following appear especially relevant to an understanding of protohistoric socio-economic patterns. The two settlement areas were similar in these respects:

(1) The resources and seasonality of local, indigenous, subsistence pursuits were virtually identical at Waitaki and Waiateruati and so too was the dispersed distribution of potato cultivation.

(2) Over the decade in question the two populations retained a stable membership, especially in terms of family head.

(3) The average number of people per family was virtually identical at Waitaki (6.3) and Waiateruati (5.9).

They were different in these respects:

(4) Waiateruati was occupied all year round by a comparatively large group which had wide connections throughout the southern South Island. Waitaki was occupied seasonally by a small dispersed group whose external connections were primarily with Waikouaiti.

(5) *Hapu* affiliation has been given in two distinct ways. At Waitaki, Huruhuru gave children the *hapu* name of their father, two wives the *hapu* of their husbands and three wives different *hapu* names (Ngatitu, Ngatimu, Ngatikopihi) which, along with Ngatikuware, are found in the censuses only at Waitaki. At Waiateruati, however, each of the families aligned itself entirely with one of six *hapu*, five of which are found elsewhere in the censuses.

(6) Average *hapu* membership was 22 at Waiateruati but only 2.3 at Waitaki (counting only people whose *hapu* was recorded).

TOWARDS EXPLANATION

From the case study it is apparent that Waitaki and Waiateruati can be seen as representing different aspects of the same regional socio-economic pattern, Waitaki as the seasonal dispersed dimension and Waiateruati as the permanent nucleated one. The reasons why Waiateruati and its subsidiary camps should differ from the Waitaki hamlets and their probable main base at Waikouaiti are matters of local significance which will not be considered any further here. Instead I want to look at, and attempt to explain, one of the wider matters raised by the case study: the evidence of social organisation and associated settlement patterns. The general question at issue here is "What social structure or framework integrates the evidence of the case study, and more widely, that of the contemporary southern South Island?" Is it:

THE TRIBE THAT BINDS? A FIRST LOOK.

Traditional tribal lifeways, as these have been described by Best (1924), Hiroa (1950) and Firth (1972) outline a socio-economic structure which was centred upon the *hapu* as the strongest territorial unit. Firth (1972:378) says "... the tribal territory was ... made up of the lands of the various *hapu*, each jealously and exclusively maintained ...". Emphasis upon the social importance and territorial coherence of the *hapu* was also common amongst the opinions of such 19th century authorities as Sir George Clarke, Edward Shortland, Judge Maning and Rev. James Stack (A.J.H.R. 1890), and, despite occasional views to the contrary (Webster 1975:122), it remains in the latest reference works (Metge 1976:5). This is not to say that *hapu* land was held in common. The *hapu* had exclusive rights of alienation, but *whanau*, nuclear families and individuals had clear rights of ownership, use and bequeathal to various portions of it (Metge 1976:12). The important points are, however, that the *hapu* was a coherent social unit and that it corresponded to a discrete and defended territory.

The *hapu* could be correlated, in the normative model, with village settlements — each *hapu* living more or less exclusively in one, or perhaps several, *kainga*.³ Within the village the *whanau* occupied separate households or groups of them depending upon numbers. *Whanau* were commonly some tens of people strong, *hapu* some hundreds (Firth 1972). From the village base most economic activities were carried out by family or task-specific groups and both nuclear family and *whanau* acted as distinct economic units in leaving the village for more extended periods to occupy fishing and fowling camps (Firth 1972:123,224).

Various aspects of this model have been questioned by archaeologists, especially by Groube (1965), who contended that *kainga*, the settlement pattern equivalent of the *hapu*, are all but non-existent in the earliest historical records. Groube opts, instead, for a more dispersed and mobile settlement pattern in which it is implied that *hapu* may congregate at times of harvest and refuge in *paa*, but are otherwise split into *whanau* moving from hamlet to hamlet as economic tasks required. Kennedy (1969)

also noted the evidence of dispersal and mobility, but argued that villages were more common in the Bay of Islands than Groube had thought. Whichever interpretation is preferred, the basic assumptions of *hapu* and *whanau* coherence and of territorial integrity of *hapu* have remained. Figure 2a is an idealised sketch of this traditional model.

It is in terms of territorial integrity that the case study evidence appears so immediately at odds. If the *hapu* ascriptions are simply accepted as they stand, we have in Waiateruati a village being occupied for at least a decade by families belonging to six different *hapu* which were, in turn, associated with two apparent tribes. At Waitaki

