

Kia* and *ki te* Complementation in Maori: An Unaccusative Analysis

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0. Introduction

Previous analyses of the syntax of subordinate clauses in Maori have taken the view that the selection of *kia* versus *ki te* is a function of the stativity or not of the verb of the embedded clause (Hohepa 1969) and of the volitionality/agentivity of the embedded subject (Reedy 1979, Hooper 1982, 1984). Whilst we accept these interpretations as descriptively accurate, our purpose in the present paper is to show how the observed syntactic effects can be accounted for through the use of structures which distinguish between unaccusative and non-unaccusative predicates.

Section 1 provides a basic description of the syntactic characteristics of *kia* and *ki te* clauses. Section 2 outlines the major characteristics of unaccusative constructions which will be relevant for our analysis. Section 3 sets out the analysis of *kia/ki te* complement clauses. Section 4 provides a formal account of the conditions for the presence of Control PRO from a Minimalist perspective.

1. Finite versus nonfinite asymmetries

In this part of the paper, §1.1 gives the basic distinctions between *kia* and *ki te* complements. Section 1.2 outlines the approach that will be taken to basic clause structure in Maori. Section 1.3 presents the initial analysis of the role of unaccusativity in the determination of the complement clause characteristics.

1.1. *Kia* and *ki te* complements

Included in the semantic representation of a sentence is an explicit indication of its predicate-argument relations. Thus, the semantic

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representation of (1) makes it explicit that 'I' is the argument which combines with the predicate phrase *succeed in the test* and not 'somebody' or 'he' or anything else.

(1) I hope to succeed in the test.

In this sense, the meaning of (1) is comparable to the meaning of (2a) and distinct from the meaning of (2b):

- (2) a. I hope that I will succeed in the test.
b. I hope that somebody will succeed in the test.

In (2a) and (2b) the subject argument of *succeed* is overt. Another difference between (1) and (2) is that, whereas in (1) the verb of the subordinate clause is non-finite, in (2) the verb is finite. These characteristic differences in the forms of sentences like (1) and (2) are accounted for through the principles of Case assignment in the Government-Binding framework. The overt subjects in (2) are assigned Nominative Case by the [+tense] inflectional component of their clause. In (3) below the [-tense] Infl head (= I°) cannot Case-mark the subject position and the subject of *succeed* is represented as a non-overt DP 'PRO' in the syntactic representation of the sentence. The 'Control' system of referential coindexing links that subject with the subject of the main clause as shown in (3).

(3) I_i hope [PRO_i [I° to_[-tense]] succeed in the test]

Complement clauses in Maori show a similar type of asymmetry for the absence or presence of the overt DP subject, depending on whether the subordinate clause is introduced by *ki te* or by *kia*.

(4) a. Ka pīrangī ia_i [ki te pōwhiri PRO_i i te manuhiri]
T want he *ki te* greet PRO DO Det guest
'He wanted to greet the guest'

b. *Ka pīrangī ia_i [ki te pōwhiri ngā tamariki i te manuhiri]
T want he *ki te* greet Det children DO Det guest

(5) a. *Ka pīrangī ia_i [kia pōwhiri pro_i i te manuhiri]
T want he *kia* greet pro DO Det guest

b. Ka pīrangī ia_i [kia pōwhiri ngā tamariki i te manuhiri]
T want he *kia* greet Det children DO Det guest
'He wanted the children to greet the guest'

The analysis that is applied to English (1) versus (2) can straightforwardly be applied to Maori (4) versus (5) on the assumption that

ki te introduces a non-finite clause, whereas *kia* introduces a finite clause. At the outset, therefore, we will take the view that *kia* is a [+tense] I° head.¹

A problem for this treatment of the *ki te* versus *kia* contrast shown in (4) and (5) is that it will not work for other examples of embedded clauses introduced by these elements. As has been observed in many discussions of this topic (Hohepa (1969), Chung (1978), Reedy (1979), Bauer (1983, 1993), Hooper (1982, 1984), among others), the availability or not of an overt subject in an embedded clause is a function not only of the elements introducing the clause but also of the class membership of the verb of the embedded clause.

Before however examining the verb class membership characteristics, we will need to establish some details of the elements involved in the structure of the embedded clause.

1.2. Clause structure

Our first assumption about the structure of the Maori clause is that the VSO ordering is obtained by raising of the verb to a position above the VP. The tree structure in (6b) shows the realization of the single clause sentence in (6a).

- (6) a. Kua/kei te/ka kai te tamaiti i te ika.
T/A eat Det child DO Det fish
'The child has eaten/is eating/ate the fish'

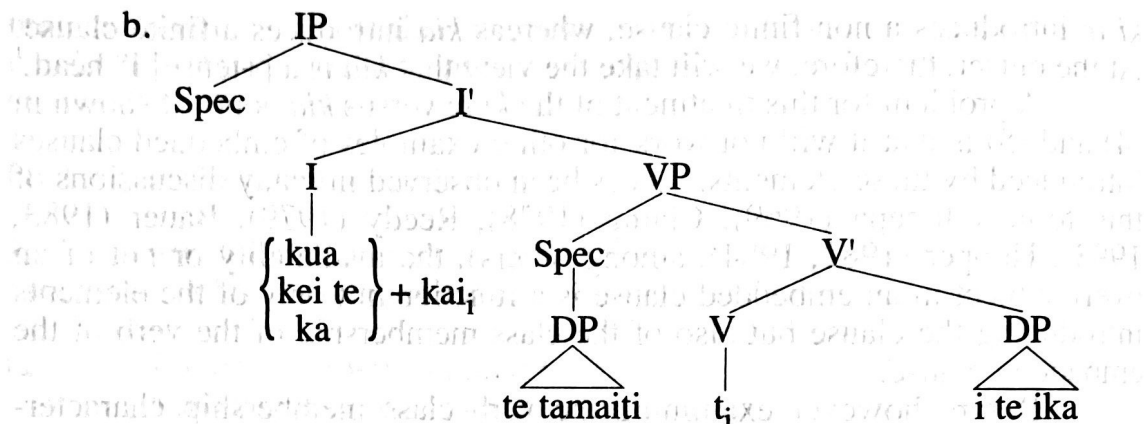
¹ Another comparison between English and Maori that might be considered is the case of the English constructions illustrated in (i) and (ii).

- (i) a. I_i expect [PRO_i to succeed in the test].
b. I expect [them to succeed in the test].
c. I expect [that they will succeed in the test].
- (ii) a. *I_i believe [PRO_i to be a liar].
b. I believe [him to be a liar].
c. I believe [that he is a liar].

Whereas both *expect* and *believe* conform to the pattern established for *hope* in that they have a lexical subject in the embedded tensed clause in (ic) and (iic), the nonfinite complements of these verbs show another pattern in that both allow a lexical subject in a nonfinite clause ((ib) and (iib)).

The question that is raised by examples of the latter type is whether the embedded clause in the Maori construction with *kia*, illustrated in (5), is comparable to the tensed embedded clause of (2) or comparable to the nontensed embedded clauses of (ib) and (iib).

Given, however, that the lexical subject which occurs in (ib) and (iib) is case-marked as an object (*them* versus *they*, for example in (i)), we will take the view that it is not appropriate to treat this construction on a par with Maori (5b), in which the embedded lexical subject is nominative.



The structure (6b) includes an implementation of head-raising: the V° *kia* moves up to attach to a head position above the VP. Given that forms of V° head-movement in other languages may involve movement within IP (as in French: Pollock 1989) or to a C° position external to IP (as in German main clauses: den Besten 1983 and much subsequent work), an alternative analysis of the structure for (6a) might be that the I° head (and possibly also the V° head) are properly located in C° .²

The issue of the precise location of Tense/Aspect elements (in C° or in I°) is a complex one, but it is not an issue which affects the proposals of this paper. Therefore we will leave this question aside and we will continue to assume the basic clause structure as shown in (6b) for embedded clauses as well as for main clauses.³

1.3. The verb of the subordinate clause

Hohepa (1969) shows that one of the distinguishing characteristics of stative and non-stative verbs in Maori is that verbs of the former class occur in *kia* complement clauses but not in clauses introduced by *ki te*. The contrast noted by Hohepa is extended in Bauer (1993:41) who states (Bauer uses the term 'neuter verb' in preference to 'stative verb' used by Hohepa):

' . . . If the verb in the subordinate clause is an experience verb, a neuter verb [. . .], a negative, or a passive, the clause is introduced by kia. If the subordinate clause verb does not fall into one of these categories, the distribution of kia and ki te depends primarily on the identity or otherwise of the subjects of the main and subordinate clause. . . . '

The examples given in (7)–(10) below show the relevant contrasts for the verb classes identified in Bauer (1993).

²This is the structure assumed in Waite (1989, 1990).

³For some arguments in support of this approach see Pearce (1995). Note also that Massam (1995) opts for a C°/I° approach allowing for raising of I° to C° in her treatment of Niuean clauses.

