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Regional Variation in Maori

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ABSTRACT

Although writers on Maori have been aware for a long time that it shows dialectal variation, the nature of this variation has not been systematically studied. In the hope of initiating such a study, this paper summarises what is known about phonological and grammatical variation, and discusses the interpretation of this for dialect geography and prehistory. The classification of contemporary North Island dialects into Western and Eastern is confirmed, and a few features connecting some dialects with other languages of Eastern Polynesia (and thus implying contact) are discussed.
Keywords MAORI LANGUAGE, GRAMMAR, VOCABULARY, DIALECTS, PREHISTORY.

Abbreviations

AUP (Te Aupouri), CE (Central Eastern Polynesian), EP (Eastern Polynesian), HAW (Hawaiian), KAH (Ngaati Kahungunu), MAO (Maori), MOR (Moriori), MQ (Marquesic), MQA (Marquesan), MVA (Mangarevan), NI (North Island), NPH (Ngaapuhi), NPR (Ngaati Porou), PEP (Proto Eastern Polynesian), PMQ (Proto Marquesic), PN (Polynesian), PPN (Proto Polynesian), PTA (Proto Tahitic), RAR (Rarotongan), SI (South Island), TA (Tahitic), TAH (Tahitian), TAR (Taranaki), TUA (Tuamotuan), TUH (Tuuhoe), TWH (Ngaati Tuuwharetoa), WAI (Waikato).

INTRODUCTION

The present paper has grown out of a short survey of some regional variants of Maori (MAO) carried out to provide material for an introductory lecture to Anthropology students. As such, it will not have a great deal to offer in the way of new information or as regards the possible implications of MAO dialectology for prehistory. Rather, I hope that a summary of what has been written on MAO regional variation, the presentation of some new, though limited data, and a discussion of the interpretation of dialect material may encourage others to make available in published form any material they may have or to undertake some systematic study of the subject.

Virtually from the time of the first publications on MAO there have been references to regional variation. For example, Maunsell distinguishes "seven leading dialects" (Maunsell 1894: preface to first edition, 1842, pp. vii-viii): (a) Rarawa, north of Kaitaia, (b) Ngapuhi, down to Kaipara and Point Rodney, (c) Waikato between Kaipara and Mokau, and between Point Rodney and Tauranga, (d) Bay of Plenty, (e) East Cape including Rotorua (though minor differences are detectable), (f) West Coast from Wellington to Wanganui (four sub-branches posited), (g) Wanganui to Mokau. He considers the dialect of Taupo to be a mixture of (c) and (e). He gives (Maunsell 1894:9) a comparative chart of five of the above "leading dialects" and Taupo showing "a few of the variations in pronunciation". Williams (1852) implicitly recognises six North Island dialects in that many words are marked as coming from: (a) Waikato, (b) Rarawa, (c) Tauranga, (d) East Coast, (e) Ngatitoa, (f) Ngapuhi. More recent editions (e.g. Williams 1971) unfortunately do not continue this practice with anything like the same thoroughness, the reason being that: "Intercommunication between the different tribes, by obliterating niceties of dialect, has made the investigation of such niceties a matter of extreme difficulty" (Williams 1971: preface to 5th edition, 1917, p.xxix). Nonetheless, a very few words are marked as: (a) Arawa, (b) Kahungunu, (c) Maniapoto, (d) Ngapuhi, (e) Ngati Porou, (f) Rarawa, (g) Raukawa, (h) Takitimu, (i) Ngai Tahu, (j) Tainui, (k)

Taranaki, (l) Tuhoe, (m) Waikato, (n) Whanganui (sic). Of these, Takitimu and Tainui are probably meant as cover terms for some combinations of the individual dialects, perhaps (b), (i) and possibly (e), and (c) and (m) respectively. Colenso (1868:44) lists ten "principle subdivisions" of MAO, but says that they cannot properly be regarded as "sub-dialects": (a) Rarawa, (b) Ngapuhi, (c) Waikato, (d) Rotorua and Taupo, (e) Bay of Plenty, (f) East Cape and Poverty Bay, (g) Hawkes Bay to the Straits, (h) Ngati Awa, or Wellington to Taranaki, (i) the Middle Island, (j) Chatham Islands. Skinner (1921) explicitly associates four of his "culture areas" with distinctive dialects: Moriori, Murihiku, Kaiapoi, and West Coast (= Taranaki). He is vague about the dialect classification of the rest of the North Island. Buck (1949:79) mentions the well-known phonological regional differences, but attempts no classification of the dialects.

More recently, Biggs (1961:2) mentions two main dialects in contemporary MAO: Western, being North Auckland, Waikato-Maniapoto, Taranaki and the Wanganui River area; Eastern, encompassing the Bay of Plenty with its hinterland, and the whole of the East Coast of the North Island. Te Arawa and Ngati Tuwharetoa share features from both major groups. A similar classification is given in Biggs (1971:497), Hohepa (1967:3) and Krupa (1967:11-12). All three authors assert that South Island MAO is extinct. Finally, references to dialect variation within contemporary MAO crop up in some text books and popular publications, e.g. Rikihana (1976:9), who mentions some of the well-known phonological differences and 12 items of vocabulary which vary around the North Island, and Armstrong (1968:6), who again refers to the phonological variants and gives some examples of regional forms of address and greetings.

In none of the above is dialect variation the major concern of the writer, and reference is included only as supplementary information in the general context, usually of a description of the language as a whole. There are, however, at least two reasons for attempting the systematic collection and analysis of data in this area. The first is that manifestly regional variation in MAO has existed and still exists, and a student of the Maori language should not only be aware that he is dealing with a differentiated object, but also explore the facts and their possible implications for fields such as prehistory. The second is the more practical consideration that many people involved in teaching MAO are concerned that not enough account is taken of regional variations in the preparation of teaching materials and examinations.

The present writer's interest is that of a linguist, not a teacher, so emphasis here will be on material of a sort that may one day allow a thorough dialectological survey of MAO. The rest of this paper will consist of: 1. a review of the phonological variation within MAO, 2. some remarks on grammatical variation, 3. the presentation of some data on vocabulary, 4. a discussion of the status of the present-day regional speech variants, and dialect geography, 5. the question of the relevance of MAO dialectology for prehistory, 6. some thoughts on what work might profitably be done in this area in the future.

