

# Preverbal Determiners and the Passive in Moriori

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This paper examines the curious occurrence of preverbal determiners in Moriori (Chatham Islands), which are best analyzed as passive markers. In some Moriori sentences, a determiner is found following the clause-initial tense/aspect particle and preceding the verb. Examining the morphological markings of the arguments in these sentences shows that the verb is in the passive form, though without the usual *-Cia* passive suffix. This paper demonstrates that preverbal determiners mark a passive verb, and are in complementary distribution with the standard passive suffix. Previous analyses for preverbal determiners, including being part of continuous aspect particle or introducing a nominalized verb, are ruled out. Preverbal determiners which identify a verb as passive are not found in any other Polynesian language, making this construction unique.

**Keywords:** Moriori; Māori Passive; *-Cia* Suffix

**1. INTRODUCTION.**<sup>1</sup> The Moriori are the indigenous people of Rēkohu, the Chatham Islands, which lie 750 km east of New Zealand. Their eponymous language belongs to the Polynesian family and has no L1 speakers.<sup>2</sup> Historic data from the language exist in only three sources: a petition to the New Zealand Governor George Grey (1862), which predominantly comprises of a list of Moriori names,<sup>3</sup> a small dictionary of Moriori words and their Māori and English equivalents compiled by Samuel Deighton, a magistrate on the Chatham Islands between 1873 and 1891, and a book of narratives which contains stories and cultural information translated into both Māori and English, collected by Alexander Shand (1911). Moriori is related to but independent from Māori (Williams 1919; Clark 1994; Richards 2001), with many syntactic

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2. While there are no first language speakers, Moriori is beginning to be heard again, due to the efforts of the Hokotehi Moriori Trust. Modern collections of songs, chants, and short stories have been assembled.

3. Some prose occurs in the 1862 petition which is yet to be linguistically glossed (Richards 2001).

differences in the language including complementizers, pronoun uses, and argument morphology (Williams 1919).

Moriori exhibits a unique pattern of preverbal particles, which take the shape of a definite singular determiner. Moriori preverbal determiners directly follow a tense/aspect (TA) particle (example (1)).<sup>4</sup>

- (1) *A preverbal determiner following the TA particle* (Shand 1911:64)

Ka **te** kotī ta upoko?

TA DEF cut DEF head

‘Did you cut off the head?’

Preverbal determiner constructions are rare, but are found across several texts in Shand (1911). Preverbal determiners occur in several different sentence types, including declaratives (example (2)), interrogatives (example (3)), and subordinate clauses (example (4)),<sup>5</sup> and are found with a variety of different verbs.

- (2) *Declarative sentence with preverbal determiner* (Shand 1911:63)

U-u, ka **tch** huri e maū ko ro’ tā pari.

yes TA DEF turn AG 1DU.EXCL to over DEF cliff

‘Yes, we threw him down over the cliffs.’

- (3) *Interrogative sentence with preverbal determiner* (Shand 1911:64)

Ka **te** mot’(u) te manaw’(a)?

TA DEF sever DEF heart

‘Did you cut off the heart?’

- (4) *Subordinate clause with preverbal determiner* (Shand 1911:35)

Ekore i **tē** tarei ta iho o ta tatau rakau ke tika.

NEG TA DEF sculpt DEF core of DEF 1PL.INCL tree COMP straight

‘We cannot manage to chip the heart of our tree to make it straight.’