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Experiencer verb: *mōhio*

- (7) a. Ka pīrangi ia {kia } mōhio ki te kōtiro rā. [Bauer 1983 (46)]
 b. { *ki te } [Bauer 1983 (45)]
 T/A want he T/A know P the girl there
 'He wanted to know that girl'

Stative/neuter verb: *mahue*

- (8) a. E pīrangi ana a Moana {kia } mahue i tāna tāne.
 b. { *ki te }
 T/A want T/A Pers Moana T/A left P her male
 'Moana wants her husband to leave her'

Negative verb: *kaua*

- (9) a. Kei te hiahia a Hōne {kia } kaua e poro i te rākau.
 b. { *ki te } [Chung 1978: p.110 (14b)]
 T/A wish Pers Hōne T/A Neg T/A cut P the tree
 'Hōne wishes not to cut down the tree'

Passive

- (10) a. E pīrangi ana a Moana {kia } āwhinatia e tōna whānau.
 b. { *ki te }
 T/A want T/A Pers Moana T/A help-Pass by her family
 'Moana wants to be helped by her family'

For each of the examples in (7)–(10) the understood argument of the subordinate clause is coreferential to the overt subject of the higher verb. When the verb of the subordinate clause occurs as a main clause verb, what was the understood argument in (7)–(10) appears overtly with zero nominative case:

- (11) Kei te mōhio ia ki te kōtiro rā.
 'He knows that girl'
- (12) I mahue a Moana i tāna tāne.
 'Moana was left by her husband'/'Moana's husband left her'
- (13) E kore a Hōne e poro i te rākau.
 'Hōne will never cut down the tree'
- (14) Kei te āwhinatia a Moana e tōna whānau.
 'Moana is helped by her family'

In the examples (11), (12) and (14) the surface nominative argument is the D-structure Theme DP of its verb. Notice, however, that the surface nominative *a Hōne* in (13) is the D-structure subject of the verb *poro* 'cut

down', embedded below the negative. Following the analysis of Hohepa (1969) (and see also Chung 1970 and Waite 1987), negatives in Maori are subject raising stative verbs. What the negatives have in common, therefore, with the verbs of the Experiencer class and with other verbs in the Neuter/Stative class is the absence of a D-structure Agent subject.⁴

Since *kia* introduces the grammatical (a) examples in (7)–(10) and since *kia* is the T/A form which is associated with an overt nominative DP in (5b), we must assume that the nonovert DPs in these examples are Case-marked 'pros'.⁵ Clauses introduced by *ki te*, on the other hand, do not allow overt subjects and their subject arguments are Caseless PROs.

In the analysis that we will develop in this paper, we will show that the *kia/ki te* contrast which has been demonstrated in §1.1 and above receives a unified treatment when it is viewed as an effect of the differing syntactic realizations of unaccusative and non-unaccusative predicates in Maori. In essence, it is our claim that verbs of the types illustrated in (7)–(10) are unaccusatives: their surface nominative subjects (as in (11)–(14)) are derived from their D-structure complement position.

2. Perspectives on the syntax of unaccusatives

Effects of syntactic unaccusativity have been explicitly demonstrated in previous work on aspects of the grammar of Maori: Waite (1994) draws on the unaccusative versus non-unaccusative distinction in accounting for the *o/a* possessive patterns in Determiner Phrases; and Chung, Mason & Milroy (1995) have shown the role of unaccusativity in accounting for the distribution of indefinite *he*-NPs. Whilst Hohepa (1969) is written in a framework which predates the important findings (dating from Perlmutter 1978) as to the role of unaccusativity, this work provides a most valuable demonstration of the major syntactic characteristics of the stative verb class of unaccusatives in Maori. In particular, as noted above in §1.3, Hohepa demonstrates the relevant differences in the use of *kia* and *ki te* for subordinate clauses containing stative versus non-stative verbs. Bauer (1983) shows how Experience verbs have a set of syntactic characteristics which distinguish these verbs from transitive verbs and from most intransitive verbs. Some of the characteristics which Bauer identifies for Experience verbs overlap with those which Hohepa identifies for Stative verbs. In particular, in addition to the availability of *he* nominative subjects

⁴ In earlier generative analyses (such as the classic treatment in Jacobs and Rosenbaum 1968), subject raising verbs had a subordinate clause in their D-structure subject position. In the current treatment, dating back at least to Chomsky (1977), the subordinate clause argument of a subject raising verb is the D-structure Theme argument.

⁵ Further examples are given in the Appendix, where D (6b-f) and (7b-f) show subordinate clauses introduced by *kia* with overt nominative pronoun subjects, contrasting with nonovert subjects (i.e., *pros*) in A (2b-f) and (4b-f).

with both Statives and Experiencers, neither of these classes has a process of object incorporation and both classes have *kia* imperatives, as well as the *kia/ki te* alternation which is the subject of the present paper. Both Stative/Neuter verbs and Experience verbs have the common characteristic that they lack an Agent subject. Under our analysis both of these verb classes, along with Passive verbs, are unaccusatives.

It is not our purpose in the present paper to provide a treatment for all aspects of syntactic unaccusativity in Maori since our analysis will focus simply on accounting for the mechanisms applying to the use of *kia* and *ki te* in subordinate clauses. To this end, an important part of our demonstration is to account for why it is that Maori differs from other languages in distinguishing the forms of subordinate clauses in which unaccusative and non-unaccusative verbs may appear (the effects shown in (7)–(10), contrasting with those in (4) and (5)). As part of our discussion, therefore, it is both useful and necessary to compare the phenomena in Maori with data from other languages.

Our comparative discussion will draw mainly on data from Italian for the following two reasons: (i) the properties of unaccusatives in Italian have been clearly demonstrated in previous work, such as Perlmutter (1979), Rosen (1981), Burzio (1981, 1986), Belletti & Rizzi (1988) and others; and (ii) since Italian does not syntactically distinguish unaccusative verbs for complement clause type, it provides a useful comparative base for our analysis of the *kia/ki te* distinction in Maori. Section 2.1 provides a brief demonstration of how unaccusativity works and §2.2 extends the discussion more specifically to Maori. The comparative account of the *kia/ki te* alternation will be undertaken in Section 3.

2.1. Unaccusatives: syntax and semantics

The term 'unaccusative' as coined by Perlmutter (1978) was a descriptive label applied to classes of constructions, demonstrated in particular for Turkish and Dutch, in which the surface subject is the object rather than the subject of the deep structure/initial representation of the sentence. A more detailed and more recent treatment of the nature of unaccusativity is to be found in Levin and Rappaport Hovav (1995) and further references cited therein.

The essential characteristic of unaccusative constructions is that their nominative subjects have a Theme rather than an Agent role.⁶ The discussion to follow provides a summary of how the unaccusative analysis applies in Italian.

In Italian, the selection of the auxiliary verb in tenses formed with a past participle has been shown to be dependent on whether or not there is an

⁶ The Agent role is crucial also to the interpretations applied to Maori in Hooper (1982, 1984).

Agent role associated with the predicate. In essence, the selected auxiliary is a form of the verb *avere* 'have' in the presence of an Agent and it is *essere* 'be' when no Agent is present. (The outline presented in this section for Italian is based (in updated form) on the analysis of Burzio (1986).)

(15) Marco *ha* telefonato a Maria.
 Marco has telephoned to Maria
 'Marco telephoned Maria'

(16) Marco *è* arrivato a Roma.
 Marco is arrived at Rome
 'Marco arrived in Rome'

In both (15) and (16) the auxiliary verb shows 3PersSg agreement with the subject *Marco*. In both sentences, therefore, Marco is a well-behaved subject of a finite verb. Other facts associated with the constructions in (15) and (16) show that the subjects in these two sentences have distinct syntactic properties.

One of the salient distinctions is their behaviour with respect to *ne*-cliticization. The clitic *ne* is a pro-form standing for a quantified NP. Thus, in (17b) *ne* replaces *libri* in (17a):

(17) a. Maria *ha* comprato tre *libri*.
 'Maria bought three books'
 b. Maria *ne* ha comprati tre.
 'Maria bought three (of them)'

Ne replacement shows contrasting effects for post-verbal subjects in the construction types of (15) and (16):

(18) a. Hanno telefonato tre *studenti*.
 have telephoned three students
 'Three students telephoned'

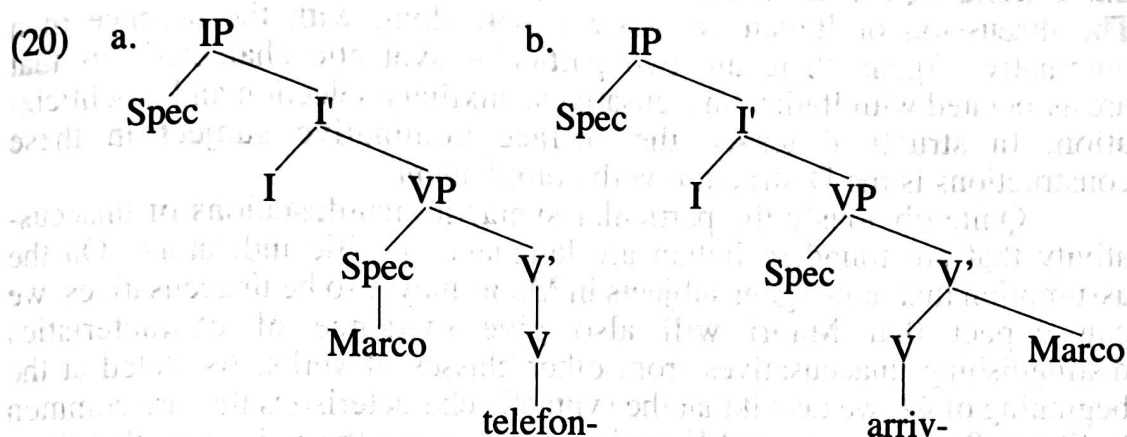
b. Sono arrivati tre *studenti*.
 are arrived three students
 'Three students arrived'

(19) a. **Ne* hanno telefonati tre.
 'Three (of them) telephoned'

b. *Ne* sono arrivati tre.
 'Three (of them) arrived'

In both (18a) and (18b) the finite auxiliary verbs are 3PersPl agreeing with the subject *tre studenti*. Thus, apart from the auxiliary choice, there is no

apparent syntactic distinction between (18a) and (18b) and, in both sentences, *tre studenti* is the surface subject. However, in (19b) we see that the argument associated with *arrivare* 'arrive' behaves exactly like the object in (17b) with respect to *ne*-cliticization. The contrast between (19a) and (19b) shows that the predicates in these two constructions differ not only for auxiliary choice, but also in terms of the syntactic properties of their sole argument. The analysis that has been applied to these constructions is that the Agent argument associated with *telefonare* 'telephone' is a D-structure external argument, whereas the non-Agent argument associated with *arrivare* is a D-structure internal Theme argument. The appropriate D-structure syntactic representations are as shown in (20a) and (20b):



In (20b) *Marco* occupies the position of a direct object and in (20a) *Marco* is in the D-structure 'external' argument position. In the derivation of the surface forms the [Spec, IP] subject position may be filled by the D-structure object when no [Spec, VP] subject is present; otherwise, it is filled by the D-structure [Spec, VP] argument. In this way, in an unaccusative construction the D-structure object (*Marco* in (20b)) becomes the S-structure subject.