1. PHONOLOGICAL VARIATION

The fullest statement of the systematic phonological and phonetic differences in regional variants of MAO is provided by Biggs in his comments (Biggs 1971:497) and in his comparative table (Biggs 1971:481) in which he gives data for five varieties of MAO: MAO unqualified, Bay of Plenty, Taranaki-Wanganui River, South Island, and North Auckland. Many of these are noted in other sources e.g. Williams (1852:ix) and Colenso (1868:45). They are: Taranaki-Wanganui River: [ʔ] corresponds to [h] elsewhere, and [ʔw] to 'wh'; Bay of Plenty merges /n/ and /ŋ/ to /n/, the South Island merges /k/ and /ŋ/ to /k/. These are the well-known and unproblematic variations.

Others are less clear. In particular, the realization and distribution of 'h' and 'wh' are interesting. Most, if not all, dialects seem to preserve a distinction here, although the distribution of these phonemes is not always the same. There seem to be three classes of
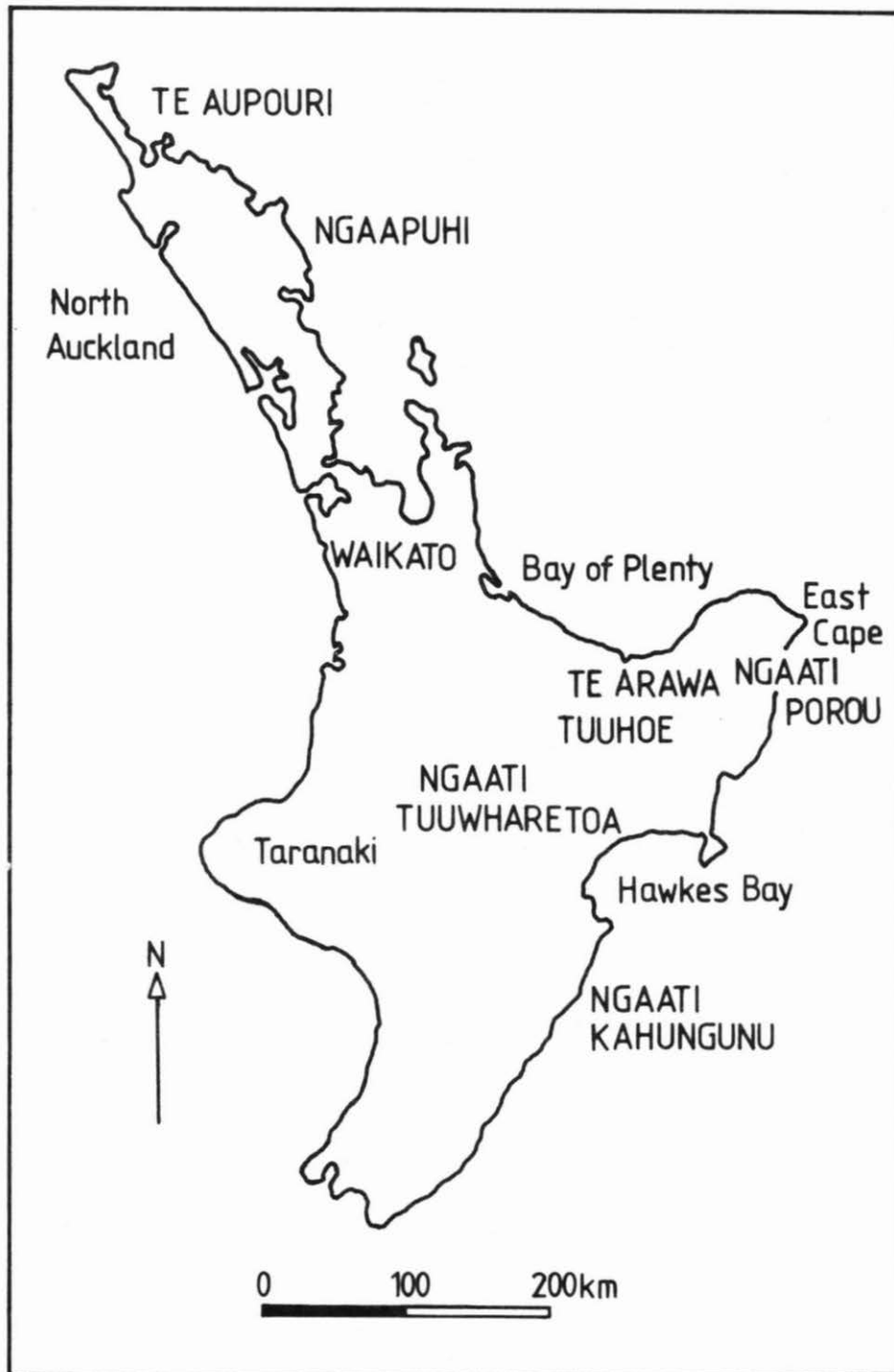
Figure 1 The North Island of New Zealand, showing the major geographic (lower case lettering), tribal and dialect divisions (upper case lettering) referred to in the text.

words; (i) those (including all reflexes of PPN *s) which have /h/ everywhere, e.g. *noho* 'sit', *ahi* 'fire', (ii) those in which 'wh' (in various realizations, partly in free variation, partly regionally conditioned) appears everywhere, e.g. *whare* 'house', *whaka-* 'causative', and (iii) those where one or the other may appear, partly at least on a regional basis, e.g. *hea-whea* 'where', *poohiri-poowhiri* 'welcome'. The 'wh' is variously realized as [f] (nowadays very wide-spread, conceivably arising through contact with English), [φ], and [h] with secondary rounding (and possibly high-back tongue position). It is possible that parts of the North Island up to the first half of the 19th century in fact had a three-way distinction reflecting PPN *s and *f; a palatalized [h] (from PPN *s) giving rise to such spellings as 'Shunghee' for *Hongi*, and a split in the reflexes of PPN *f into /h/ and /φ/, leading to minimal pairs such as *ahi* 'fire' and *awhi* 'embrace'. The palatalized [h] merged with /h/ some time last century (Biggs 1971:497, Williams 1852:ix). I have no data on this whole question or on the present distribution and regional realizations of 'wh', and would very much welcome information.