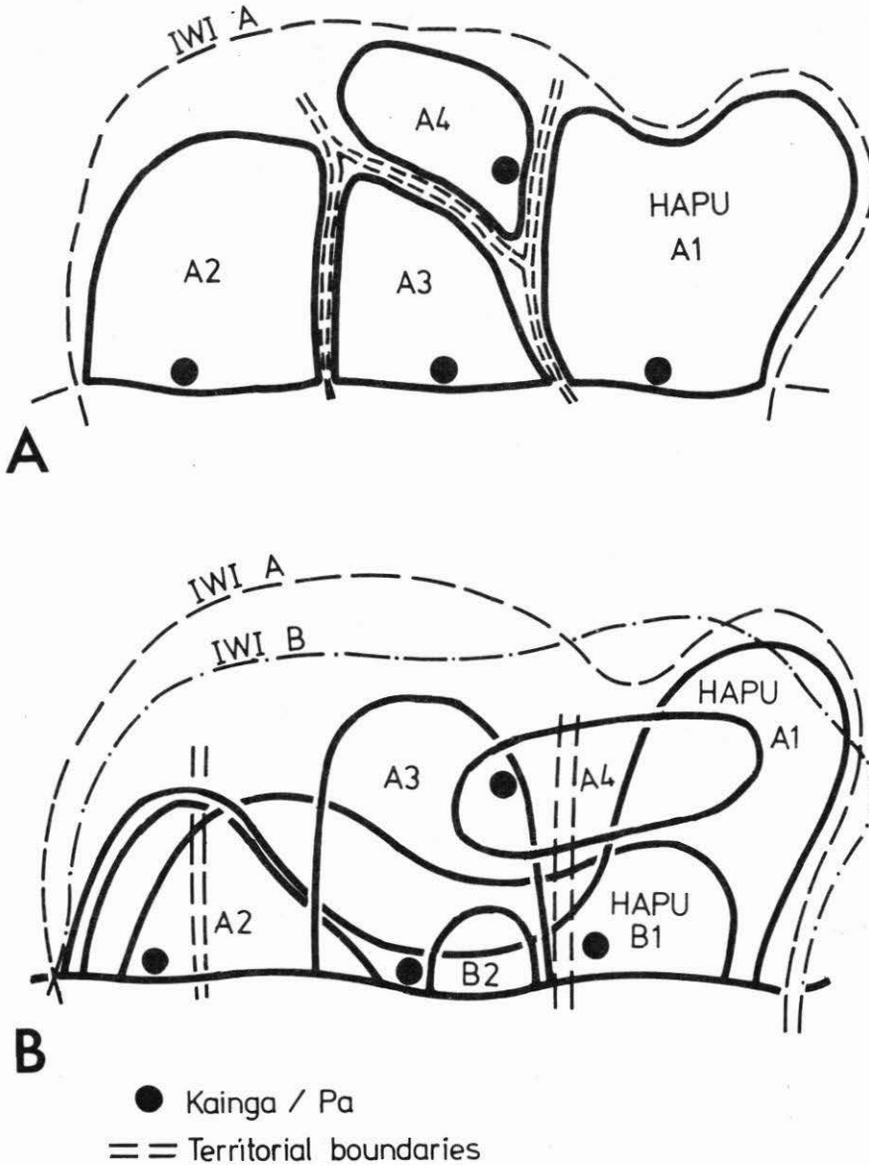


Figure 2: Schematic representation of the territorial distribution of social units in: A. The traditional model, B. The protohistoric southern South Island.

the situation is even more anomalous. Leaving aside the *hapu* ascriptions of wives, siblings and affines, there remain seven different *hapu* names of family heads for a total population of only 40 and, what is more, three of the hamlets were each occupied by two families of different *hapu*. Clearly there is no correspondence to the ideal of a *hapu* having territorial integrity or of a *whanau* occupying a single hamlet. Equally, since two of the *hapu* (Ngatihuirapa and Ngatihinekato) were found in each settlement and across a territorial boundary, the social coherence of *hapu* is called into question as well.

These findings raise the issue of what significance may be attached to the appellation '*hapu*' in the historical evidence. As it is a matter which undoubtedly lies close to the crux of our problem it is worth examining at some length. Simple carelessness or misunderstanding in the ascription of *hapu* names by European recorders can probably be disregarded. Shortland (1851:231), at least, makes clear that he followed Maori direction in this and, since accuracy in determining land title was essential, the other census takers were probably equally as conscientious. Yet, by writing down on each occasion, only a single *hapu* name for each person, their records merely inform obliquely on the current state of two continuous processes of variation in *hapu* ascription. The first of these, arising from the nascence and decay of *hapu*, is that names were far from immutable. For instance, Thomson (1934) mentions that Ngati Kuri was the old name for the *hapu* Ngai-te-ruahikihiki and later that a branch in Southland was known as Ngati Pahi. In an analogous manner, as Tuhawaiki made apparent to Shortland (1851:99-102), the Ngai Tahu arrived in the South Island as but one of a number of Ngati Kahungunu *hapu* but gradually assumed predominance and the status of a tribe. Had the Europeans not arrived when they did the Ngatihuirapa, who seem to have been picking their way through the middle ground of political ascendancy in a similar fashion, may have followed the same course.

The second process, and one potentially of much more serious import within the short time span of the present context, is customary flexibility in *hapu* affiliation. The principal circumstance through which affiliation to more than one *hapu* is recorded — although only one at any particular time — occurs when ownership or access to major resources was at issue. Thus, in the sale of the Ngai Tahu block in 1848, Karetai gave his *hapu* as Kati Hawea, rather than the Ngatitepaihi of the 1853 census, and several other signatories gave Ngati Mamoe *hapu* rather than their usual Ngai Tahu names (MacKay 1873:I:211). In 1864 the Otakou people attempted to argue their case for access to the southern muttonbird islands on the basis of Ngati Mamoe ancestry but were eventually forced to adopt Ngai Tahu bases for their claims (MacKay 1873:II:60). In 1874 the 180 south Canterbury people, mainly descendants of the Waiateruati community, gave their affiliation as totally Ngatihuirapa but in 1896, when the population had grown to 215, as 30% Ngati Mamoe (Andersen 1916:36). These three examples seem to reflect a desire to legitimise ownership or access by appeal to ancestry of greater antiquity than that usually necessary in the circumstances of the immediate family.