There are five potential analyses of preverbal determiners, which are outlined below using the example from (1). Clark (1994) suggests two hypotheses for preverbal determiners. First, he proposes preverbal determiners are part of a continuous aspect particle, similar to the *kei te* particle in Māori. This would mean both the preceding particle and the determiner form one single unit that marks durative aspect (example (5a)). Clark’s second hypothesis is that the

4. All of the data in this paper come from Shand (1911) and was glossed with the help of a Māori language consultant and the Māori dictionary (Moorfield 2011) due to the similarities between the languages. The English glosses are obtained from the English translation given by Shand. These are not always word for word, nor are the syntactic structures consistently identical in both the Moriori data and the English gloss. Therefore, the English translations must be viewed with caution. The use of breves (as seen in (1)) are found throughout the text, but are assumed to be macrons. The breve forms have been retained in this paper for data accuracy. No explanation for the use of breves is found in Shand (1911). Abbreviations follow the Leipzig Glossing Rules where these apply. Additional abbreviations used in glosses: AG, passive agent preposition; CONJ, conjunction; CONT, continuous; DIR, directional particle; INT, intensifier; PERS, person article; STAT.AG, stative agent marker; TA, tense/aspect particle.

5. Chung (1978, 2021) argues negatives in Māori are higher predicates which take subordinate clauses; it is assumed the same occurs in Moriori.

determiner introduces a nominalized verb (example (5b)). Another possibility is that the determiner and preceding particle are a single complementizer, similar to the Māori *ki te* complementizer, which introduces infinitive verbs (example (5c)). It could also be proposed that preverbal determiners are a form of preverbal pronoun which are common in some Polynesian languages (example (5d)).

All these hypotheses are ruled out in this paper. Instead, it is demonstrated that the preverbal determiner is a passive particle which marks the verb as passive without the need for a passive suffix (example (5e)). This is a unique situation in Polynesian languages, where only suffixes have been recorded for passivization (Clark 1976; Sanders 1991).

(5) *Possible analyses of Moriori preverbal determiners*

- a. *A continuous aspect particle* (Clark 1994)

**Ka te** kotī ta upoko?

TA.CONT cut DEF head

- b. *A verb nominalizer* (Clark 1994)

**Ka te kotī** ta upoko?

TOP DEF cut-NMLZ DEF head

- c. *A complementizer that introduces an infinitive verb*

**Ka te** kotī ta upoko?

COMP cut DEF head

- d. *A subject pronoun*

**Ka te** kotī ta upoko?

TA 2PL cut DEF head

- e. *A passive particle* (this paper)

**Ka te** kotī ta upoko?

TA PASS cut DEF head

This paper is ordered as follows: Section 2 provides a brief overview of Moriori morphosyntax. In section 3, passivization in Moriori is described, and an analysis that preverbal determiners are passive markers is presented. This will be achieved by demonstrating standard passivization parallels exactly with preverbal determiner constructions. In section 4, it is demonstrated that preverbal determiners are not part of a continuous aspect TA marker, while in section 5, evidence is provided that the preverbal determiners do not introduce a nominalized verb. In section 6, the possibility that preverbal determiners are part of a complementizer, equivalent to the Māori *ki te*, is ruled out. Section 7 demonstrates the similarities between preverbal determiners and preverbal pronouns found in other Polynesian languages, but rules out syntactic equivalence. Section 8 concludes. The data are Moriori, unless otherwise marked.

**2. MORIORI MORPHOSYNTAX.** Like other Eastern Polynesian languages, Moriori is a VSO language, with a TA particle preceding the verb (example (6)). Nominal predicates are also clause-initial, marked by the predicate-particle *ko* (example (7)).

- (6)
- VSO word order*
- (Shand 1911:78)

Ka tango ake ko Apukura i ta uru o Tu.  
 TA take DIR PERS Apukura ACC DEF head of Tu  
 'Apukura took the head of Tu.'

- (7)
- Nominal predicate*
- (Shand 1911:79)

Ko wai tō mana e rere te peepe?  
 PRED who DEF.warrior TA attack DEF canoe  
 'Who is the warrior who will attack the canoe?'

Arguments may be fronted to a clause-initial position, marked by the topic particle *ko*.

- (8)
- Ko-topicalized argument*
- (Shand 1911:35)

**Ko ka tamiriki a Manaii rauu ko Niwa**  
 TOP DEF.PL children of Manaii 3DL PERS Niwa  
 tchiei kitē i tarei rakau.  
 NEG.PST see ACC sculpt tree  
 'The children of Manaii and Niwa did not understand the chipping of timber.'