Biggs (1961:2) asserts that "North Island Maori /f/ was apparently represented by zero in the South Island dialect", and in his comparative table of PN phonemes (Biggs 1971:481) he gives 'h' as the only South Island reflex of PPN *f. In neither case does he give sources, and could be thinking, for example, of the forms of the name *Akaroa* (= North Island *Whangaroa*), which occurs also as *Hakaroa* (Shortland 1851 passim). Watkin's (n.d.) vocabulary, however, has 'u', 'f' and 'wh' at different stages of the list and 'h' only where North Island dialects agree on 'h' as well. Rev. W. Stack (note by T. M. Hocken May 1895 in Watkin n.d.) claims that "the 'f' vice the 'wh' sound was introduced by whalers and is depraved Maori". This, however, still leaves Watkin's spellings 'u', e.g. *uare* 'house', and 'wh'. Perhaps there was variation within the South Island (cf. Skinner (1921), who distinguishes 'Kaiapoi' and 'Murihiku').

There is one further feature of South Island MAO which deserves mention at this stage. Watkin (n.d.) occasionally, though by no means always, writes 'l' for North Island 'r' (cf. Skinner 1921:72), and this feature appears in at least two place names, 'Lake Waihola', Dunedin and 'Little Akaloa', Banks Peninsula. There can be no question of a phonemic contrast between /l/ and /r/ in the South Island, the varying spelling capturing an allophonic (free, regional, conditioned?) variation between possibly an alveolar flap with and without redundant lateral closure.

Aside from the systematic variations, there is in some grammatical morphemes and bases a regional variation in the realization of two diphthongs. The diphthongs concerned are /ei/ and /ou/ (preserved in Biggs' Western dialects), which collapse with /ai/ and /au/ in the East. According to Biggs (1961:3; 1969:40, 87) Taranaki-Wanganui River agree with the Eastern forms. Maunsell (1894:9) gives the best list of these morphemes, though, significantly, his Taranaki dialect agrees with the West. The forms are: *kei* (Eastern *kai*) 'is at', *hei* (Eastern *hai*) 'to be a', *teina* (Eastern *taina*) 'younger sibling same sex', *taatou* (Eastern *taatau*) 'l incl. plur.' and similarly in 1 excl. plur. and 3 plur. pronouns. Interestingly the South Island agrees with the innovating Eastern forms. Watkin (n.d.) has *taina, kai*, 'sign of the present tense', *ratau, matau*, though he writes *tenei* 'this', and *tuboubou* 'stand on the head' ('b' frequently, though not consistently for 'p'. This variation is not evident with the other stops. Cf. Skinner (1921:72), where [b] and [g] are given as phonologically conditioned allophones of /p/ and /k/.).

Morioi (MOR) of the Chatham Islands, which has been extinct since last century, is widely regarded as a dialect of MAO (Skinner 1921:74, Colenso 1868:45, Biggs 1961:2), and without any intention to beg this question (see Section 5 below), a few remarks on this language may not be out of place here. The difficulty with any study of MOR is the question of the reliability of the sources. Shirres (1977) provides an excellent discussion of these, and concludes that of the four major sources: Skinner and Baucke (1928), Shand (1911), Deighton (1889) and Grey MS NZMMSS 144, only the last "can be regarded with any reliability". Williams (1919) depends entirely on Shand (1911) and Deighton (1889).

The most characteristic feature of MOR phonology is the realization of /t/ as a palatal affricate (Biggs 1961:2, who surely does not mean 'fricative'); and according to Baucke in Skinner and Baucke (1928:358), this realization occurs only initially. According to Williams (1919:418), this palatalization affected also /k/ and /h/. 'k' appears regularly for MAO /ŋ/ only in the plural article, *ka* (MAO *ngaa*), though randomly elsewhere as well; *tchakat'* in Skinner and Baucke (1928:357) for MAO *tangata* beside *rangat'* 'man' in Shand (1911:passim). MOR seems to have preserved 'wh' and 'h' as in MAO, except that in a few words vowel assimilation to a following back vowel, or to preceding rounding in 'wh' (?) has produced environments with back vowels, where MAO has non-back, with regular shift to 'h', thus *hunua* for MAO *whenua* 'land'.

MOR vowels are characterized above all by widespread apocope and assimilation (Shirres 1977:6) and, if Shand's spelling is at all accurate, monophthongisation of diphthongs. Williams (1919:417, 419) lists large numbers of "letter changes" compared to MAO, but this may reflect only the unreliability of his source.

2. GRAMMATICAL VARIATION

In general one can probably speak of a single MAO grammar. This is not to say that variation does not occur; rather that where it does exist, it tends to be a case of minor rule variation, i.e. the differences are associated with individual lexical items and morphemes. Thus, the productive passive suffix is variously *-tia, -hia, -ngia* (however I have no data on the exact regional distribution of these allomorphs); some verbs select different lexically conditioned passive suffixes in different areas, e.g. Williams (1852:xxvi) gives *makaa* as the usual passive of *maka* 'throw', but *makaia* for the East Cape region. Similarly, the South Island seems to have had *hikaina* as passive of *hika* 'kindle fire by friction' as compared with *hikaia* in Williams (1971:49). The same thing applies to the rection of some verbs, e.g. *tatari* 'wait' takes *ki* in the Waikato, *i* in North Auckland, and *mo* on the East Coast before the object noun phrase. North Auckland has short unstressed forms for the dual pronouns; *mao* '1 excl. du.', *tao* '1 incl. du.' and *rao* '3 du.'.

The admissibility of passive verb forms after *me* 'prescriptive' and *hei* is known to vary, the latter being a tricky particle altogether, sharing as it does the functions of preposition, article, and verbal particle. Thus, *me tiikina atu he wai* 'some water should be fetched' is possible for some native speakers, while others admit only *me tiki atu he wai*. Likewise, *kaua au hei patua e koutou* 'don't you (plur.) hit me' is accepted by some speakers, but rejected in favour of *kaua au hei patunga ma koutou* by others. I know nothing about the distribution of these constructions, and suspect that they may even be cases of idiolect variation, i.e. differences in the grammars of individuals irrespective of dialect.