I suggest that the differences between the Waitaki and Waiateruati data may be explicable simply in these same terms. Asked "What is your *hapu*?" at the summer camps of the Waitaki, the inhabitants tended to stress family names, names which probably reflected family or individual rights to the surrounding land and resources. Asked the same question in a major winter camp where the whole community was together or in a permanent settlement, people aligned themselves with a common ancestral name which expressed community over family interests.

This argument would account for the fact that Waiateruati has a high membership per *hapu* compared with Waitaki but the same average family size. In other words, the size of the family does not change between settlements or seasons, only the way in which it is built into the local social structure. The different degrees of integration

expressed to the European census takers may thus reflect Maoris perceiving the question "What is your *hapu*?" as something like, "By what right are you in this place?"

The same argument may explain why there were so many *hapu* recorded in the protohistoric southern South Island — Mantell (1848) collected 96 *hapu* of the southern Ngai Tahu and there are others in the 1848 censuses (A.J.H.R. 1886) — and why there was such an immense variation in *hapu* size. The census data indicate that most *hapu* had 10-30 members, many only two to five, and barely a few more than 60. Ngatihuirapa with almost 200 stood head and shoulders above all others. Very few of the small *hapu* have recognisable ancestral names (Ngati Moki is an exception), and many are probably just family names or even improvisations arranged at the time of the census; names like Ngatihapuiti (Mantell 1848) look decidedly suspicious. The major *hapu* do have ancestral names, mainly of warriors who established the original Ngai Tahu beach-heads in the South Island: Ngatiruahikihiki, Ngatituhuriri, and Ngatitukurakautahi (Taylor 1946, Shortland 1851) are examples.

But if the proliferation of names in the records arises from the processes described, and in view of ambilineal reckoning of descent these would seem reasonable, other aspects of the data continue to remain at variance with the traditional model. This is particularly the case with *hapu* distribution. Not only was the number of people per *hapu* unusually low in general but so also was the average membership of *hapu* per settlement. With the exception of Waikouaiti (22) and Waiaeruati (15) it averages four with a range of two to seven. Clearly *hapu* were finely dispersed over the whole region; it was not just a matter of a few members of a particular *hapu* turning up in the censuses outside the main settlement of that group, as might be surmised only on the basis of the case study data, but rather of some *hapu* comprising a significant proportion of the membership in settlements throughout the region. The best example is provided by the Ngatihuirapa who formed the dominant group at Waiaeruati, Kakaunui, Waikouaiti, Matau, Tuturau, Omaui, Oue and Aparima in the 1848 and 1853 rolls (A.J.H.R. 1886). Figure 2b shows, in idealised form, the relationship of *hapu*, other social units, and territory as revealed by the protohistoric data.

Even if it is accepted, therefore, that the term '*hapu*' may have had a variety of meanings not subsumed by the translation 'sub-tribe', so that social organisation, as recorded by the census ascriptions of *hapu* can be made to fit within the framework of the traditional model, this flexibility cannot extend to the evidence of protohistoric settlement patterns. But the very fact that these *are* protohistoric prompts the question of whether the anomalies can be laid at the door of the Europeans.

THE PAKEHA WHO DIVIDES?

It cannot be denied that the traditional fabric of Maori society was comprehensively rent by the settlement of Europeans in New Zealand, but it is beyond the scope of this paper to consider the matter in the detail which it demands. Rather, in confining attention to the settlement patterns in the area of the case study, the following points are worth noting. Evidence outlined above suggests that the European potato had not exerted an over-riding influence upon traditional subsistence and settlement patterns. Similarly the small whaling station at Timaru had been abandoned for four years by 1844 and there was no European settlement within 50 km of Waitaki or 80 km of Waiaeruati. Of course Waikouaiti, a probable winter base of the Waitaki people, was also a European whaling station, and it was no doubt from there that the Waitaki chief acquired most of his "... fragmentary prayer-books of all persuasions, Maori letters, punamu (sic) and pieces of old brass and iron ..." which turned up in 1848 while his hut was being searched by Taiaroa (Stevenson 1947:128). But such articles, unlike whaleboats (Bathgate 1969b), may have had little observable effect upon settlement patterns. Even less it seems did the attractions of Christianity; throughout the

protohistoric period there remained an ebullient opposition to missionaries and their dogma by followers of traditional ways or those of the "whalefishing order" (Selwyn n.d.).

The degree to which musket warfare had influenced settlement patterns appears more straightforward than was probably the case. The central event was the sacking of Kaiapoi and Banks Peninsula settlements by Te Rauparaha in 1831 and the subsequent flight of survivors to the south. A secondary event, of significance to the Wai-taki people, was Te Puoho's raid which destroyed the Hawea settlement in 1836. It is very difficult, however, to find just how many refugees went south or to where. Certainly Moeraki was a refugee settlement, and its *hapu* names and situation in the north Otago settlement patterns mark it out quite clearly as anomalous. It seems to have had no extensive hinterland and in 1848 it contained no Ngatihuirapa compared with 59% at Kakaunui and 66% at Waikouaiti, the settlements lying immediately north and south of it (A.J.H.R. 1886). It must also be considered whether Te Rauparaha represented anything significantly greater, to take a meteorological analogy, than the 50 year storm. After all, not a generation before he came south, the Ngai Tahu were convulsed in the bitter, protracted and bloody Kai-Huanga ("Eat Relations") feud (Andersen 1916), and their traditional accounts of the settlement of the South Island are little short of a catalogue of violent reciprocity.