Moriōri is a nominative/accusative language, showing the same case-marking as the related Māōri language. Chung (1977) demonstrates that Māōri is nominative/accusative, with the accusative marker *i* preceding the object in transitive sentences, while the transitive and intransitive subjects go unmarked (example (9)).

- (9)
- Nominative/accusative case-marking in Māōri*
- (Chung 1977:355)

a. *Transitive sentence*

Ka hook te matua i ngā tikitī.  
 TA buy DEF parent ACC DEF.PL ticket  
 'The parent buys the tickets.'

b. *Intransitive sentence*

Ka oma ngā kōtiro ki waho.  
 TA run DEF.PL girl to outside  
 'The girls will run outside.'

Likewise, other Eastern Polynesian languages Cook Islands Māōri, Marquesan, and Tahitian have *i* (or '*i*') marking the accusative object as demonstrated in (10).<sup>6</sup>

- (10)
- Accusative case-marking in Eastern Polynesian*

a. *Cook Islands Māōri*

(Nicholas 2017:210)

Kua 'opu atu ra aia i te ika.  
 TAM catch DIR POS 3SG ACC DEF fish  
 'He caught the fish.'

b. *Marquesan*

(Cablitiz 2006:63)

Tenei e ti'ohi tatou  
 now TAM watch 1PL.INCL  
**i te pouhu'e='ia o Tahia ...**  
 ACC DEF live=PRF POSS Tahia  
 'Now, we are watching the life of Tahia ....'

6. Marquesan and Tahitian each have an allomorph of the accusative marker: *ia* and '*ia*', respectively. This is used for proper names and personal pronouns, instead of the usual *i* (Tryon 1970; Cablitiz 2006).

c. *Tahitian*

(Tryon 1970:31)

'Ua tapu te ta'ata 'i te tumu 'uru.  
 TA cut DEF man ACC DEF tree breadfruit  
 'The man cut down the breadfruit tree.'

Moriori exhibits the same case-marking as the languages above, with transitive objects case-marked (with *i*), indicating a nominative/accusative split in the language. Transitive and intransitive subjects are unmarked, except by a person-marker when appropriate (proper nouns in Moriori are marked with a person particle; the person-markers *a* and *ko* appear to be interchangeable).

(11) *Nominative/accusative case-marking in Moriori* (Shand 1911:40, 63)a. *Transitive sentence*

Ka hui a Ta Utu ratau ko o' taokete  
 TA weave PERS Ta Utu 3PL his.PL brother-in-law  
**i na ka punga** ma ratau.  
 ACC DEF.PL eel.nets for 3PL  
 'Ta Utu and his brothers-in-law wove (made) eel baskets for themselves.'

b. *Intransitive sentence*

Ka riro **ta putē**.  
 TA gone DEF putē  
 'The Putē was gone.'

*Pro-drop* is extremely permissive in the language, where any pronominal argument with a linguistic or discourse antecedent may be omitted. For example, the intransitive subjects of *here* 'go' and *tē* 'arrive' are dropped in (12), while both the transitive subject and object are omitted in the second clause of (13) due to the presence of antecedents in the previous clause.

(12) *Pro-drop of intransitive subject* (Shand 1911:35)

K' here ka tē ki ta rakau a on'(ā) tchukana.  
 TA go TA arrive to DEF tree of his.PL older-brother  
 'The boy went and arrived at the timber of his elder brethren.'

(13) *Pro-drop of transitive subject and object* (Shand 1911:41)

K' whawha etu a Utu ki t' hunau tongihiti  
 TA lay-hold-of DIR PERS Utu to DEF sibling older  
 ka waha ku rung' i to' tchura.  
 TA carry LOC top LOC his back  
 'Utu laid hold of his elder brother and carried him on his back.'

The Moriori scripts predominately use the TA particle *ka*, a default TA particle with no tense, aspect, or modal values. An allomorph of this particle is *k'*, used when the following verb starts with <h> or <wh>.