Dialects differ also in some verbal constructions. The best known example of this is the innovative Eastern use of *kei te* 'progressive present' and *i te* 'progressive past' as opposed to *e . . . ana* 'progressive' in the West (Biggs 1969:86, 95). This construction is available also in the Waikato and South Island, although apparently absent from MOR. Less well-known are: Tuuhoe *ka . . . ana* 'when future', as in *ka eke mai ana he ope* 'when a travelling group arrives', where other dialects use *kia*, and Waikato *kia . . . mai* in exclamations, as in *kia nui mai te whare* 'how big the house is', where other dialects have constructions like *te nui hoki o te whare*.

Finally, Øivin Andersen (pers. comm.) indicates that there may be some regional variation in the syntax of negation. However, his data are awaiting publication, and I have no other information on this point.

3. VARIATION IN VOCABULARY

The greatest regional variation within MAO is to be found not in phonology or grammar but in vocabulary. This section will not be a general discussion of this subject, so much as the presentation of some restricted data reflecting this type of variation. These data are composed of ten lists of 228 items of basic vocabulary, based on the so-called Swadesh

list[1]: eight obtained from informants, covering some areas of the North Island (NI), one for the South Island (SI), and one for MOR.

At this point I want to express my gratitude to the following people for their willing and interested co-operation in providing the NI lists: Mrs M. Penfold, Sister H. Wharemaru, Mr G. Heta, Mr T. S. Karetu, Mr P. Sciascia, Mr R. Broughton, Mr H. Callaghan, and Mr Ø. Andersen. The lists concerned represent: Te Aupouri (AUP), Ngaapuhi (NPH) (both North Auckland), Waikato (WAI), Ngaati Tuuwharetoa (TWH) (Taupo), Tuuhoe (TUH) (Urewera), Ngaati Porou (NPR) (East Cape), Ngaati Kahungunu (KAH) (Hawkes Bay and Wairarapa), and Taranaki (TAR).

None of the lists was administered directly by myself, with the result that some are incomplete, and in one or two cases the English gloss proved ambiguous. Thus, 'back' was correctly taken to mean the part of the body by most informants but as the positional idea 'behind' by one or two. The word 'woods' was understood by most as 'forest' but by some as 'firewood'.

Some of the items in the English list are notoriously hard to give single MAO words for, such as 'and', 'others', 'cut' and 'fall', and some of the differences between the lists will be due to difficulties involving these words. Similarly, although many informants gave a number of words for several items, the non-occurrence of a word in a list does not necessarily imply that it is unknown, only that the word contained in the list was the one that occurred to the informant as the most usual at the time of writing. There is of course always the question whether the lists do reflect accurately the local dialect of the informant, and are not influenced, albeit subconsciously, by ideas of "correct" or "standard" MAO (cf. similar difficulties in the collection of sociolinguistic data). Finally, Richard Benton (pers. comm. and without further detail) indicates that my list for TWH is suspect, and that there are some anomalies, such as those referred to above, in others as well. Only further more rigorous research will eliminate these factors.

The lists for SI and MOR were compiled by myself from texts and similar material. Thus they are not only different in source from the NI lists but represent dialects of a different time. For MOR I used the material mentioned above in Section 1, and, given its demonstrable unreliability, almost everything relating to MOR in what follows must be regarded as very insecurely founded and speculative. Baucke (Skinner and Baucke 1928:258) states that there were two dialects of MOR. Since no other source mentions this or takes account of such differences within MOR, the list is probably mixed as well as being otherwise of dubious value. It may be that one can hope for no more.

The situation with SI is similar, though perhaps not quite so bad. The main sources here were Wohlers' (1874) edition of some texts and Watkin's (n.d.) vocabulary list. Both of these reflect Skinner's (1921) Murihiku. Of the two, Watkin's material is probably the more reliable. Watkin was a Wesleyan missionary stationed at Waikouaiti from 1840 to 1844. He quickly discovered that the material already available in MAO was unusable in his area, and prepared in the local dialect translations of items such as St. Matthew's gospel, prayers, hymns and the Liturgy (Pybus 1954a:13-14). At the same time, he compiled an unordered vocabulary, which may be regarded as fairly reliable, since Watkin is known to have been a gifted linguist, as indicated in a letter from Watkin's son, Edwin Watkin, to Dr Hocken 29th March 1893, appended to Watkin (n.d.). Unfortunately I know of no copies of the religious material, but the vocabulary is held by the Hocken Library, Dunedin. Wohlers' texts may be somewhat less valuable, since it is not entirely clear to what extent Wohlers "corrected" the language for publication, i.e. made it more like his notion of NI MAO. Certainly his spelling corresponds to NI phonology. However, he claims to have "retained the essential passages and expressions of the untutored old Maori" (Wohlers 1874:31), and further comparison of his texts with other SI sources may well show them to be reliable.

Despite the factors mentioned above which have influenced the lists, the justified reservations about their reliability, validity and equivalence, and the fact that such a small sample is woefully inadequate for any really serious study, it has proved interesting

to use the lists in two ways: (i) for statistical comparison, which will occupy the rest of this section, and (ii) as data for a rudimentary dialect geography of MAO (see Section 4).

The statistical comparison of the lists consisted of determining the shared cognacy of each pair of lists and the average shared cognacy of each list with all others, and with all others except MOR. (This was done to avoid begging the question of MOR's status as a dialect of MAO.) This procedure was not altogether as straight forward as it might appear, and some of the individual decisions might well seem arbitrary. Forms involving random vowel changes, such as *inu-unu* 'drink', *keri-kari* 'dig', were counted as cognate but the metathesised *ngaro-rango* 'fly n.' was not. Reduplicated forms were regarded as cognate with simple forms but other derivatives were not. Thus *ringaringa-ringa* 'hand' was counted but not *kau-kauhoe* 'swim' or *tata-paatata* 'near'. In a preliminary count involving fewer lists (Table 2) reduplicated forms were not counted as cognate since I felt that reduplication represented a change in the lexical item just as much as replacement or derivation. However I revised this, since reduplication, which is incidentally not as well understood as it might be, seems at least partly to be a productive morphological process. It will be seen from a comparison of Table 2 with the corresponding parts of Table 1 that the revision had quite widely varying effects on the figures.