Thus, while it would be unwise to discount European influence, and indeed several aspects of it will be mentioned below, it does not seem possible to attribute the main features of protohistoric settlement patterns to it. In particular, there is nothing about European impact to suggest that the multi-*hapu* settlements of the case study area, which are commonly found elsewhere in Otago and Southland, were a response to it. Could these have reflected then, some style of socio-economic organisation quite outside the traditional Maori experience?

THE BAND THAT TIES?

Two of the more striking aspects of traditional lifeways in southern New Zealand were the very low population density and the non-horticultural economy. Both are well-known, but the degree to which the latter in particular is anomalous is not often appreciated. Calculations of early historic population densities in the southwest Pacific (Anderson n.d.), show that the northern New Zealand densities of around one person per km² (using a total population of 100,000 (cf. Pool 1977) and the distribution scheme of Lewthwaite (1950:51)), fall at the lower extreme of the Oceanic range. Southern New Zealand populations at A.D. 1780 of 2000 (Rutherford 1940) or 3000 (using Cumberland's (1950) proportion) provide densities of 46 km² to 65 km² per person, and these can only be matched by data from arid Australia (Maddock 1972).⁴

Anywhere in the world, so far as I can tell, population densities of this sparsity coupled with hunting and gathering are matched by a band type of social organisation. Typical of bands as well are high mobility, the seasonal fusion and fission of a local kin group, occasional aggregation at major resource locations (Damas 1969), bilateral descent and, to a lesser extent, patrilocal residence (Ember 1978).

Although these features can be found in northern New Zealand they are most extensively represented in the south, and can be readily identified in the case study data. If they had comprised the principal characteristics of southern traditional societies they would have made out a strong *prima facie* case for band organisation.

In fact they do not. The multi-*hapu* settlement alone provides a sufficient reason to reject the proposition because it has the consequence that close kin relationships must have extended well beyond the boundaries of local territories (Figure 2b). Indeed the multi-*hapu* settlement, to the degree that it is not merely an historiographical artefact (see above), implies the wider distribution of close kin across more imposing social boundaries than does the traditional *hapu* model. Such a settlement pattern is beyond

the range of band organisations. More than that, there is abundant evidence of the tribal nature of protohistoric society in the south, and it is of a kind which transcends both band organisation and the questions of kin group membership raised by the concept of '*hapu*'. This evidence concerns social stratification and exchange, and it is in the relationship between them that a deeper understanding of southern social organisation and settlement patterns has to be sought.

THE TRIBE THAT BINDS? A SECOND LOOK

Until his untimely death at sea in December 1844, the chief Tuhawaiki was, for Europeans, the 'king' of the Ngai Tahu (Hall Jones 1943). King he was not, but his rank as a paramount chief was beyond dispute. Tuhawaiki, born at Molyneux of a Ngatihuirapa father and claiming both Ngai Tahu and Ngati Mamoe ancestry (the latter through his paternal grandmother), resided at Ruapuke island but was almost constantly on the move. In the last year of his life for instance, he was seen at Otakou negotiating land sales, soon after at Aparima purchasing a schooner (Shortland 1851), next at Banks Peninsula buying a whaleboat and negotiating land sales (Barnicoat n.d.), back at Otakou to sell land and open a brandy still (Wohlers 1844: 2nd Rpt.), and finally drowned off Timaru on his way north again. In these movements he was accompanied by a small coterie of important Ngai Tahu chiefs who might be regarded as district representatives: Karetai and Taiaroa of Otakou and Banks Peninsula were the main ones, but Topi Patuki of Ruapuke, his eventual successor, the eponymous Kaikoura, Paitu of Stewart Island and Aparima, and Korako of Waikouaiti were others.

These men were deemed sufficiently important to sign the major land sales documents (MacKay 1873), and they seem to have occupied a rank between Tuhawaiki and the lesser, but well-connected, regional chieftains such as Te Rehe of Waiaeruati. It can be speculated that the stratification continued down through local chiefs such as Huruhuru of the Waitaki to hamlet headmen such as Te Kapa and Wharekorari (App. 1). Just how far apart the ranks were is hard to tell but Barnicoat (n.d.) records that when Taiaroa valued his share of the Otakou land claim at £1200, Tuhawaiki promptly set his at £1,000,000. Whatever the precise nature of the stratification, there was clearly a social system which would come within the ambit of Earle's (1978) generalised Polynesian chieftom.

But to have a stratified tribal society founded upon a hunting-fishing-gathering economic base is quite exceptional, and the only known examples occur in conditions where food resources are extraordinarily abundant (Sahlins 1968:39). This was not the case generally in the southern South Island, where food resources were comparatively sparse at some seasons and could never be called abundant on the scale of the Pacific salmon runs and other marine resources of the Northwest Coast, another region of stratified tribal societies without agriculture (Drucker 1965). Yet if the explanation of a tribal society in the southern South Island does not lie substantially in European influence (including potato cultivation), and if southern tribalism is not merely a vestige of historical northern origins, both propositions I would reject without further discussion here, then it must be accounted for in some way by economic favourability.

This need not consist merely of gross resource abundance. Rather it is very likely to arise out of clever resource manipulation through reciprocity in exchange, the reciprocity in turn exerting a powerful influence upon the social organisation. As Sahlins (1974:186) has said, '... the material flow underwrites or initiates social relations'. It is not, of course, simply the movement of goods which has the social consequences but rather the obligations which accompany them. The flow of both, up and down the social hierarchy, mediates between self interest and social order — the people higher up doing good by doing well and those below doing well by doing good.