Various other TA particles are found in Moriori. The TA particle *i* provides past time reference. *E* is used as a TA particle in several sentences, but its value is not clear. *E* is found in some past tense clauses (unlike the *e* TA particle in other Polynesian languages), as well as in present tense and future tense contexts, and even as a conditional complementizer. In a separate function, *e* (and *me*) is employed in some imperative clauses.

The postverbal particle *ana* supplies continuous aspect. The *ana* particle follows the verb without any obligatory preverbal particle, but occasionally

preverbal TA particles or complementizers including *e* and *khia* may co-occur with *ana*.<sup>7</sup> If a directional particle follows the verb, *ana* follows this particle. *E te* and *a te* are also continuous aspectual markers.

Moriori TA particles are given in (14).

- (14) Moriori TA particles
- |            |                     |
|------------|---------------------|
| ka, k'     | Default TA particle |
| i          | Past tense          |
| e          | Various uses        |
| ana, an'   | Continuous          |
| e te, a te | Continuous          |
| e/me       | Imperative          |

Moriori exhibits phonologically conditioned allomorphy of prenominal determiners (Clark 2000). For example, the determiner is realized as *ta* when the following word begins with a high vowel, while *tch* (palatal affricate) is used when the following word begins with a non-high vowel or *h*. The determiner is realized as *tV* when the following word begins with *r*, *k*, *p*, *m*, *n*, *ng* (velar nasal). The vowel is a copy of the following word's initial vowel. Other allomorphic variants of determiners are given in table 1.

Preverbal determiners manifest as several different forms which are identical to the prenominal variants. Due to the rarity of preverbal determiner constructions, it is not possible to provide examples of all the different determiner allomorphs in a preverbal position. However, a selection is given in table 2, which confirm the distribution seen for prenominal determiners is also observed for preverbal determiners.

TABLE 1. ALLOMORPHS OF PRENOMINAL DETERMINERS.

Determiner	Preceding	Prenominaly	Gloss	Clark (2000)
ta	High vowel	ta ure	'the penis'	(19)
tch	Non-high vowel	tch ara	'the way'	(19)
i	t, tch	i tao	'the spear'	(20)
∅	t, tch (within a preposition phrase)	o ∅ tama ki ∅ toki	'of the son' 'the axe' (object)	(19) (19)
t	wh	t'whare	'the house'	(20)
t, tch	h	tch hara t'hokotauki	'the injury' 'the proverb'	(20) (20)
tV	r	ta rakau tō roro te rerenga	'the tree' 'the entrance' 'the survivor'	(21) (21) (21)
tV	k, p, m, n, ng	tū kura ta karang'	'the chief' 'the cry'	(21) (21)
to	w	to wahine ra	'that woman'	(22)
rV	k, p, m, n, ng, w (within a preposition phrase)	i ri po a ra ngaro	'in the night' 'of the fly'	(22) (22)

7. This contrasts with Māori; the Māori continuous aspect *e* ... *ana* always has the preverbal *e* particle (Harlow 2007:139).

TABLE 2. ALLOMORPHS OF PREVERBAL DETERMINERS.

Determiner	Preceding	Preverbally	Gloss	Shand (1911)
ta	High vowel	ka ta unga	TA DEF urge	(95)
tch	h	ka tch huri	TA DEF turn	(63)
tʻ	h	ka tʻhomai	TA DEF give	(64)
tV	r	ka tā rahui	TA DEF restrict	(63)
tV	k	ka tā karo	TA DEF scoop.out	(77)

Clark (2000) notes that there are many exceptions to the phonological rules of prenominal determiners. About 88% of determiners in one narrative in Shand (1911), and 53% of determiners in the 1862 petition to the New Zealand Governor George Grey, conform to Clark’s rules. Preverbal determiners show a level of variation as well, with some following Clark’s model and others not. Several of the preverbal determiners surface as a *te* form, as shown in table 3.