	TUH	TWH	WAI	NPH	AUP	NPR	KAH	TAR	SI
TWH	76.6								
WAI	75.4	76.1							
NPH	75.2	74.6	74.3						
AUP	75.4	73.4	75.0	84.9					
NPR	82.0	77.5	76.3	77.8	78.5				
KAH	80.1	73.1	73.7	74.4	76.4	79.6			
TAR	74.8	74.6	77.9	74.1	75.2	76.1	78.1		
SI	72.5	65.0	66.3	66.9	70.6	74.5	76.2	71.5	
MOR	59.5	57.3	59.5	59.0	61.0	60.5	63.5	67.7	66.3

Table 1: Percentages of shared cognacy between eight NI dialects of MAO, SI and MOR.

	TUH	TWH	WAI	NPH	AUP	NPR
WAI	73	68	–	71	72	73
AUP	72	64	72	84	–	75

Table 2. Some percentages of shared cognacy between MAO dialects, not counting reduplicated forms as cognate with simple forms.

	TUH	TWH	WAI	NPH	AUP	NPR	KAH	TAR	SI
a	74.6	72.0	72.7	73.5	74.5	75.9	75.0	74.4	70.0
b	76.5	73.9	74.4	75.3	76.2	77.8	76.5	75.3	70.4

Table 3. Average percentages of shared cognacy of eight NI dialects and SI with all others, a. including MOR, b. excluding MOR. Average shared cognacy of MOR with the nine other lists is 61.6.

The first thing that strikes the eye about these figures is that they are not higher and this despite the multiple entries in many lists. Swadesh (1954:326), the main proponent of glottochronology, arbitrarily classifies as dialects of one language speech variants with 81-100% shared cognacy. On this basis, only AUP and NPH, TUH and NPR would be classified in this way, all other pairs would be different, though closely related, languages!

Obviously any attempt to use these figures to subgroup the dialects in the family tree sense would be futile, since dialects in contact with each other for a long time are simply not amenable to this type of classification (see Section 4). Attempting to date splits by the application of glottochronological formulae would be even more ludicrous. Rather these figures can be regarded only as indices of relatedness in some undefined sense of similarity of basic vocabulary. Taken in this way, they weakly support Biggs' (1961:2) Eastern dialect area involving TUH, NPR and KAH, and a North Auckland dialect area. However, some of the other pairs which Biggs' classification would predict as relatively close do not show up clearly in this way, e.g. WAI-NPH, WAI-AUP; TAR-AUP, TAR-NPH, being Biggs' Western group, though notice that TAR-WAI is WAI's highest shared cognacy figure. In particular the relatively high figure for TAR-KAH seems to cut right across the Eastern-Western grouping. Of special interest are the figures tying SI with NPR and KAH (see Section 5), and MOR with TAR. This latter reflects the strong TAR element in the Chathams, introduced last century by the invaders from Taranaki, who were responsible for the speedy extinction of MOR.

The main thing suggested by these figures is that vocabulary variation within MAO is higher than perhaps popularly thought and that its study in greater detail could be very instructive.

4. DIALECT GEOGRAPHY

There is, of course, always the question of the extent to which present-day regional variation reflects or preserves the state of affairs obtaining last century or in pre-Contact times. That there has been levelling is clear and inevitable (Williams 1971:xxix). Buck (1949:79) finishes his brief section on "subdialects" with the observation: "Many of these tribal differences have been rounded off into a more standardised common speech and the late Bishop H. W. Williams held that it was too late to collect subdialectal differences of sufficient value to form a guide to affinities with islands in Polynesia." Greatly increased mobility, the teaching of Maori in schools, the translation of the Bible and other religious texts, and a growing idea of "correct" MAO have no doubt all contributed to this. Richard Benton (pers. comm.) believes that in fact much of the present-day variation in dialects is due to differences in the extent of borrowing from English. That this is at least partly true is borne out by the lists. For instance, of the 35 differences between NPH and AUP, five are due to NPH having English words where AUP has not and one to the reverse situation. This idea is, however, not supported by other facts about the lists. There is, for example, no correlation between the number of loans in a list and the average shared cognacy of that list. Also, most of the loans are restricted to a few words which occur in most lists, such as *miiti* 'meat', *putiputi* 'flower', *rori* 'road' or *kaute* 'count'. It is surely true that the differences between the dialects are at least slightly smaller than Tables 1-3 would indicate, since the occurrence of word A in list 1 and word B in list 2 for some item does not imply that A is not known in dialect 2 and vice versa. In many cases this is simply not true, and the presence of different words reflects preference only. However, the fact remains that the lists show surprisingly high variation in vocabulary among some present-day speakers, particularly in view of the multiple entries in many lists.

Obviously any discussion of the question mentioned above must be based on far fuller knowledge of dialectal variation today and last century. Similarly, the actual status of SI today may still be an open question. Some scholars (e.g. Biggs 1971:497, Hohepa 1967:3)

have asserted that the dialect is extinct. It is certainly true that many of the people who are said to speak it in fact are speaking more or less a NI dialect with studious substitution of [k] for /ŋ/ and the use of some well-known vocabulary items. However, the claims that one does hear that speakers exist, especially in Southland, cannot be discounted without checking. On the other hand, it must be conceded that the chances of SI having survived are very slim. Even if there were SI-speaking families or communities or had been until recently, the tendency towards "correct" MAO, i.e. towards emulation of NI, has been present for so long that they would not necessarily provide much reliable material. Two letters dating from 1859 from Waikouaiti (held by the Otago Early Settlers' Museum) show this already; one has NI spelling and the other, though retaining 'k' for 'ng' in most places, has the extraordinary, hypercorrect 'tingaka' for NI 'tikanga'.

In the rest of this section, I will sketch the outline of a present-day dialect geography of the North Island. This will necessarily be brief, since it is based on the few data at my disposal. It is well known that in cases where regional variants of a language exist in contact with each other, the terms "dialect" and "dialect boundary" are only relative. It is rather the case that the individual features which distinguish the variants, be they lexical items, phonological differences or grammatical features, frequently have distributions that do not match. A line marking the geographic limit of the spread of some feature is known as an "isogloss", and any dialect map of a language area where variants are in constant contact will be a criss-cross of such lines. In such a situation a group of contiguous speech variants deserves the title "dialect" or "dialect group" if a relatively high number of isoglosses (what is a relatively high number?) unite in separating them from other areas. At this stage there are two general points to be made: firstly, only isoglosses indicating the spread of features that can be shown to be innovations are useful for this type of study, since the distribution of a retention from the common ancestor of the dialects in question does not imply contact or community of development. Secondly, although the distribution of innovations is used as data, we are not subgrouping the dialects in the family tree sense since this works only where the daughter languages of a family are not in contact (cf. the inadequacy of the family tree model for dealing with the high level classification of Indo-European or Germanic languages).