In the southern South Island, exchange systems of the protohistoric period involved

much the same products — mainly preserved fish, birds and roots — and similar mechanisms, such as the *hakari* or *kaihaukai* (Firth 1972:404, Beattie 1939), as those of elsewhere in New Zealand. Much of this exchange seems to have been directed at little more than the evening out of local variability in resources and the local reinforcement of social order which went with that (see, for instance, Beattie 1939:140 on the Rapaki-Kaiapoi system). But the resource or resources of sufficient value to maintain a tribal society in the face of a non-agricultural economy and low population density, as well as to service the kind of reciprocity system which could support the mobile Tuhawaiki and his high-born companions, would seem to demand something beyond the likes of fish and fernroots.

In the southern South Island there was, in fact, a resource of such value, and it was sufficiently localised in time and space to favour a complex social network for its profitable manipulation. The resource was muttonbirds.

TITI TRIBALISM

The muttonbird or *titi* (*Puffinus griseus*) nests by the million on the offshore islets of Stewart Island and the young were traditionally captured there, as they are today, in April and May (Wilson 1979). Their value as a food resource lay in their fat-rich flesh, their abundance, and the reliability of their seasonal appearance. Just as important, and more so from the point of view of exchange, was the fact that very effective preservation and storage techniques were traditionally available (Wilson 1979).

Just how valuable muttonbirds were in the 1840s we cannot precisely know, but there are some data available to assist in obtaining an approximate estimate. During this century, about 250,000 young birds have been taken in good seasons (Richdale n.d., Oliver 1955) by methods which remain almost wholly traditional. A catch of that size would have provided 125 birds per year for every man, woman and child (a total of about 2000 according to Shortland's census) of the Ngai Tahu tribe in the 1840s, probably enough food to support them through the difficult period of late winter and early spring. In terms of European wealth, Barnicoat (n.d.) in 1844 said that muttonbirds fetched £2.00 per hundred on the 'coast' — presumably of the South Island — and much more in the North Island. At this rate 250,000 muttonbirds would realise at least £5000 or more than the whole of Otago and Canterbury were sold for in the same decade (MacKay 1873). Alternatively, and perhaps more realistically, the value can be estimated in pigs and whaleboats. The former fetched about 15 shillings each in the 1840s (averaging prices in Shortland 1851:19 and McLintock 1949:95) and a customised secondhand whaleboat perhaps £40.00 (Shortland 1851:19). A good muttonbird catch would thus represent nearly 7000 pigs or 125 whaleboats. It is important to point out that since muttonbirds were almost exclusively consumed by Maoris, these 'prices' are a fair indication of the indigenous value of the resource. They demonstrate that despite the probability of strong fluctuations in the catch, a quite phenomenal amount of food or potential wealth and prestige could be injected into the Ngai Tahu community every winter.

Of course, it was none of these things unless the resource was effectively exploited and manipulated. As to exploitation, there is no doubt that muttonbirds were caught in considerable quantity in the protohistoric period. For instance, Kent in June 1823 (Howard 1940:345) and Barnicoat (n.d.) in May 1844 both describe numerous bundles of muttonbirds stacked outside houses on Ruapuke Island awaiting storage. Equally certainly large numbers of birds were taken north. Shortland's journey to Akaroa coincided with a whaleboat expedition taking muttonbirds from Waiateruati. This expedition, under the chief Koroko, involved a number of boats and ended with a feast at Waiateruati, after which Hakaroa, of the settlement bearing his name, took a consignment of the birds on to his village. Muttonbird feasting seems to have been common at Waikouaiti, even in the summer, and Shortland (1851:226) attributed the prevalence

of eczema amongst his guides to it. Muttonbirds were probably also the main item in the feast at Waikouaiti which Mantell (MacKay 1873:1:217) says was the cause of Tauhinu being deserted in October, 1848. Preserved birds in general were an important article carried by the porters in an extensive east coast land transport system described by Stack (Travers, 1872:186) and feature in several of the tales of treachery and retribution during the Kai Huanga feud (e.g. Andersen 1916:33). Kent's (Howard 1940) record of people from Kaikoura and Otakou at Ruapuke during the 1823 muttonbirding season demonstrates that long-distance canoe transport was also traditionally involved.

Canoe travel around Foveaux Strait was usually risky and not infrequently disastrous (Howard 1940:347), yet early European observations of frequent canoe voyaging and of flotillas of canoes (Bathgate 1969b:354) — as numerous as those of whaleboats in later times — belie Wohlers' (1895:192) belief that the advent of the whaleboat significantly increased muttonbird exploitation. Likewise, the argument that the population of Ruapuke had increased considerably between European contact and the 1840s (Coutts 1969:511) is contradicted by Wohlers' (1844:3rd Rpt.) record of old-time European residents in the Strait telling him that the population of Ruapuke formerly stood at no less than 1000. Much of this evidence lacks a comparative basis, but a conservative view would suggest that there is insufficient reason to think that muttonbirding in the protohistoric period differed greatly from that of traditional times.