Further support for the analysis comes from the fact that the Italian passive construction patterns in the same way as the unaccusative construction:⁷

⁷ The same point applies in the case of the 'impersonal *si*-construction with respect to *ne*-cliticization:

- (i) a. Si leggerà volentieri alcuni articoli.
 SI read-FUT-3SG willingly some articles
 'One will willingly read some articles'
- b. Alcuni articoli si leggeranno volentieri
 some articles SI read-FUT-3PL willingly
 'Some articles will be read willingly'
- c. Se *ne* leggeranno alcuni.
 'Some of them will be read'

- (21) a. Saranno invitati molti esperti.
 be-FUT-3PL invited many experts
 'Many experts will be invited'
- b. *Ne* saranno invitati molti.
 'Many (of them) will be invited'

The passive construction uses the auxiliary verb *essere*. Furthermore, *ne*-cliticization is grammatical as expected, given that the surface subject is the D-structure Theme.

2.2. Extending the unaccusative interpretation

The discussion of Italian has shown that, along with the absence of a nominative Agent, there are two particular syntactic characteristics that are associated with Italian unaccusatives: auxiliary selection and *ne*-cliticization. In structural terms, the surface nominative subject in these constructions is the D-structure verb complement.

Quite obviously the particular syntactic manifestations of unaccusativity that are found in Italian are language specific indicators.⁸ On the assumption that non-Agent subjects in Maori may also be unaccusatives, we can expect that Maori will also give evidence of characteristics distinguishing unaccusatives from other classes of verbs. As stated at the beginning of §2, we take it that the syntactic characteristics that are common to Stative/Neuter verbs and Experiencer verbs are the indicators that these verbs, along with Passives, belong to the class of unaccusatives in Maori.

Both the Stative/Neuter and Experiencer classes of verbs may have a single argument, classified by Reedy (1979) as Patient in the former class and as Patient/Experiencer in the latter class.

In the Stative/Neuter class the canonical two-argument construction has a Cause or Agent second argument preceded by *i*:

- (22) a. Ka mate au i te kore kai. [Hohepa 1969: (38a)]
 T/A die I P Det NEG food
 'I died from lack of food'
- b. I mutu te whare i te tangata. [Hohepa 1969: (15a)]
 T/A complete the house P the man
 'The house was completed by the man'

⁸ The corresponding two indicators are found also in French ('be' auxiliary alternations and *en*-cliticization), but not necessarily in other Romance varieties, e.g. Spanish. Some Germanic languages, including earlier stages of English, have auxiliary alternations.

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- c. Kua mahue ia i te pahi. [Bauer (361)⁹
T/A left he P the bus
'He was left behind by the bus'
- d. Ka hōhā ngā rangatira i tēnā kōrero. [Biggs 1969: 31]
T/A bored the-PL chief P that talk
'The chiefs are bored by that talk'

Whatever the precise nature of the role of the second argument in these examples (Cause or Agent), it is clear that the nominative argument is not an Agent.

In the case of the Experiencer verbs, the second argument in these constructions is a Cause or Goal and, following Bauer (1983),¹⁰ it is usually introduced by *ki*:

- (23) a. I pīrangi a Hata ki te whare. [Bauer 1983: (33)]
T/A want Pers Hata P the house
'Hata wanted the house'
- b. Ka rongo te tangata ki te waiata. [Biggs 1969: 30]
T/A hear the man P the song
'The man hears the song'
- c. Kia maumahara koe ki te rā whānau o tō whaea!
T/A remember you P the day birth of your mother
'Remember your mother's birthday!' [Bauer 1983: (11)]
- d. I tūtaki a Rewi ki ngā tāngata. [Bauer 1983: (83)]
T/A meet Pers Rewi P the people
'Rewi met the people'

Examples from Reedy (1979) indicate that the selection of the marker of the second argument can at least in some cases have a disambiguating function:

- (24) a. Kei te mōhio a Hōne ki te waiata. [Reedy: 264 (72a)]
T/A know Pers Hone T/A sing
'Hone knows how/when to sing'
- b. Kei te mōhio a Hōne ki te waiata rā. [Reedy: 264 (72b)]
T/A know Pers Hone P the song Dem
'Hone knows that song'

⁹ Throughout, 'Bauer (x)' means that 'x' is the example number in Bauer (1993).

¹⁰ Bauer mentions that *kite* 'see' and *rongo* 'hear' can take a second argument preceded by *i*. See also III in the Appendix.

- c. Kei te mōhio a Hōne i te waiata. [Reedy: 264 (71)]
 T/A know Pers Hone P the song
 'Hone knows the song'

The word *waiata* may be either a noun or a verb. In (24a) *waiata* is interpreted as an infinitive verb preceded by *ki te* interpreted as the T/A marker. In (24b) the inclusion of the demonstrative means that *waiata* is unambiguously a noun, so that the infinitive verb interpretation that is applied in (24a) is not available. Thus, if *waiata* is to be interpreted as a noun and if no other indicators of its status as a noun are included, then the marker selected is *i*, as in (24c), rather than *ki*, as in (24b).

In other instances the use of *i* versus *ki* may signal a difference in the interpretation of the predicate. Williams (1971) gives two constructions for *wareware* illustrating the meanings 'forgetful' and 'forgotten':¹¹

- (25) a. I wareware pea koe ki tā tāua kōrero.
 T/A forgetful perhaps you P the our talk
 'Perhaps you are forgetful of our talk'
- b. Ka wareware i a au te ingoa o tēnei wahi.
 T/A forgotten P Pers I the name o that place
 'I have forgotten the name of that place'

On the basis of the semantics alone, the reason for the choice of one or other construction is not obvious.¹² On the assumption that the *ki* versus *i* contrast is a real distinguishing factor, then *wareware* in (25a) is an Experiencer verb, whereas in (25b) it is a Stative verb. Notice that, in the Experiencer construction (25a), the thing that is forgotten is the preposition-marked argument, whereas, in the Stative construction in (25b), the thing that is forgotten is the nominative Theme. The stative construction of (25b) is thus in contrast in this respect with the construction used with the Stative adjective *mataku* 'frightened' in which the thing that is feared (that frightens) is the preposition-marked argument:

- (26) E mataku ana ia i te taniwha. [Bauer (1112)]
 T/A frightened T/A he P the taniwha
 'He is frightened of/by the taniwha'

¹¹ Factors affecting the relative ordering of the two arguments in Stative constructions are not readily identifiable. Bauer (1997: 54) proposes a number of principles affecting constituent order in Maori, including preferences for shorter constituents to precede longer ones and for animates to precede inanimates. Both of these conditions obtain in (26b).

¹² One of our native speaker consultants accepts *wareware* only with the *i*-marked non-Theme argument.

If we are to align the interpretation of (25b) with that for (26), a more literal rendition for (25b) could be: 'The name of that place is forgotten to/by me'. Whereas the *i*-marked arguments with the Stative verbs in (22) and with the Stative adjective in (26) are readily interpreted as Cause arguments, the extension of this interpretation to the *i*-marked argument in (25b) puts another perspective on what may be understood as a Cause argument, here giving more of a Source interpretation.

Although as Bauer (1983) shows there is evidence of some variability in the syntactic characteristics of Experiencer verbs, we will assume that at least some of this variability may be due to semantic shifts or to disambiguating mechanisms. Also we do not wish to claim that such a broad distinction as Stative/Neuter verb versus Experiencer verb would be capable of encapsulating the fine detail of other semantic parameters which may be relevant to the behaviour of these and other verb classes.¹³ For our present purposes, what is of interest is that the Stative/Neuter and Experiencer classes present characteristics in common with the Passives and which place them in the class of syntactic unaccusatives in their failure to have nominative Agent subjects.

3. The syntax of unaccusatives in Maori

3.1. Control PRO

Returning to the *kia/ki te* distinctions for clausal complements shown in (4)/(5) and in (7)–(10), the essential problem that we are addressing is that of identifying the syntax of the interactions between unaccusativity and the availability of a PRO subject. Since *kia* complements are tensed, they are essentially no different from tensed main clauses. With respect to the *ki te* Control PRO structures, we need to work out why it is that unaccusatives in Maori may not occur in Control structures, whereas in other languages they do:

(27) John_i wants [PRO_i to be praised t_i by everyone.]

(28) a. Gianni_i vuole [PRO_i essere lodato t_i da tutti]. [= (39)]

b. Gianni_i vuole [PRO_i piacere t_i a Maria].
Gianni wants to please to Maria
'Gianni wants Maria to like him'

¹³ It is of interest to note that, following the analysis of Belletti and Rizzi (1988), Italian has at least three distinct classes of Experiencer verbs. In all three subclasses, however, it is the non-Experiencer argument which Belletti and Rizzi argue is the Theme of the construction. Only one of the three subclasses exhibits the use of the 'be' auxiliary, typical of other unaccusative types:

(i) La musica è sempre piaciuta a Gianni. [Belletti & Rizzi 1988 (101b)]
the music is always pleased to Gianni
'Music always pleased Gianni'/'Gianni always liked music'

PRO in unaccusatives is not restricted to contexts of Control:

- (29) a. Non è importante [PRO_i essere lodati t_i da tanta gente]
 'It is not important to be praised by so many people'
 b. Non è importante [PRO_i piacere t_i a molta gente]
 'It is not important to be liked by many people'

In both English and Italian a PRO must be interpreted as animate (more specifically, as human, in the absence of Control) and a PRO is licensed in nonfinite clauses in which in parallel tensed clauses it would be the syntactic subject, regardless of its (D-structure) thematic role.