Whatever the ultimate origin of the variants of MAO (see Section 5), it is now impossible to classify them into historical subgroups on the basis of innovations. What follows is a brief examination of some of the evidence bearing on the synchronic dialect distribution in the North Island. In order to determine which, if any, of competing forms could be regarded safely as an innovation, I searched some dictionaries of Eastern Polynesian (EP) languages (Savage 1962, Rarotongan (RAR); Dordillon 1931, Marquesan (MQA); Pukui *et al.* 1975, Hawaiian (HAW); Tregear 1899, Mangarevan (MVA); Stimson and Marshall 1964, Tuamotuan (TUA)); Tregear (1891), and Biggs (1977). A form was taken to be an innovation in those dialects in whose lists it occurred if no cognate with a similar meaning appeared in any of the above. In some cases, these sources were in conflict, e.g. although *mata?u* 'right (not left)' must be reconstructed for PPN, a number of EP languages have *katau* instead. In fact the only EP occurrence of *matau* outside New Zealand is recorded in Biggs (1977) as RAR, despite its absence from Savage (1962) and Tregear (1891). Is *matau* in some MAO dialects an innovation compared to EP (or Tahitic (TA)) *katau*? Is RAR *matau* in Biggs (1977) a borrowing from Pukapuka, a non-EP language? And if not, is it a shared innovation with those MAO dialects that do have it, or convergence? Doubt on all these questions renders the rather unusual distribution of *matau-katau* in New Zealand less valuable.

The following are the features which can fairly reliably be regarded as innovations, along with their distributions. The non-innovating form is given in square brackets.

Group A:
pawa-paoa 'smoke' WAI NPH AUP TAR [*auahi*]
mangu 'black' WAI NPH AUP [*pango*]
wheua 'bone' WAI NPH AUP [*iwi*]
hiako 'skin' NPH AUP [*kiri*]
maatenga 'head' NPH AUP [*uupoko*]
kaapura 'fire' NPH AUP [*ahi*]
i in *toimaha-taimaha* 'heavy' WAI NPH TAR [*taumaha*]
kuiti 'narrow' WAI NPH TAR [*whaaiti*]
kori 'play' TWH WAI TAR [*taakaro*]
whiore 'tail *of a fish*' TWH WAI TAR [*hiku*]
naeroa-ngairoa 'mosquito' TWH WAI TAR [*namu*]
manga 'branch' NPH AUP TAR [*peka*]
maangai 'mouth' NPH AUP TAR [*waha*]
(Note the absence of the last two from my WAI list, making their distribution discontinuous. Perhaps this was the result of replacement in WAI by the retained but expanding *peka, waha*. Cf. *manga* in WAI place names.)

Group B:
noke 'worm' TUH NPR KAH [*toke*]
kiri (kiri) 'sand' (innovation in this meaning) TUH NPR KAH [*one (puu)*]
haututuu 'play' TUH NPR [*taakaro*]
kootee 'squeeze' TUH KAH cf. *koopee* NPR [*romi*]
hemo 'die' TUH NPR [*mate*]
Diphthongs in *kai* 'is at' *raatau* '3 plur.' cf. section 1 TUH NPR KAH. (Note that my TAR material does not support Biggs' assignment of this innovation to TAR as well.)

Group C:
kei te 'present progressive' TUH TWH WAI NPR KAH [*e-ana*]
putiputi 'flower' TUH TWH WAI NPH AUP NPR [*pua(awai)*]
pei 'push' NPH AUP NPR [*pana*]
waeroa 'mosquito' TUH AUP [*namu*]
ngaro 'fly n.' TUH TWH WAI NPH AUP (This is a metathesised form of [*rango*])
maahunga 'head' TUH TWH WAI NPR TAR [*uupoko*]
matau 'right (not left)' TWH NPH AUP NPR KAH [*katau*]

I fully realize that this list is based on negative evidence of two kinds: (i) I have given as the distribution of each word only those lists in which they occur (cf. remarks above), (ii) the forms listed are regarded as innovations on the criterion mentioned above. Only more thorough research and field work can provide more security in both these areas. Nonetheless, it is significant that, like the statistics of Section 3, these forms seem to support Biggs' East-West division. Group A forms tie the dialects of WAI, NPH, AUP and TAR together and include TWH in some isoglosses. Group B forms seem to be innovations common to TUH, NPR and KAH, i.e. Biggs' Eastern group. The distribution of group C forms cuts across this primary division, but does not necessarily refute it. *Kei te* in WAI represents the incursion of an essentially Eastern form into one Western area. *Ngaro* in TUH is perhaps the converse. *Matau* is very doubtful as an innovation anyway, and *putiputi* (a loan from English 'pretty-pretty') may well owe its very wide distribution to Ngata's popular song. *Pei, maahunga,* and *waeroa* have distributions less easy to account for on the basis of an East-West dialect division. It may be that *maahunga* was a common-MAO innovation later replaced by *maatenga* in North Auckland. The situation regarding *waeroa* is very interesting. According to Biggs (1972:152) it is the

usual MAO word for 'mosquito', the inherited *namu* having been applied to 'sandfly'. He suggests that this semantic shift in *namu* may have already occurred outside New Zealand, e.g. in Tahiti, and that the word was not available for 'mosquito' when the Maoris arrived, with the result that they invented *waeroa*. In my lists, the form *waeroa* occurs only three times: TUH and AUP 'mosquito', and KAH 'fly n.'. *Naeroa* WAI TAR, *ngairoa* TWH and *keroa* SI 'mosquito' are surely related, but significantly the remaining lists (NPH NPR KAH and MOR) have *namu* 'mosquito'. I do not know what these informants would say for 'sandfly', and it may be that in these areas *namu* has become a generic term for biting insects. If it has not, however, then its presence may be of interest for the question of contacts outside New Zealand (see Section 5). Finally, *pei* has an odd distribution, but note that this may be only a result of the lists at my disposal. Coastal Bay of Plenty and the Hauraki area may prove to know this word as well, thus giving it a continuous area of use.