Although it is quite clear that many muttonbirds were taken and distributed among the Ngai Tahu and further north (Shortland 1851:244), it is not so apparent under what system this was accomplished. Most Ngai Tahu communities had, and exercised, rights to take the birds, so that Ruapuke, the collection centre for the birders, was compelled to play host to visitors from throughout the Ngai Tahu domain and from further afield (Bathgate 1969a:263) during the winter. This may not have been as great an imposition as it appears because the 1853 census reveals that Ruapuke was the most heterogeneous of the larger Ngai Tahu communities — an average of 2.4 people per *hapu* name — which suggests that most visitors were able to count a close relative in residence. Even so, the idea of outsiders exercising birding rights has never been regarded with enthusiasm in the south. The discontents of today (Wilson 1979) reflect those of 1864 (see above), and extend back at least until 1823. In that year Kent (Howard 1940) found the Ruapuke people at loggerheads with those from Kaikoura and Otakou in their midst. They regarded them as intruders upon their rights and Kent says that each of the groups spent most of its time watching the others for signs of hostility. Despite the uneasy relations, however, some direct harvesting by outsiders was probably always necessary in order to obtain sufficient birders to cover all the islands during the season and desirable anyway, from the outsiders' point of view, in order to maintain traditional rights of access. Even so, the least contentious way for most Ngai Tahu to obtain muttonbirds, and certainly the safest in early times, would have been by linkage to an exchange system originating upon Ruapuke Island. The operation of this system for the distribution of such a valuable commodity would, it is suggested, have provided the necessary background for the development, or the maintenance, of a tribal chiefdom.

Turning back to the case study, it is now possible to briefly consider the fragmentary data about exchange and stratification in these terms. The permanence of Waiateruati and its numerous *wata* may reflect a reliance upon stored food, including the muttonbirds which Shortland saw arriving. Te Rehe was evidently obliged to feast both the giver (Koroko) and the secondary receiver (Hakaroa) in an exchange to which, judging by Shortland's (1851:234) comment, Waiateruati probably contributed *kauru* (a food prepared from *ti* root). The impermanence of the Waitaki settlements, likewise, may owe less to any local resource scarcity, in comparison with Waiateruati, than to the fact that Huruhuru stood further down the social strata and was obliged, both economically and socially, to regularly join his kin in muttonbird feasting at Waikouaiti.

Unequivocal evidence linking the high chiefs of the Ngai Tahu with an exchange system founded on muttonbirds is, however, wanting. Yet there is intriguing circumstantial evidence in favour of the hypothesis. Ruapuke Island, the centre of the muttonbirding activities during the protohistoric period, was according to Wohlers (1895:101) "... the residence of the distinguished people of the race and the most exalted chieftains, and the centre and gathering place of the Maoris who were scattered all over the country". In particular, it was the residence of Tuhawaiki and also of Topi Patuki, his successor. Tuhawaiki occasionally signed himself as 'Topi' as well and this name, in various guises, may have been an honourific of principal Ruapuke chiefs (cf. Kent's remark in Howard 1940:346). These people, as Wohlers was frequently to complain, regarded toil with a disdain appropriate to their rank. Instead, "Gifts were made to the high chiefs by all the clans of the tribe: what the chiefs required no one dared refuse them" (Wohlers 1895:122). Perhaps in consequence, Ruapuke was almost without cultivation when Wohlers landed there in 1844.

What the chiefs gave in return for gifts is seldom recorded. They may have given muttonbirds directly, especially to people from the north (as recorded by Beattie 1954:31; see also Bathgate 1969a), and they probably regulated and approved muttonbirding rights. Tuhawaiki, at least, had it in his power to grant such rights, as he did on one occasion to Taiaroa (Wilson 1979:42). Whether muttonbirds actually accompanied the high chiefs in their continual visiting around the settlements of the Ngai Tahu cannot be said, and, in fact, most of the movement in the 1840s seems to have been more directly concerned with land sales. Nevertheless, mobility of the southern chiefs was a feature of earlier times as well (e.g. Shepherd 1826, in Howard 1940:363) and was facilitated by the lack of subsistence tasks upon Ruapuke (Wohler n.d.: May 1855) and later on, by the acquisition of whaleboats (Bathgate 1969b). Thus it is tempting to see Tuhawaiki, who owned a small fleet of these, and also a schooner, as the arbiter of birding rights and the foremost broker in a muttonbird exchange.⁵

But the hypothesis need not be pressed that far in order to see that reciprocity in exchange not only offers an explanation of the maintenance of a chiefdom in the otherwise unfavourable circumstances of the south but also of the outstanding settlement pattern problem. The advantages of spreading the major *hapu* amongst communities along the exchange routes would be various and considerable: facilitation of exchange itself by enhanced social approbation of feasting (since feasting close relatives is likely to generate greater and more promptly repaid obligations than would be the case with distant kin), lowering of tension amongst the communities in the network (an important consideration amongst the quarrelsome Ngai Tahu), and the retention of wealth in the hands of one, or a few, kin groups.

CONCLUSIONS

The social organisation of the protohistoric southern Ngai Tahu is not clearly revealed by the historical data. Most often only sex, *hapu* and tribe are recorded along with fragmentary indications of rank. These data are such that the question of what interpretation is to be put upon the European recording of '*hapu*' is swiftly raised.

In the case study, where there was comparatively full evidence of sex, family relationship, *hapu*, tribe and rank, it seemed that *hapu* ascription could be correlated with differences in socio-economic circumstances. It is argued that the question "What is your *hapu*?" asked by Europeans may have been interpreted as an enquiry into the right by which the questioned Maori stood where he was at the time. People in dispersed seasonal camps, as at Waitaki, may have given responses stressing family or individual connections, whereas people in nucleated permanent settlements, such as Waiateruati, may have responded with 'clan' or ancestral affiliations. This hypothesis also serves to explain the profusion of *hapu* names recorded in protohistorical data and the corresponding low average membership of them.