Previous accounts of the use of the Control PRO in Maori (Chung 1978, Reedy 1979, Hooper 1982) have shown that a PRO in a *ki te* clause must be both a syntactic subject and semantic agent. Thus, for Hooper (1982: 37-38) 'the target of the deletion rule [= PRO (P & W)] must be capable of volitional action and [. . .] the subject of neuter verbs, passives and most adjectives are ruled out because they are involuntary experiencers.'

The notion that is represented in these accounts of PRO in Maori is that the availability or not of a Control PRO is semantically driven. However, given our analysis, it is precisely when the parallel tensed clause subject is an unaccusative Theme that the PRO subject possibility is not available. It should therefore be possible to derive the absence of such PROs from the theta-grid of the subordinate clause verb. In other terms, the semantic basis of the volitionality account is by itself non-explanatory when it comes to the treatment of the acceptability of the parallel *kia* complements, such as in the examples given earlier as (10) and (8):

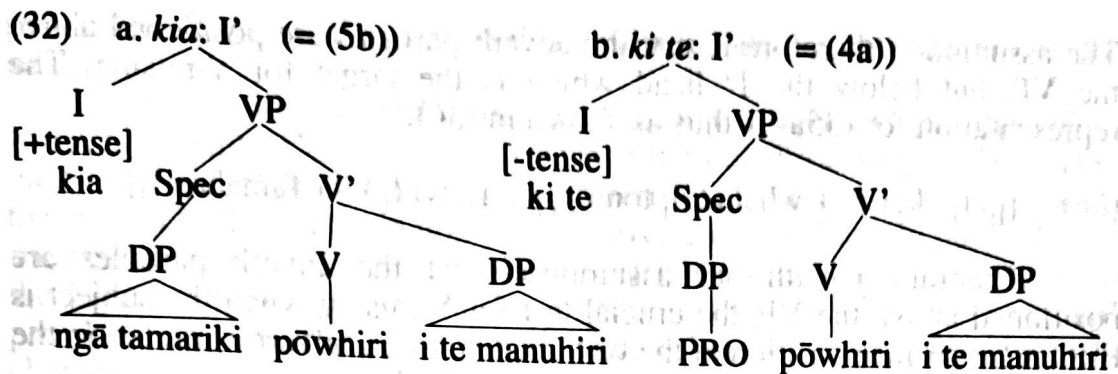
- (30) E pīrangi a Moana kia/*ki te āwhinatia e tōna whānau.
 T/A wish Pers Moana T/A help-Pass by her family
 'Moana wants (that she) be helped by her family'
 (31) E pīrangi a Moana kia/*ki te mahue i tāna tāne.
 T/A wish Pers Moana T/A left P her man
 'Moana wants (that she) be abandoned by her husband'

We therefore turn now to a closer consideration of the syntactic mechanisms which are involved in distinguishing PRO in Maori from PRO in English/ Italian.

3.1. The nonfinite clause in Maori

In our analysis of the *kia/ki te* distinction for subordinate clauses, our first assumption is that the overt DP versus non-overt PRO subject matches with a [+tense]/[-tense] characteristic. Predicates having Agent subjects are thus distinguished as shown in the D-Structure representations:

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According to our discussion in §1.2, the verb of the tensed clause raises to [+tense] I° to derive the surface VSO ordering. We will show that there is evidence for V → I also when I° is [-tense]. In line with the approach of Pollock (1989) and much subsequent work, we base our argument here on the ordering of the verb with respect to the subject and adverb particles.

Maori has a range of adverb particles which intervene between the verb and the subject in tensed clauses. Biggs (1969) identifies the ordering of three classes of such adverb particles as shown in (33).¹⁴

(33) Manner particle — Directional particle — Positional particle

- (34) a. *Kua tae tonu mai nei rātou.* [Biggs 71]
 T/A arrive Intens hither here they
 'They have just arrived here'
- b. *I haehae rawa iho nei rātou.* [Biggs 71]
 T/A slash Intens downwards here they
 'They slashed deeply downwards here'

That the examples in (34) should not be interpreted as involving a form of subject postposing is shown by the fact that the normal ordering of subject and verbal complements is preserved in the presence of adverb particles:

- (35) a. *Kei te whakatoī tonu a Rewi ki a Tamahae.* [Biggs 86]
 T/A tease Intens Pers Rewi P Pers Tamahae
 'Rewi is still teasing Tamahae'
- b. *Ko te hiahia o Kupe, kia tae rawa atu ia ki Aotearoa.* [Biggs 69]
 Top the wish Gen Kupe T/A arrive Intens thither he P Aotearoa
 'It was Kupe's wish to get right to New Zealand'

¹⁴ In Bauer (1993) the term 'Deictic' is used for what Biggs terms 'Positional' in (28). See Mutu-Grigg (1982) for a more detailed analysis of particles and their positioning.

The assumption therefore is that the adverb particles are positioned above the VP, but below the I° head which is the target for V-raising. The representation for (35a) is thus as shown in (36).

- (36) $[_{IP} [_{I'} \text{kei te + whakatoi}_i \text{tonu } [_{VP} \text{a Rewi } t_i \text{ki a Tamahae }]]]$

Continuing with our assumption that the adverb particles are positioned above the VP, the crucial test for V-raising when the subject is PRO is the surface position of the verb relative to the adverb particles. In the case of the Directional particles the evidence is clear:

- (37) a. Ka tonoa e ia ngā hēpara $\left\{ \begin{array}{l} \text{ki te whiu } \textit{mai} \\ * \textit{ki te } \textit{mai} \textit{ whiu } \dots \end{array} \right\}$ i ngā hipi ki te wuruhete. [Bauer (181)]

'The shepherds were ordered by him to chase the sheep to the woolshed'

- b. He tino ātaahua ngā whetū $\left\{ \begin{array}{l} \text{ki te } \textit{titiro } \textit{ake} \\ * \textit{ki te } \textit{ake } \textit{titiro } \dots \end{array} \right\}$ [Bauer (2116), TR2 26]

'The stars were very beautiful to look up at'

It is more difficult to discover examples of Manner particles in *ki te* clauses because these particles have aspectual functions which do not readily occur in nonfinite clauses. However, the following examples have been proposed by our native speaker consultants:

- (38) a. Kei te whakaaro a Hone ki te mahi tonu i tāna pukapuka.
T/A decide Pers Hone T/A work Intens DO his book
'Hone is thinking of continuing to work on his book'
- b. Kei te titiro a Hone ki te whakatū tonu i tōna kāinga ki reira.
T/A look Pers Hone T/A build Intens DO his house P there
'Hone is looking to go on with building his house there'
- c. Kei te whakaaro a Hone ki te whai rawa i a rātou ki te kāinga.
T/A decide Pers Hone T/A follow Intens DO Pers 3Pl P the home
'Hone is thinking of following them home at all costs'

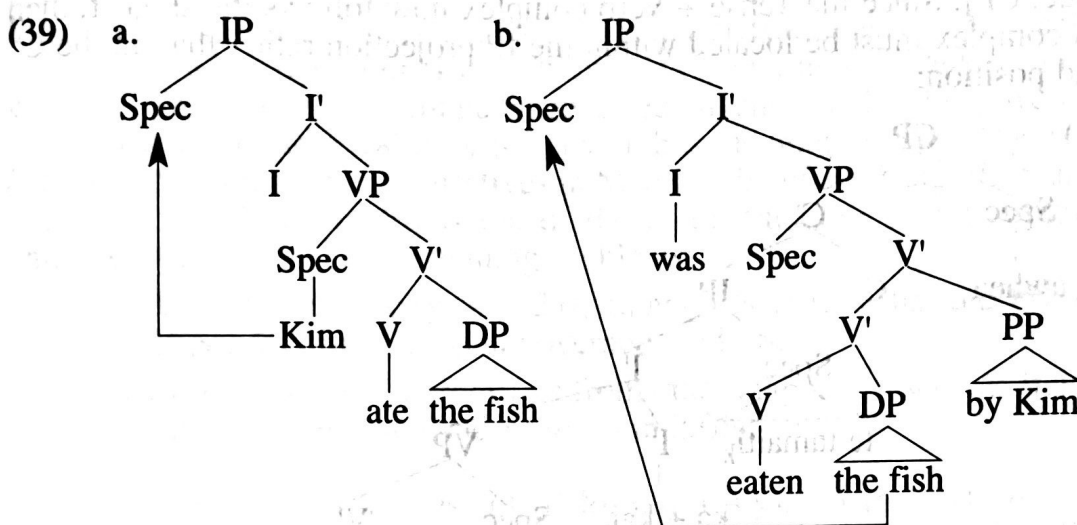
Thus, we show that there are at least two kinds of adverb particles which may follow the verb of a *ki te* clause but which may not precede it. On the basis of this evidence we must conclude that V-raising to I° applies in Maori nonfinite clauses.

3.3. Unaccusative clause structures

The details of our analysis of the contrast between the overt subject in *kia* clauses and the non-overt PRO in *ki te* clauses will be dependent on our interpretation of the prohibition against the use of *ki te* with unaccusative

predicates. The crucial aspect of this analysis concerns the position of the subject.

The essential insight of the unaccusative analysis is that the DP to which nominative Case is assigned is the structural Direct Object (DO). This unaccusative DO then 'takes on' characteristics which are associated with the subject of the clause in non-unaccusative constructions. In particular, in a language in which nominative Case is assigned in a Spec-head relation to the [Spec, IP] position, the raising of the unaccusative DO to [Spec, IP] provides the mechanism for the realization of the surface subject characteristics associated with the unaccusative DO. Such an interpretation applies to the English active/passive contrast in (39a)/(39b).