Our rudimentary dialect geography can thus be seen to agree with the results of the statistical comparison of the same body of data in supporting Biggs' Eastern and Western dialect areas. TWH seems to go more with the Western than with the Eastern, and the behaviour of the other area called transitional by Biggs, Te Arawa, must wait investigation.

5. DIALECTS AND PREHISTORY

The study of dialects does on occasions allow inferences relating to prehistory, specifically to contacts between one dialect area and some language outside. The features which distinguish dialects from each other may be simply spontaneous developments within the dialects themselves, or they may be due to language contact, either as substratum features or as later imports. A good example of this latter type is to be found in the Scandinavian features of Midlands dialects of Middle English, due to the incursions of the Old English period.

If it can be shown that some dialect feature of language A is shared by some language B outside the line of descent of language A, AND that it is an innovation, AND that it is unlikely to be a case of convergence, i.e. independent development, then it is a plausible inference that there has been contact between language B and some dialect of A.

While my data do not allow us to speculate on the dialect geography of last century and earlier, it does seem clear that the regional variants of MAO have been converging for some time, implying that at some time in the past they showed greater diversity than now. These differences, as noted above, may be internal developments, and most certainly are. In some cases, however, they may have arisen through contact with languages outside MAO. It is this application of dialectology within MAO that Williams was so pessimistic about (Buck 1949:79). Biggs (1961:2) refers to the need for greater research into MAO dialects with a view to establishing contacts in this way, and Green (1966) has done some work in this direction. Given that MAO dialects are and have been converging, it seems probable that dialect material of greater age, e.g. texts from last century, would stand a better chance of revealing such features. Nonetheless, on the basis of my limited data it is perhaps possible to speculate about some individual features, especially of East Coast MAO.

Following Elbert (1953), Green (1966) posits a subgroup of EP, Central Polynesian — also widely referred to as Central Eastern Polynesian (CE) — which in turn divides into Tahitic (TA), including Tahitian (TAH), MAO, Cook Islands languages (except Pukapuka), and TUA; and Marquesic (MQ), including MQA, MVA, and HAW (though this latter was later influenced by TAH).

To my knowledge, there is no evidence connecting any feature of MAO in general exclusively with languages outside CE, or any NI feature with any language outside TA. Green (1966:32) mentions that the Bay of Plenty merger of /n/ and /ŋ/ to /n/ is paralleled in MQ languages, but rightly says that it is probably convergence. It may be,

however, that there are one or two features of some NI MAO dialects that imply particular exclusive contact with some individual language within TA. Green (1966:28-9) discusses the innovating RAR forms for possessives in 2 sing.: *taaʔau, tooʔou* 'thy', and the occurrence of similar forms *taahau toohou* on the East Coast, along with *maahau, noohou* etc. 'for thee, belonging to thee', which also have parallels in RAR. My data suggest that formations of this sort are in fact far more widely spread than just East Coast; specifically, all the dialects for which I have material, except TUH and MOR (possibly also TAR, no information) have forms of this kind. However, what renders Green's inference of contact between East Coast MAO and RAR plausible, despite the inaccuracy of his data, is the fact that only in RAR and on the East Coast are these forms restricted to the 2 sing. Elsewhere similar forms for 1 and 3 sing. are also available (*taahaku* 'my', *naahana* 'belonging to him' etc.). It is well known that such expansion or generalization of features is a characteristic of borrowing (Anttila 1972:154), and so the distribution of these forms suggests an interpretation whereby RAR and East Coast MAO enjoyed exclusive contact, and the feature in question was borrowed from the East Coast into the other dialects. Speculations on *namu* 'mosquito' and *matau* 'right', although very shakily based, may support this. If Biggs (1972:152) is right that MAO *namu* 'sandfly' and *waeroa* 'mosquito' indicate that the Maoris come from an area, such as Tahiti, where, through absence of the mosquito, the inherited **namu* was used for 'sandfly', then the presence of *namu* 'mosquito' in NPH, NPR, KAH and MOR may well point to contact with a language, such as RAR, which had retained (or re-borrowed from a Samoic language) *namu* in its original sense. Similarly, if *katau* is the PTA for 'right (not left)', and if *matau* in Biggs (1977) is RAR, then its presence in some MAO dialects could also indicate contact. Note that the distribution of all three features includes NPR and that *matau* and *namu* 'mosquito' also share KAH and NPH.

These (in part very speculative) remarks exhaust the evidence at my disposal suggestive of secondary contacts within the North Island. The rest of this section will deal with SI and MOR.

There can be no doubt that SI as reflected in the material available to me is a dialect of MAO. It shares a number of features which seem to be exclusive innovations of common-MAO or at least some dialect. Thus SI has, for instance, *ringaringa* 'hand' (cf. PEP **lima* 'hand'), *pungarehu* 'ashes', *nau* 'come', and *hemo* 'die'. Its average shared cognacy with NI dialects is not greatly lower than that of the NI dialects themselves. This is by no means surprising, given the traditional evidence that the Kai-Tahu were in fact originally a southern North Island tribe (cf. Pybus 1954b:37, Helen Leach 1978, B. F. Leach 1978), and the fact that the data I have used for SI are drawn from areas (Waikouaiti, Ruapuke) which were occupied by people calling themselves by that name. B. F. Leach (1978) asserts that "there is little if any suggestion of a close link between the East Coast and Ngai-Tahu dialects". However, this is not borne out by my material. Firstly, the shared cognacy of SI with NPR and KAH (74.5 and 76.2 resp.) is higher than with any other dialect. Secondly, SI shares many features with these two dialects, especially with KAH, exclusive of at least the Western dialects of NI. Some of these, such as *poohatu* 'stone', *rango* 'fly n.', and *waero* 'tail', are in fact retentions, making the East Coast (or parts of it) and SI relic areas, but the following are suggestive: of the group B innovations of Section 4, SI shares *hemo, noki* (sic), and the diphthong mergers. *Kai* is given in Watkin (n.d.) as 'sign of the present tense'. Further, SI shares with NPR and KAH the shortened forms *ro* 'inside', for *roto, tou* 'still, continually' for *tonu*, and with KAH, *haakui* 'mother', *huanui* 'road', *kakari* 'fight' and *mahara* as the usual word for 'thought'. (Some of the KAH forms here are drawn from Smith (1913), which may perhaps be regarded as reliable.) These individual examples are supported by a statement (quoted in B. F. Leach 1978) of one of White's informants that KAH and Kai-Tahu are the same language.