But while it is possible to thus resolve some of the differences between the data and the traditional model of social organisation, the regional settlement pattern is more refractory. The multi-*hapu* settlement, created by the dispersal of major *hapu* into communities throughout the region, does not seem explicable in terms of European influence, nor is it compatible with band organisation.

The very low population density and the non-horticultural economy of traditional times, features which otherwise might be expected to be correlated with band organisation, are not so in southern New Zealand. The southern Ngai Tahu were members of a tribal society — in fact of a chiefdom. They were closely related and strongly inter-dependent both economically and socially. Social stratification was pronounced in the early 1840s and led up, until 1844, to the paramount chief Tuhawaiki.

It is hypothesised that tribal society in general, and the multi-*hapu* settlement and social stratification in particular, were socio-economic structures which, whether they arrived in the south or developed there, were maintained by a specialised exchange system based upon the muttonbird and centred around the chiefly island of Ruapuke.

Notes

1. The difference between these figures may reflect only day to day movements, since Shortland and Selwyn were at Waiateruati only a few days apart, but Shortland arrived at the time of a feast. Creed's figure may simply be an estimate.
2. There is a transposition of names in Shortland's letter. Tiakikai should be associated with Taumutu, and Te Rehe, of course, with Waiateruati.
3. *Kainga* (or *kaika*) are terms used in this paper in the sense of 'village'.
4. These figures provide merely a gross indication of relative differences. Actual estimates of carrying capacity achieved, or even of territory commonly used, would be more satisfactory. Given that the latter, in the case study region, lay below 300 m. a.s.l., the territory of the lower Waitaki people can be estimated at about 1650 km² and of the Waiateruati community at about 3200 km². In 1844, population densities would thus have been about 41 km² per person and 25 km² per person, respectively.
5. In Tuhawaiki, the southern Ngai Tahu seem to have had a leader of exceptional ability. He was respected and trusted by the Europeans and held an authority over his chiefly followers that neither his son nor his successor was able to match (Wohlers, n.d: January 1852). To this degree, the chiefdom in his time may have been accentuated beyond its traditional form.

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APPENDIX 1

WAITAKI AND WAIATERUATI PROTOHISTORIC DATA

Data from Shortland (1844, 1851, n.d.), MacKay (1873), A.J.H.R. (1886).

WAITAKI:

Name	Relationship	Hapu	Other information
TAUHINU			
Te Kapa*	Husband	Ngatihuirapa	*Chief Person of Tauhinu
Topi	Wife	Ngatitu	
Taumaru	Son	Ngatihuirapa	
Tamiri	Daughter	Ngatihuirapa	
Rakitawini	Husband	Ngatirakaimamoe	
Tu	Wife	—	
Para	"A Girl"	—	

Name	Relationship	Hapu	Other information	
PUNAAMARU				
huruhuru*	Husband	Ngatiruahikihiki	*Chief Person of Punaamaru and chieftain of Waitaki district	
Moheke	Wife	Ngatiruahikihiki		
Te Urukaio	Son	Ngatiruahikihiki		
Pounuku	Slave	—		
Koreke	Husband	Ngatiturakautahi	*Prob. Koreke's **"Son of Tiro"	
Tihotiho	Wife	Ngatikopihi		
Koki	Son	Ngatiturakautahi		
Kaikau	"His Son"*	—		
Te Wakaihau*		Ngatikopihi		
TAMAHAEREWENUA				
Te Awhiti	Husband	Ngatikura		
Kaao	Wife	Ngatikura		
Te Ko	Son	Ngatikura		
Urukaio	Son	—		
Maru	Son	Ngatikura		
Karue	Son	Ngatikura		
Waikawa	Daughter	—		
TE AKATARAMEA				
Te Wharekorari*	Husband	Ngatituahuriri	*Chief person of Te Akataramea	
Tuapuku	Wife	Ngatimu	*Mother of Tuapuku	
Rerekau	Grandparent*	Ngatimu		
Taimana	Son	—		
Mahureka	Son	—		
Huruhuru	Son	—		
Takitu	Son	Ngatituahuriri		
Koroiti	Daughter	Ngatituahuriri		
Whakateko				
Tiroki	Husband	Ngatikuware	*Husband of Pauahi Daughters of Karue/Pauahi	
Piako	Wife	—		
Taipo	Son	Ngatikuware		
Toraho	Son	—		
Toraho	Daughter	—		
Pauahi	Daughter	Ngatihinekato		
Karue*	Son-in-law	—		
Rakiamoa	Granddaughter	Ngatihinekato		
Kaikai	Granddaughter	—		
HAWEA¹				
Te Raki*	Husband			*Chief Person of Hawea
Hinetehekeraki	First Wife			
Te Aowhiro	Second Wife			
Pukuharuru	Son			
Titwaitai	Daughter			

Changes at 1848:

Moved to Punaamaru or Tauhinu: Whakateko, Tiroki, Piako, Pauahi (but not her husband, Karue).

Additional residents: At Punaamaru or Tauhinu: Kaitipu, Te Oraki, Pukoro Timaima, and Kurukuru.

At Te Akataramea: Ihaia, Tomiti, Te Hira, Oromene and Tumutu.

Evidence of 1852-53:

Ihaia (adult in Sydney), Tomiti, Te Hira, and Te Oromene (infant), all children of Wharekorari. Tomiti and Taitu, sons of Wharekorari betrothed to Rakiamoa and Tumutu (daughter of Te Kihī).

Notes

1. The Hawea people were listed for Shortland by Huruhuru, but it is likely that they were not living at Hawea in 1844, since this family was driven to refuge in Ruapuke by Te Puoho's raid in 1836.