Under the view that the passive past participle fails to assign structural accusative Case to its complement, this complement, *the fish* in (39b), must raise to [Spec, IP] for Case marking. In the active structure (39a), it is the Agent *Kim* which standardly raises to the [Spec, IP] of the clause.

Our representations of Maori VSO structures have assumed that the active subject of a tensed clause is Case-marked at S-structure in its [Spec,VP] position. Both the [Spec,VP] position and the complement position in the VP are theta-positions. Following the theta-criterion of Chomsky (1981), an argument may not move from one theta-position into another theta-position, even if the target position of such a movement is empty. How then is nominative Case assigned to the argument in the D-structure complement position in Maori?

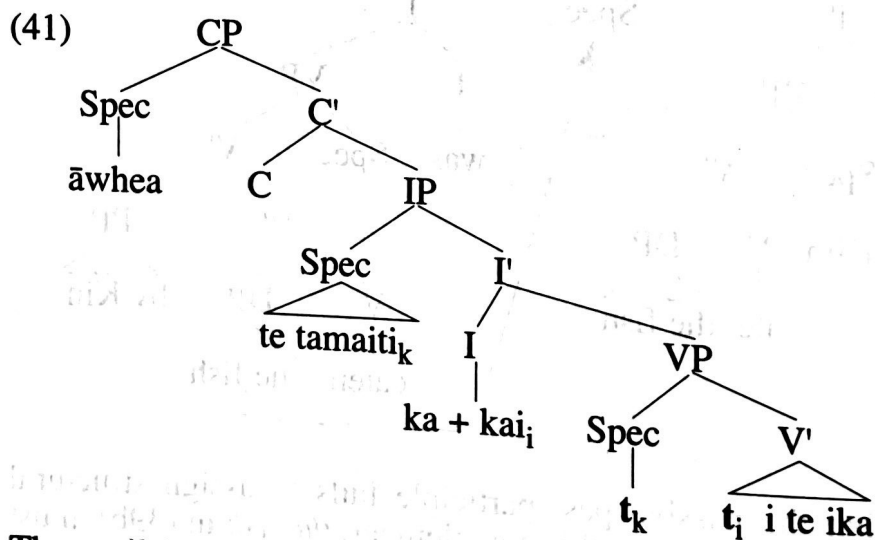
There are two possible alternative mechanisms for the assignment of Nominative Case in the Maori unaccusative construction: (i) Nominative Case is assigned to a position above the VP (but below the adverb particle positions); or (ii) Nominative Case is assigned directly to the complement position when the [Spec,VP] is not filled by an argument.

Two aspects of linear ordering go against the analysis that the surface

subject is raised above the VP as for the (i) alternative. The first is that, as we have just seen, we have no evidence for the raising of the subject since the ordering Verb-Subject-Adverb-Object is unattested. Second, there is a [Spec,IP]-like position to the left of the verb in certain constructions in Maori:

- (40) *Āwhea te tamaiti ka kai i te ika?*
 when Det child T/A eat DO Det fish
 'When will the child eat the fish?'

In (40) *āwhea* as a *wh*-constituent has been preposed to the [Spec, CP] position. The subject *te tamaiti* has been raised to a Spec position below the [Spec, CP]. Since the Tense + Verb complex now follows the subject, then this complex must be located within the IP projection rather than in the C° head position:

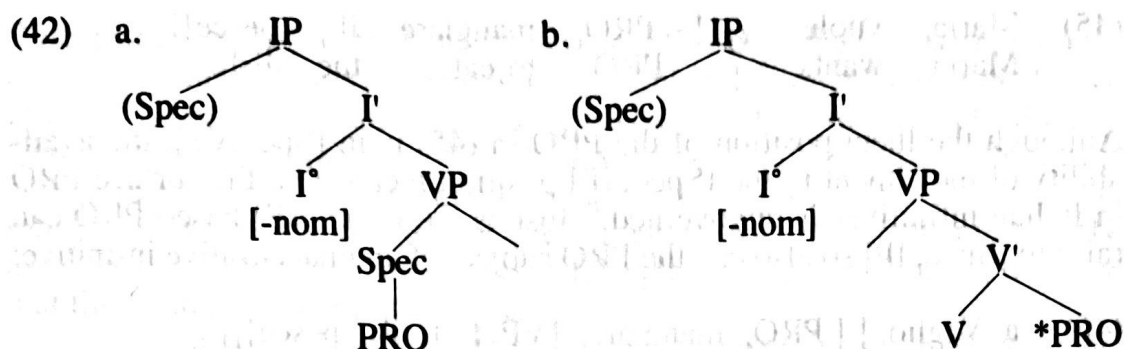


The availability of constructions like that shown for (40)/(41) suggests that, when the subject does raise out of the VP in a simple clause, it raises to a position preceding the T/A nexus rather than to a position following this nexus. We assume that it is this position in Maori which is to be viewed as the equivalent of the [Spec, IP] subject of other languages. We are left with the conclusion that, in the VSO ordering pattern, Nominative Case is assigned VP-internally at S-structure, both in unergative/transitive and in unaccusative constructions, that is, by alternative (ii) above.

If the subject of the tensed clause may be VP-internal, then the first assumption for the nontensed clause is that its subject also is VP-internal. This interpretation leads to the contrasting representations shown in (42a) for non-unaccusatives and (42b) for unaccusatives.¹⁵

¹⁵ For convenience, the structures shown in (42) focus on the status of the [Spec, VP] versus V-sister positions, without reference to the structural position of a second overtly Case-marked argument.

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On the basis of the representations in (42a) and (42b), we conclude that PRO is licit in [Spec,VP] of a nonfinite clause but is illicit in the Theme position. Since the Theme position is standardly a lexically (theta-)governed position and since PRO by definition, from Chomsky (1981), can occur only in a non-governed position, (42b) is immediately ruled out since its PRO is governed.

The ungrammaticality of (42b) and thus the ungrammaticality of the *ki te* construction with unaccusatives in Maori is therefore straightforwardly accounted for. But our discussion of these constructions is not complete until we have solved two remaining problems:

- (i) the grammaticality of (42a), namely: how it is that the PRO in [Spec,VP] in (42a) is ungoverned; and
- (ii) why it is that Maori differs from other languages, such as Italian, in not accepting unaccusatives in infinitives.

The problem in the case of (i) for our analysis of the surface forms corresponding to (42a) is that the verb is raised above the VP where it will be in a c-command relation with the [Spec,VP] position. This structural relation should identify the Spec position as a governed position, given that traces in such Specs conform to the Empty Category Principle for head-government:

- (43) Mary_i seems [_{IP} [_{Spec} t_i] to have eaten the fish]
- (44) a. We consider [_{sc} [_{Spec} them] foolish]
- b. Who_i do we consider [_{sc} [_{Spec} t_i] foolish]?

The trace in (43) is head-governed by *seems* and in (44b) the trace is governed by *consider*. Furthermore, under the assumption that Case is assigned under government, *them* in (44a) is assigned accusative Case under government by *consider*. Because the [Spec,VP] in the surface structure for (42a) will be in a parallel relation with the raised verb, then PRO in this position should be governed and therefore illicit.

The same problem does not arise in Italian Control constructions because the PRO in [Spec, IP] is protected from government by the presence of the CP barrier:

- (45) Maria_i vuole [_{CP} [_{IP} PRO_i mangiare il pesce]].
 Maria wants PRO to-eat the fish

Although the theta-position of the PRO in (45) is in [Spec,VP], the availability of movement to the [Spec, IP] position means that the surface PRO in Italian infinitives is ungoverned.¹⁶ Just as the [Spec,VP] based PRO can raise to [Spec, IP] so also can the PRO subject of an unaccusative infinitive:

- (46) a. Voglio [[PRO_i mangiare_j [VP t_i t_j il pesce]]]
 I-want PRO to-eat the fish
 b. Voglio [[PRO_i arrivare_j [VP t_j t_i alle otto]]]
 I-want PRO to-arrive at eight

Clearly what seems relevant for our analysis of the contrast between Italian and Maori with respect to unaccusative infinitives is precisely the contrast that we have proposed for Maori in the [Spec,VP] versus V-sister positions of the PROs in (42a) and (42b): Italian has a unique position for its PRO subjects, whereas Maori has two distinct positions. Just as we find a straightforward solution to the unavailability of PRO in the Maori unaccusative infinitive, so also do we have a simple solution to the difference in the behaviour of Italian and Maori (problem (ii) above).

However, we still need to determine our answer to (i): how it could be that PRO in [Spec,VP] is ungoverned.

Within the pre-Minimalist version of Government-Binding theory (e.g. Chomsky 1986), we might assume that the VP of a non-tensed clause is a barrier to government (despite the ability of the verb to raise out of the VP). Within the Minimalist theory of Chomsky (1995) we have another approach to treating this problem. Our analysis in §4 takes up this question from a Minimalist perspective.

4. Checking relations in a Minimalist approach

The following notions from the Minimalist framework will be relevant to our discussion of the [Spec,VP] versus Verb complement position:

- (47) (i) Case is assigned in a Spec-head configuration overtly, or covertly.
 (ii) Argument positions are syntactically licensed by functional categories.
 (iii) The relative 'strength' of a feature has effects on overt versus covert syntax.

¹⁶ In effect, note also that, as a consequence of the movement from [Spec,VP] to [Spec, IP], the trace that is left in [Spec,VP] must be governed.

With respect to movement, we understand the overt/covert distinction of (47)(iii) as the difference between movement in PF versus movement only in LF. In these terms, for example, English has overt *wh*-movement, whereas Chinese (Huang 1982) does not. Thus, we infer that, in English, there is a strong feature in the structure (in the C° position) which forces overt movement of a *wh*-constituent. Although a *wh*-feature is universally available, since *wh*-movement fails to take place for PF in Chinese, we infer that this feature is weak in Chinese.