It is clear from the traditional material that the Kai-Tahu were not the first inhabitants of the South Island. According to B. F. Leach (1978), they did not even arrive in large numbers, but as "overlords" over the indigenous Kaati-Mamoe and Waitaha. In order to determine some of the characteristics of what these people spoke, one may perhaps (a) try to extract from the present sources those features NOT shared with KAH, and (b) try to find sources from outside the area of greatest Kai-Tahu involvement. I want to point to a few features that come to light through method (a). Firstly, the obvious phonological features probably belong in this category: merger of /k/ and /ŋ/ to /k/, [1] corresponding to NI [r], *hoko-* for NI *whaka-* 'causative'. Green (1966:22, 32) wants to connect all of these with his MQ subgroup. However, this is by no means clear-cut, in that (i), as Green (1966:22) himself points out, the merger /k/ and /ŋ/ to /k/ probably occurred in TAH as well, (ii) it is not clear from my data that [1] was any more common than [r], and in any case allophonic variation and its transcription by amateurs can hardly be a very secure basis for conclusions of this sort, and (iii) my data give no instances of *hoko-*. It may be that sources outside the Kai-Tahu area will provide examples, but, even so, a spelling *hoko-* may reflect something very similar to some NI pronunciations of *whaka-* anyway.

The search for non-KAH lexical items suggestive of MQ contact is potentially more fruitful, but material available to me provides only two interesting forms: *kakahu* 'bite' in Watkin (n.d.) corresponds to PMQ *(ŋa)ŋahu* 'bite' given by Green (1966:19) as one of the innovations defining the MQ subgroup. Watkin was somewhat erratic in his writing of 'h'. While he does occasionally write 'h' where NI (and EP) have none, it is always initial, e.g. *hiua* 'nine', *haka* 'shell', and never medial, where he is in fact more likely to omit 'h', e.g. *kaereere* 'forest'. *Muhu* 'grope one's way' may be an exclusively SI word, at least in this meaning, and is reminiscent of MVA *muhumuhu* 'find one's way by smell'.

Pending more work on this, e.g. with sources from outside the Kai-Tahu area, one may perhaps summarize as follows: the SI dialect represented in my material seems to be essentially a close relation of KAH which has adopted some features from a substratum at least one feature of which suggests contact with MQ. Some of these substratum features would be: the merger referred to above (mergers are easily borrowed and spread, cf. Weinreich *et al.* 1968:152 and references therein), possibly lateral pronunciation of EP/1/ (PTA/r/), *hoko-*, if it is SI and represents something quite distinct from *whaka-* in its phonemic structure, *tino* 'body' (cf. NI MAO *tinana* 'body' also in SI; *tino* is present in both TA and MQ subgroups), *kakahu* 'bite'.

Finally concerning MOR, there is little to add to what Green (1966) and Shirres (1977) have said about possible origins and contacts of MOR, and I shall restrict myself to the latter work. Shirres (1977) points out that MOR shares some clear MAO lexical innovations, e.g. *aniniwa* 'rainbow' cf. MAO *aaniwaniwa*, PPN *anuanua*, and *purungehu* 'ashes', MAO *pungarehu* PPN *refu*. One may perhaps add *kekeno* 'seal', *ngaro* 'fly n.', and *matao* 'cold'. It is, however, interesting to note the MOR *ririma* 'hand' is a retention in contrast to MAO *ringa(ringa)*. Shared grammatical innovations are: *te ngaa* (i.e. MOR *ka*) as *singular and plural articles* (shared by HAW), and the n/m contrast in prepositions and possessive constructions (shared by Tongareva and MVA). It is impossible, however, to be sure that all of these bear on the origin of MOR, given that its high shared cognacy with TAR shows that my data are heavily influenced by the historical invasion of the Chathams by TAR speakers last century. The high shared cognacy with KAH and SI tends to support Biggs' (1971:498) suggestion that MOR derives from some SI or eastern NI dialect. My material, however, contains no exclusively shared innovations involving MOR and KAH or MOR and SI. MOR before the TAR invasion may well have had a history not unlike that of SI.

In this section I have reviewed some evidence bearing on contacts (on the exact nature of which — substratum, superstratum, borrowing — we can draw no conclusions) between some MAO dialects and other EP languages and subgroups. By and large there

is relatively little evidence, though some individual items are suggestive. More research, especially on MOR and the non-Kai-Tahu SI, could be very revealing.

6. FUTURE WORK

In this paper, I have tried to summarize what is known about regional variation in MAO and to present and interpret some data of my own. The gaps and deficiencies will have been obvious to all readers, and I hope that this article will go some way towards initiating attempts to fill and correct these.

One of the areas in which research is particularly needed is the collection and ordered presentation of much more thorough and exhaustive data on contemporary variation than have been available to me. Surveys carried out by Richard Benton and his colleagues at the Maori Research Unit of the New Zealand Council for Educational Research show that, although in many areas of the North Island there are relatively few speakers of MAO, there are speakers in virtually all districts. More careful collection of many more and much longer lists, including grammatical information from people known to speak relatively unmixed dialects, is a large but very urgent task.

Less urgent, but nonetheless important, for the study of the development of MAO dialect geography is the critical study of texts known to originate from particular areas, e.g. my limited use of Smith (1913). This applies also to the tracing of any sources from the South Island involving "Kaiapoi" (Skinner 1921) and more especially, areas with less Kai-Tahu involvement than my own sources. Only philological work of this sort can provide information on the dialect situation in New Zealand in earlier times, or bring to light less speculative indications as to prehistory than I have been able to give.

Note

1. The list consists of the standard 200-word list plus the following items which have proved useful in the investigation of PN languages: above, alive, ancestor, below, be born, branch of tree, brother of woman, chop, dive, excreta, fishing line, fly (v), lightning, lizard, moon, mosquito, navel, octopus, outside, oven, paddle, pregnant, have sexual intercourse, shark, speak, thunder, weave, weep.

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