2. Where 1844 names are found on the 1848 list this is indicated by *hapu* affiliation, except in the case of Tiroki.

WAIATERUATI:

Name	Relationship	Other information
+ = recorded in 1853 census		
NGATIHUIRAPA (NGAITAHU)		
Te Rehe* +	Husband	*Chieftain of Waiateruati and Arowhenua district
Poti	Wife	
Tarawhata +	Son	
Takitahi +	Son	
Kautawa	Son	
Tautakiora	Daughter	
Taua +	Daughter	
Kukuwhero* +	Daughter-in-law	*Wife of Tarawhata (above)
Whatuirā	Grandson	} Children of Tarawhata and Kukuwhero
Wainui +	Grandson	
Hinewai	Granddaughter	
Tamaiharoa	Husband	
Rutaki	First Wife	} Children of Rutaki and Tamaiharoa
Kuraru	Son	
Te Kiritira	Son	
Taramiaka	Son	
Ririwhatu	Daughter	} Children of Hinewaiari and Tamaiharoa
Hinewaiari	Second Wife	
Matepuako	Daughter	
Kakihere	Daughter	
Tamahika	Widower	
Koiti	Son	
Korehe	Daughter	
Potini*	Daughter	*married at Moeraki
Kahu* +	Husband	*Katihinematua hapu
Waiheretakina	Wife	
Te Oti +	Son	
Rehe	Son	
Pi	Daughter	
Rito +	Widow	
Te Roatutu	Son	
Haki +	Widow	
Kahuti	Daughter	
Pori +	Daughter	
Te Tauwhare	Daughter	
Kahaki* +	Son-in-law	*Husband of Pori (above)
Pati +	Grandson	} Children of Kahaki and Pori
Kohau	Granddaughter	
Toroharakeke	Widow	
Tumutu	Daughter	
Kauaua	Daughter	
Kurupata	Bachelor	
Pakake	Husband	Nephew of Koroko. May not be included in Ngatihuirapa.
Paturau	Wife	Possibly a visitor. Paturau is a Ngatiawa
Hoemoana	Daughter	Lives at Akaroa
KATIWHAEA (KAITAHU)		
Tarewai	Husband	
Tataripowha +	Wife	
Whareiro	Son	
Tairohua +	Son	
Te Autiti	Daughter	
Hekura	Daughter	
Tua	Bachelor	
Te Kaihaere	Husband	
Kiripateko	First Wife	Daughter of Koroko (below) by another man

Name	Relationship	Other information
Kiwikiwi	Son	Children of Kiripateko and Te Kaihaere
Tauhinu	Daughter	
Pi	Daughter	
Koroko +	Second Wife	Children of Koroko and Te Kaihaere
Hapi	Son	
Te Koaua +	Daughter	
Nohinohi	Daughter	
KATIKAHUKURA (KAITAHU)		
Hinemarama	Widow	
Kerepako	Son	
Te Pohipi	Son	
Te Hori*	Son	*Lives at Port Levy
Tukaruhetoro +	Husband	
Kainaunau +	Wife	
Tai*	Daughter	*by former husband
Motukawa	Husband	
Mumuru +	Wife	
Wahine +	Daughter	
Paka +	Daughter	
Waiari*	Daughter	*Married Takitahi at Taumutu
Strangers:		
Te Maraka*	Husband	*Te Atiawa
Te Ruapohue	Wife	
NGATIMAHAKI (KAITAHU)		
Tuhuru +	Husband	} Younger brothers of Tuhuru
Papako +	Wife	
Taiteariki +		
Kahu +		
Te Kaihaere +	Husband	
Rauwheko +	Wife	
Miru	Widow	
Mahakore	Son	
Paka +	Son	
Korake*	Daughter	*Lives at Waikouaiti
Kokou	Granddaughter	} Daughters of Korake. Father is dead
Potikoko	Granddaughter	
Manawa	Daughter	} Children of Manawa. Tanewharau lives at Stewart Island and Pi at Otakou.
Tanewharau	Grandson	
Pi	Grandson	
Porakahau	Granddaughter	
Kirihauka*	Daughter-in-law	*Wife of Mahakore (above).
Kapetoa	Husband	
Kuhata +	Wife	
Koera	Son	
Pokariri	Son	
Te Hu +	Son	
Mokohi*	Husband	*Lives sometimes at Taumutu
Hotutaua	Wife	
Pori	Son	
Koera	Daughter	
Moka	Daughter	
Nuha	Daughter	
Toi	Bachelor	
Tuki +	Widower	
Tane	Son	
Te Pae	Son	
Kaihuatu	Son	
Hua +	Second Wife	

Name	Relationship	Other information
Tahuna + Toka +	Son Daughter	} Children of Hua and Tuki
KATIHINEKATO	(TARAPUAI NGATIMAMOE)	
Kaiewe +	Husband	
Kotiotio +	Wife	
Te Aitiakura	Daughter	
Kaikai	Husband	
Kaikouka	Wife	
Wharepirau	Son	
Torepi +	Son	
Tuhoro	Son	
Pi +	Daughter	
KATIRAKAI	(KATIMAMOE)	
Tiratahi +	Husband	
Te Rokura	Wife	
Taikoa	Son	
Pauahi +	Son	
Te Hauatua +	Daughter	
Tokeke +	Daughter	
Paka	Daughter	
Taipaua +	Husband	
Te Wiwini +	Wife	
Wakataupuka	Son	
Pauahi +	Son	
Pi +	Daughter	

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