To some extent, at least, the strength of a given feature may be found to correspond to the degree of richness in the relevant overt morphology. Thus, English lacks a rich array of distinctions in its verbal morphology and, as it turns out, the surface ordering of the verb with respect to other elements of the clause in English argues for the absence of overt V-raising. On the other hand, the Italian verbal paradigm has a rich array of inflectional distinctions in its verb paradigms and, correspondingly, the relative surface ordering of the verb with respect to other elements in the tensed clause gives evidence that V-raising applies for PF in Italian (see the discussion in Belletti 1990). In effect, the best evidence for the presence of strong features comes from what can be inferred from the surface placement of elements in different types of constructions. However, it is also very often the case that morphological characteristics can be helpful diagnostic tools, especially in comparisons of finer distinctions in closely related languages (see, for instance, the discussion in Vikner 1995 for parameters of morphological distinctions and movement in Germanic languages).

If we return now to the consideration of the syntax of the subject in Maori, there are two reasons why we may attribute weakness to the features of the checking head or heads relevant for the licensing of the subject argument. First, on the basis of the discussion of the examples (34)–(35) and (40), the linear ordering facts led us to the conclusion that, even in a tensed clause, the subject fails to raise overtly out of the VP in the regular VSO finite clause pattern. Second, the absence of any overt morphology of the subject-verb agreement type provides another kind of support for the weak features analysis.

Nevertheless, putting together (47)(i) and (47)(ii) above, at least at LF, a subject of a tensed clause will raise to the Spec of the head which is responsible for the assignment of nominative Case. Thus, a [+nom] feature is present in the Maori tensed clause, but this feature is weak and so the raising of the subject occurs at LF, rather than for PF.¹⁷ In Italian, by contrast, the [+nom] feature is strong as it induces movement of the subject

¹⁷ For cases of the type shown in (40), where the subject precedes the T/A-Verb sequence, some 'strengthening' factor must be involved. Or else, there is some other mechanism which permits the subject to appear in the pre-verbal position in these cases.

to [Spec, IP] at PF. Our discussion of Italian infinitives suggested that the [-nom] feature is here strong enough to allow for movement at PF: PRO can raise to [Spec, IP]. (We will discuss this further below.)

Now consider the situation for Maori infinitives. Already we have seen that [+nom] in Maori is a weak feature that does not induce raising at PF. There is nevertheless a covert relation between the subject DP and the Spec position in which nominative Case is checked.

In Minimalist theory it is the checking relations which take over from the pre-Minimalist mechanism of government. Chomsky (1995: 374) suggests that, if a relevant checking feature (D feature in this case) is not sufficiently strong, then it could fail to project a Spec.¹⁸ The absence of a Spec for a weak [-nom] head, the head carrying the D features, would lead to the failure of a checking relation for a PRO in [Spec,VP].

Suppose that the D features for Maori are not strong enough to project a Spec when [-nom]. Under such an account, the PRO in [Spec,VP], stranded as it were, is prohibited from entering into an identifying relation with a functional head because of the absence of a Spec projected by the relevant D-feature head. We might suppose that what is special about PRO is that it fails to enter into a checking relation at PF. As a formal statement of this interpretation, we now propose the following anti-licensing condition:

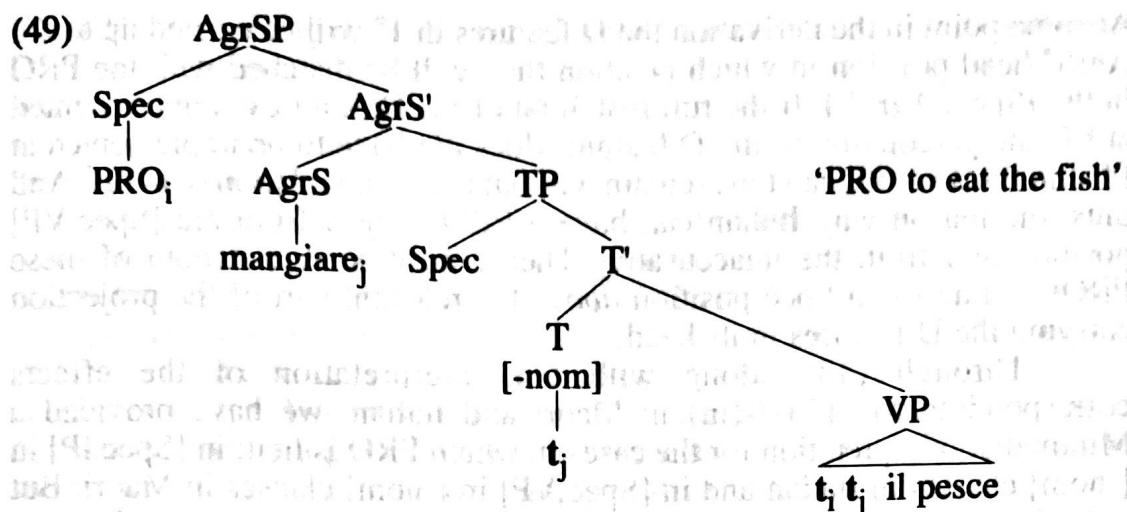
(48) A PRO cannot be in relation with a D features functional head at PF.¹⁹

If we are to suppose that (48) is a general anti-licensing condition for PROs, we will need to see how (48) is contravened by the Theme PRO of an unaccusative in Maori, as in (42b). We will also need to see how, in Italian, a PRO interpretation is available for both a [Spec,VP] based subject of the Maori/Italian contrast, we will continue to work with the notion that the contrast derives from the differing PF positions for PRO: VP-internal in the case of Maori (42a) and (42b); and VP-external in Italian (46a,b). We consider first the Italian case.

On the view, therefore, that the [Spec, IP] position is available for an Italian PRO at PF, a more complete representation of the Italian nonfinite clause, following Belletti (1990), is that given in (49).

¹⁸ D (or N) features are required in the functional structure of the clause for the checking at some level (PF or LF) of a subject argument in fulfillment of the Extended Projection Principle.

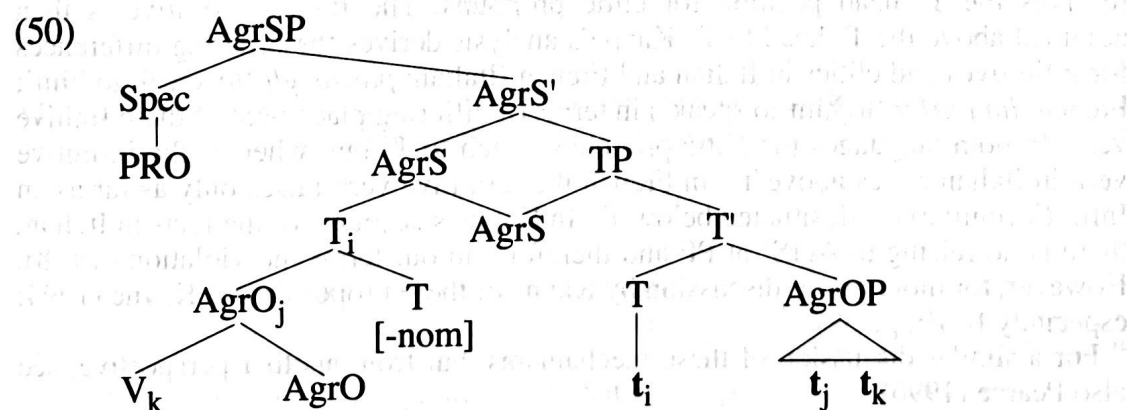
¹⁹ Note, that this account refers to conditions operating at PF. We leave open the details of how the relevant Control binding interpretation will be established at LF.



Belletti (1990) presents evidence that, in Italian, the verb raises all the way up to AgrS° in nonfinite clauses, as well as in finite clauses. The resulting structure, shown in (49), presents a problem for the condition that we have proposed in (48). On the assumption that, in raising up to AgrS°, the verb must pass through T° and on the generally held view that it is T° which is the location of the [+/-nom] feature, the expectation would be that the features of T°, carried up to AgrS° by the verb, would enter into a relation with a PRO in the [Spec, AgrSP] position. In other words, the PRO in the resulting structure would be in a direct Spec-head relation with the D-features associated with the [+/-nom] head, thus, in violation of our (48).

Suppose, however, that the matching of D-features with the relevant DP (PRO in this case) can be held over until LF. That is, the relationship must eventually be implemented, but the matching is not forced for PF. This assumption works in accord with the motivation behind the Extended Projection Principle (see fn. 18), as a means of capturing the interpretation function requiring that the predication of the clause be saturated by an argument.

We now observe that, in the actual configuration that obtains within the AgrS° projection of (49), it is not the [-nom] T° that heads the projection, but rather it is AgrS°:



At some point in the derivation the D features in T° will be carried up to the AgrS° head position in which position they will be matched with the PRO in the [Spec, AgrSP]. If the full matching of the D features is implemented at LF, the percolation of the D features does not have to be implemented at PF and PRO in (50) can thus remain without being in violation of (48).²⁰ And thus, the reason why Italian can have a PRO subject from the [Spec, VP] position and from the unaccusative Theme position is that both of these PROs can access a Spec position *above* the relevant part of the projection carrying the D features in its head.

Through (48), along with our interpretation of the effects corresponding to (47)(i)–(iii) in Maori and Italian, we have provided a Minimalist interpretation for the cases in which PRO is licit: in [Spec, IP] in [-nom] clauses in Italian and in [Spec, VP] in [-nom] clauses in Maori. But note that, since we have put aside the notion of government and thus our initial explanation of the ungrammaticality of the PRO in the verb complement position, we now need to see how to treat the Maori unaccusative *PRO within the same system of mechanisms by which we have accounted for the grammatical PROs.

Whilst the Minimalist framework presents Spec-head relations as necessary for overt/covert Case checking (and for other licensing mechanisms too), the theory also allows for other configurational relations, some of which are implicated in movement and others which may not be. In particular, XPs can link up with Spec positions through raising (for feature checking) and head-to-head relations are also implemented through raising. Both of these kinds of relations lead to the formation of syntactic chains. A third kind of syntactic relation is that between a head and its complement.²¹

Within this system of available syntactic relations, we have the means to establish a relation between the [-nom] weak D feature and the complement of the verb. The PRO in the complement position has access to the D feature through its relation with the V° at the foot of the head-chain.

²⁰ In another analysis of the placement of the infinitive verb in Italian, Kayne (1991) reserves the T° head position for clitic pronouns. The Italian infinitive is then adjoined above the T° head to T' . Kayne's analysis derives the ordering differences for infinitives and clitics in Italian and French (Italian: *parlar-gli* 'to speak-to him'; French: *lui parler* 'to him-to speak') in terms of differing placement of the infinitive verb. In both languages the clitic pronouns attach to T° but, whereas the infinitive verb in Italian raises above T° , in French the infinitive verb raises only as far as an Infn° (infinitive) head, situated below T° . In Kayne's accounts of the facts in Italian, there is no raising to AgrS° at PF and therefore, in our terms, no violation of (48). However, for more recent discussion by Kayne of these proposals, see Kayne (1994), especially fn.19, p.139.

²¹ For a similar discussion of these mechanisms, but from another perspective, see also Pearce (1996).

formed by the raising of the V° to I° . In effect the D° head of the complement DP is the head immediately below the V° foot and we assume that this D° and the V° are necessarily in a head-to-head relation, even though no overt movement is implicated for this configuration. By this account, the *PRO in the complement position is ruled out by (48).

Although we cannot undertake here a broader survey to investigate how (48) would apply in a variety of languages, it is easy to see that English, which has [Spec, IP] subjects and which lacks V-raising even in finite clauses, will fall into the general pattern described for Italian: the English PRO will be above the T° carrying the D features. Our prediction for VSO languages is that those with characteristics like Maori (in particular, those don't make use of a position for overt subjects above the VP) should also show the [Spec,VP] versus unaccusative Theme divide for the presence/absence of PRO.

In effect, as Maria Bittner (personal communication) points out, Bittner and Hale (1996) make a similar prediction within their theory of Case assignment for the [Spec,VP] versus unaccusative Theme divide for Acehnese.²² The empirical characterization is that unaccusative Themes in Acehnese have morphological accusative Case in finite clauses from a VP-internal mechanism. In nonfinite clauses, the application of the same Case assignment mechanism gives the result that Acehnese lacks the ability to have a Control PRO in unaccusative clauses. Non-unaccusative subjects (nominative in tensed clauses) may occur as PROs accompanied by an uninflected verb. The Acehnese data in (51) is given in Bittner and Hale (1996: (77)) from Durie (1985, 1987).

- (51) a. Gopnyan geu-tém [____ (*geu-)taguen bu]. (transitive)
 he(NOM)_i 3SG_i-want PRO_i (*3SG_i-)cook rice
 'He wants to cook rice.'
- b. *Gopnyan geu-tém [____ rhët]. (unaccusative)
 he(NOM)_i 3SG_i-want PRO_i fall
 ('He wants to fall')
- c. Gopnyan geu-tém [____ (*geu-)jak]. (unergative)
 he(NOM)_i 3SG_i-want PRO_i (*3SG_i-)go
 'He wants to go'

The subjects of the embedded verbs in (51a) and (51c) are nominative when occurring in a finite clause, whereas the unaccusative Theme argument in

²² The Bittner and Hale (1996) Case assignment theory depends on relations of government in surface representations. In the present analysis we have adopted the Minimalist Spec-head theory of Case checking which allows for overt and covert relations, a quite different approach from that developed in Bittner and Hale.

the embedded clause has accusative case in a tensed finite clause. For us, the similarity with respect to the Control PRO divide in Maori and Acehnese is that both languages have in situ PF Case realization for their unaccusative Themes.²³ Whereas Bittner and Hale define the Acehnese accusative Case in terms of a relation between the complement with a verb having a D feature, our characterization of the unaccusative nominative in Maori is that the complement is also in relation with the verb, the verb accessing the D feature in T° through chain formation.

The other side of the coin of the predictions that fall out from our (48) is that a VSO language which has Control PRO unaccusatives projects a Spec position for subjects above the VP at PF. Such a position could be manifested in agreement morphology on the verb; or by differing constituent ordering possibilities for main clauses and embedded clauses, as in the Irish cases discussed in Chung and McCloskey (1987).

5. Conclusion

Whilst previous accounts of complement clauses in Maori (Hohepa 1969, Reedy 1979, Hooper 1982, Bauer 1983, 1993) have shown that the presence/absence of an Agent subject is relevant in distinguishing between *ki te* versus *kia* complement clauses, our present discussion has shown how the contrasting effects fall out from the syntactic realizations of argument positions in the clause.

The lexical semantics (including agentivity characteristics) are responsible for the placement of arguments in particular configurational positions within the VP. The arguments themselves have formal characteristics marking distinctions between, for example, a non-lexical PRO and a full lexical DP. In our analysis in §4 we have shown how the highly constrained system of mechanisms in the Minimalist framework provides the means of accounting for surface differences in the availability of Control PRO subjects in Maori and Italian. We have shown that the surface differences are driven, not by language-specific stipulations as to the role of agentivity, but that they fall out from broader syntactic distinctions between Maori as a VSO language with surface VP-internal subjects and Italian as an SVO language allowing for surface VP-external subjects.

The Appendix which follows this discussion sets out examples in paradigms illustrating characteristic differences in the behaviour of unaccusative versus non-unaccusative verbs as they apply in classes of subordinate clauses and the Actor Emphatic construction. The subordinate clause classes show that purpose clauses introduced by *hei* (I.B(3)) pattern with nonfinite *ki te* clauses (I.A(1)); whereas purpose clauses introduced by

²³ Durie (1985: 190) describes the pre-verb argument position in Acehnese as a 'Core Topic' position rather than as a subject position (the basic constituent orderings are V-initial or #Topic - V ...).

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kia (I.B(4)) are comparable to complement clauses introduced also by *kia*. Both the purpose and complement *kia* clause can include an overt pronoun subject coreferential or not with the main clause subject (II.D (6) and (7)). The data in I.C (5) provide paradigms for the Actor Emphatic construction introduced by *mā*. This construction is of interest in that it shows differing constituent ordering patterns for unaccusative versus non-unaccusative verbs. For some discussion and analysis of this construction, see Waite (1990) and Bauer (1997: 501-514). The Actor Emphatic construction has a number of intriguing characteristics. It would clearly be of interest to see how this construction could be accounted for in the terms of the present analysis. This and other issues we leave for future work.

Appendix

We are most grateful to Timoti Karetu for his judgments on the paradigm sets of this Appendix.

I. The paradigms in A–C show systematic syntactic distinctions between *āwhina* ‘help’, a clearly transitive verb with an Agent subject, versus the unaccusative verbs in the (b) - (f) examples.

A. Complement clause: *ki te* versus *kia*

(1) a. E pīrangī ana a Moana ki te āwhina i tōna whānau.
‘Moana wants to help her family’

b. *E pīrangī ana a Moana ki te āwhinatia e tōna whānau.
‘to be helped by her family’

c. *E pīrangī ana a Moana ki te rite ki tōna whaea.
‘to be like her mother’

d. *E pīrangī ana a Moana ki te pai ki tāna whaiāipo.
‘to please her lover’

e. *E pīrangī ana a Moana ki te mōhio ki tōna koroua.
‘to know her elder’

f. *E pīrangī ana a Moana ki te mahue i tāna tāne.
‘to be abandoned by her husband’

(2) a. *E pīrangī ana a Moana kia āwhina i tōna whānau.

b. E pīrangī ana a Moana kia āwhinatia e tōna whānau.

c. E pīrangī ana a Moana kia rite ki tōna whaea.

d. E pīrangī ana a Moana kia pai ki tāna whaiāipo.

e. E pīrangī ana a Moana kia mōhio ki tōna koroua.

f. E pīrangī ana a Moana kia mahue i tāna tāne.

B. Purpose clause: *hei* versus *kia* . . . *ai*

- (3) a. Ka noho atu a Moana ki tōna anō iwi hei āwhina i tōna whānau.
'Moana stayed at her iwi to help her family'
- b. *Ka noho atu a Moana ki tōna anō iwi hei āwhinatia e tōna whānau.
- c. *Ka noho atu a Moana ki tōna anō iwi hei rite ki tōna whaea.
- d. *Ka noho atu a Moana ki tōna anō iwi hei pai ki tāna whaiāipo.
- e. *Ka noho atu a Moana ki tōna anō iwi hei mōhio ki tōna koroua.
- f. *Ka noho atu a Moana ki tōna anō iwi hei mahue i tāna tāne.
- (4) a. *I pēneitia e Moana, *kia* āwhina ai i tōna whānau.
'Moana acted in this way so as to help her family'
- b. I pēneitia e Moana, *kia* āwhinatia ai e tōna whānau.
- c. I pēneitia e Moana, *kia* rite ai ki tōna whaea.
- d. I pēneitia e Moana, *kia* pai ai ki tāna whaiāipo.
- e. I pēneitia e Moana, *kia* mōhio ai ki tōna koroua.
- f. I pēneitia e Moana, *kia* mahue ai i tāna tāne.

C. Actor emphatic introduced by *mā*

- (5) a. *Mā* Moana e āwhina tōna whānau. / *Mā* Moana tōna whānau e āwhina.
'Moana will help her family'
- b. —
- c. **Mā* Moana e rite tōna whaea. / **Mā* Moana tōna whaea e rite.
- d. **Mā* Moana e pai tāna whaiāipo. / **Mā* Moana tāna whaiāipo e pai.
- e. **Mā* Moana e mōhio tōna koroua. / **Mā* Moana tōna koroua e mōhio.
- f. **Mā* Moana e mahue tāna tāne. / **Mā* Moana tāna tāne e mahue.

II. Both verb classes admit an overt pronoun subject in the two kinds of *kia* clauses, complement and purpose. The pronoun may be interpreted as coreferential or not with the main clause subject.

D. Complement clause: *kia*

- (6) a. E pīrangi ana a Moana, *kia* āwhina ia_i/j i tōna whānau.
'Moana wants that she/he help her family'
- b. E pīrangi ana a Moana, *kia* āwhinatia ia_i/j e tōna whānau.

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- c. E pīrangī ana a Moana_i kia rite ia_{i/j} ki tōna whaea.
- d. E pīrangī ana a Moana_i kia pai ia_{i/j} ki tāna whaiāipo.
- e. E pīrangī ana a Moana_i kia mōhio ia_{i/j} ki tōna koroua.
- f. E pīrangī ana a Moana_i kia mahue ia_{i/j} i tāna tāne.

E. Purpose clause: *kia . . . ai*

- (7) a. I pēneitia e Moana_i, kia āwhina ai ia_{i/j} i tōna whānau.
'Moana acted in this way so that he/she could help her family'
- b. I pēneitia e Moana_i, kia āwhinatia ai ia_{i/j} e tōna whānau.
- c. I pēneitia e Moana_{iv}, kia rite ai ia_{i/j} ki tōna whaea.
- d. I pēneitia e Moana_i, kia pai ai ia_{i/j} ki tāna whaiāipo.
- e. I pēneitia e Moana_i, kia mōhio ai ia_{i/j} ki tōna koroua.
- f. I pēneitia e Moana_i, kia mahue ai ia_{i/j} i tāna tāne.

III. The verb *rongo* 'hear' patterns as an unaccusative, except in purpose clauses. Our analysis of this distribution is that *rongo* has a secondary interpretation 'listen to' (transitive-agentive) and that this interpretation is activated when *rongo* occurs in a clause which is unambiguously a purpose clause.

- (1)g. *E pīrangī ana a Moana ki te rongo i ēnei kōrero.
to hear these speeches'
- (2)g. E pīrangī ana a Moana kia rongo i ēnei kōrero.
- (3)g. Ka noho atu a Moana ki tōna anō iwi hei rongo i ēnei kōrero.
- (4)g. I pēneitia e Moana, kia rongo ai i ēnei kōrero.
- (5)g. *Mā Moana e rongo ēnei kōrero. / *Mā Moana ēnei kōrero e rongo.
- (6)g. E pīrangī ana a Moana_i kia rongo ia_{i/j} i ēnei kōrero.
- (7)g. I pēneitia e Moana_i, kia rongo ai ia_{i/j} i ēnei kōrero.
- (8)g. I haere mai a Moana ki konei rongo ai i ēnei kōrero.

IV. The complement clauses in the following lack a Tense/Aspect marker and they have a reason (or purpose) interpretation. These constructions are grammatical across all the classes except for the Stative/Neuter class. In (8d) *pai* is grammatical with the agentive interpretation 'treat well'.

- (8) a. I haere mai a Moana ki konei āwhina ai i tōna whānau.
'Moana came here to help her family'

- b. I haere mai a Moana ki konei āwhinatia ai e tōna whānau.
 c. *I haere mai a Moana ki konei rite ai ki tōna whaea.
 d. I haere mai a Moana ki konei pai ai ki tāna whaiāipo. [pai = 'treat well']
 e. I haere mai a Moana ki konei mōhio ai ki tōna koroua.
 f. ?*I haere mai a Moana ki konei mahue ai i tāna tāne.

References

- Bauer, Winifred 1983. 'Experience verbs in Māori,' *Te Reo*, 26: 3-28.
 Bauer, Winifred 1993. (with William Parker and Te Kareongawai Evans) *Maori*. London & New York: Routledge.
 Bauer, Winifred 1997. (with William Parker, Te Kareongawai Evans and Te Aroha Noti Teepa) *The Reed Reference Grammar of Māori*. Auckland: Reed.
 Belletti, Adriana 1990. *Generalized Verb Movement*, Turin: Rosenberg & Sellier.
 Belletti, Adriana, and Luigi Rizzi 1988. 'Psych-verbs and θ -theory'. *Natural Language and Linguistic Theory*, 6: 291-352.
 Besten, Hans den 1983. 'On the interaction of root transformations and lexical deletion rules,' *On the Formal Syntax of the Westgermania*, ed. by W. Abraham. Amsterdam: John Benjamins.
 Biggs, Bruce 1969. *Let's Learn Maori*. Revised 1973. n.p.: Reed Books.
 Bittner, Maria, and Ken Hale 1996. 'The structural determination of case and agreement,' *Linguistic Inquiry*, 27: 1-68.
 Burzio, Luigi 1981. *Intransitive Verbs and Italian Auxiliaries*. PhD thesis, MIT.
 Burzio, Luigi 1986. *Italian Syntax: A Government-Binding Approach*. Dordrecht: Kluwer.
 Chomsky, Noam 1977. 'On Wh-Movement,' *Formal Syntax*, ed. by Peter W. Culicover et al. New York: Academic Press. pp. 71-132.
 Chomsky, Noam 1986. *Barriers*. Cambridge, Mass: MIT Press.
 Chomsky, Noam 1995. *The Minimalist Program*. Cambridge, Mass: MIT Press.
 Chung, Sandra. 1970. 'Negative verbs in Polynesian,' Ms. Harvard University.
 Chung, Sandra 1978. *Case marking and Grammatical Relations in Polynesian*. Austin: University of Texas Press.
 Chung, Sandra, Te Haumihiata Mason, & J.W. Milroy 1995. 'On Maori *he* and the uses of indefinites,' *The Journal of the Polynesian Society*, 104: 429-459.
 Chung, Sandra, and James McCloskey 1987. 'Government, Barriers, and Small Clauses in Irish,' *Linguistic Inquiry*, 18: 173-237.
 Durie, Mark 1985. *A Grammar of Acehnese on the Basis of a Dialect of North Aceh*. Dordrecht: Foris.
 Durie, Mark 1987. 'Grammatical relations in Acehnese,' *Studies in Language*, 11: 365-399.
 Hohepa, Patrick W. 1969. 'Not in English and *kore* and *eehara* in Maori,' *Te Reo*, 1: 1-34.
 Hooper, Robin 1982. *Neuter Verbs and Stative Aspect in Polynesian*. MA thesis, Auckland University.
 Hooper, Robin 1984. 'Neuter verbs, stative aspect, and the expression of agency in Polynesian,' *The Journal of the Polynesian Society*, 93: 39-70.

Kia and ki te Complementation in Maori: An Accusative Analysis

- Huang, C.-T. James 1982. *Logical Relations in Chinese and the Theory of Grammar*. PhD thesis, MIT.
- Jacobs, Roderick A., and Peter S. Rosenbaum 1968. *English Transformational Grammar*. Waltham, Mass.: Xerox College Publications.
- Kayne, Richard S. 1991. 'Romance clitics, verb movement, and PRO,' *Linguistic Inquiry*, 22: 647-686.
- Kayne, Richard S. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Levin, Beth, and Malka Rappaport Hovav 1995. *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
- Massam, Diane 1995. 'Case and clause structure in Niuean,' *Toronto Working Papers in Linguistics*, 14: 83-102.
- Mutu-Grigg, Margaret 1982. *The Manner Particles 'rawa', 'tonu', 'noa', 'kee' and 'kau' in Maori*. MPhil thesis, Auckland University.
- Pearce, Elizabeth 1995. 'Operator binding and the syntax of negation in Maori,' Ms. Victoria University of Wellington. [To appear: *Negation and Polarity: Syntax and Semantics*, ed. by Danielle Forget et al, 271-288. Amsterdam: Benjamins, 1997]
- Pearce, Elizabeth 1996. 'DP licensing and Spec roles in Maori,' Ms. Victoria University of Wellington. [Presented at AFLA III, UCLA].
- Perlmutter, David 1978. 'Impersonal passives and the Unaccusative hypothesis,' *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*. ed. by J.J. Jaeger et al, 157-189. Berkeley: Berkeley Linguistics Society, University of California, Berkeley.
- Perlmutter, David 1979. 'Working 1s and Inversion in Italian, Japanese, and Quechua'. *Proceedings of the Fifth Annual Meeting of the Berkeley Linguistics Society*. ed. by Christine Chiarello et al, 277-324. Berkeley: Berkeley Linguistics Society, University of California, Berkeley.
- Pollock, Jean-Yves 1989. 'Verb movement, Universal Grammar and the structure of IP,' *Linguistic Inquiry*, 20: 365-424.
- Reedy, Tamati M. 1979. *Complex Sentence Formation in Maori*. PhD thesis, University of Hawaii.
- Rosen, Carol 1981. *The Relational Structure of Reflexive Clauses: Evidence from Italian*. PhD thesis, Harvard University.
- Vikner, Sten 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. New York: Oxford University Press.
- Waite, Jeffrey. 1987. 'Negatives in Maori: a lexical-functional approach,' *Te Reo*, 30: 79-100.
- Waite, Jeffrey. 1989. 'Tough- and Pretty-movement in Maori,' *Te Reo*, 32: 61-94.
- Waite, Jeffrey 1990. 'Another look at the Actor Emphatic,' *The Journal of the Polynesian Society*, 99: 395-413.
- Waite, Jeffrey 1994. 'Determiner phrases in Maori,' *Te Reo*, 37: 55-70.
- Williams, H.W. 1971. *A Dictionary of the Maori Language*. Seventh Edition. Wellington: Government Printer.