Reaching a definitive analysis of the preverbal determiner allomorphy is hampered by the fact that Shand’s spellings are known to be inconsistent; for example, the directional particle *atu* is spelt variously as *atu*, *eti*, *etu*, *whatu*, *wha*, *at*, and *et* (Williams 1919:419).

TABLE 3. PREVERBAL DETERMINERS REALIZED AS *te*.

Preverbally	Gloss	Shand (1911)
ka te motʻ(u)	TA DEF sever	(64)
ka te kotī	TA DEF cut	(64)
ka te tchiro	TA DEF look	(77)

**3. MORIORI PASSIVE SENTENCES.** Moriori has a passive construction which is identical to passive constructions in other Eastern Polynesian languages. A passive suffix attaches to the verb, the patient is unmarked, and the agent is marked with *e*. Two examples of the Moriori passive are given in (15), with (15a) showing the agent preceding the passive subject, while (15b) has the agent following the passive subject.

(15) *Passive sentences in Moriori* (Shand 1911:35)

- a. Ka mau-a hoki e ratau  
TA bring-PASS also AG 3PL  
tchia rakau nei i kaingʻ.  
DEF spear PROX to home  
‘They took the spear to their home.’
- b. Kohi to hoki mai, te potchiti-i mai koʻ  
fast your.SG return DIR TA overtake-PASS DIR 2SG  
e o hunau tongihiti.  
AG you.PL brother older  
‘Return quickly lest you be overtaken by your elder brethren.’

Compare the Moriori passive to passive sentences in closely related languages (example (16)). In each example, the verb takes a passive suffix, which

is one of the phonologically conditioned variants of the of the *-Cia* suffix. The agent (demoted to an oblique) is introduced by the agentive preposition *e*. The passive subject, which would be preceded by the accusative case-marker *i* in an active sentence, is unmarked in the passive.

(16) *Passive sentences in Eastern Polynesian languages*

- a. *Māori* (Bauer 2010:90)  
 Ka whaangai-a ngaa manu e ia.  
 TA feed-PASS DEF.PL bird AG 3SG  
 'The birds were fed by her.'
- b. *Cook Islands Māori* (Nicholas 2017:212)  
 Kua 'opu-kia aia e te toa.  
 TAM catch-PASS 3SG AG DEF warrior  
 'He was caught by the warrior.'
- c. *Marquesan* (Cablitz 2006:79)  
 U kai-'ia Ta'einui e te 'Ua Pou.  
 TAM eat-PASS Ta'einui AG DEF 'Ua Pou  
 'Ta'einui was eaten by the 'Ua Pou (people).'
- d. *Tahitian* (Tryon 1970:38)  
 'Ua hohonihia 'oia 'e te 'uri.  
 TAM bite-PASS 3SG AG DEF dog  
 'He was bitten by the dog.'

Passivization has been a major subject in the literature of Eastern Polynesian syntax (Hohepa 1969; Clark 1976; Sinclair 1976; Chung 1977). In Māori, there has been much discussion due to the prevalence of the passive compared with the active, with different arguments based on the underlying case system of the language (see Sinclair 1976, for an ergative analysis; Chung 1977, for an accusative analysis). Like Māori, Moriori has several allomorphs of the passive suffix including *-a*, *-hia*, *-tii*, *-rii*, and *-hii*, with examples given in table 4. How these variants are conditioned is yet to be analyzed (see de Lacy 2002, for Māori passive suffix variations).

An alternative passive suffix involves lengthening the final vowel, as shown in table 5.

TABLE 4. ALLOMORPHS OF THE PASSIVE SUFFIX *-Cia*.

Active form	Passive form	Gloss	Shand (1911)
tuku	tuku-a	'to send'	(79)
mahi <sup>†</sup>	mahi-a	'to work'	(41)
koti	koti-ia/koti-a	'to cut'	(41)
wero	wero-hia	'to spear'	(63)
korero <sup>†</sup>	korero-tii	'to talk'	(79), (35)
	kume-a	'to drag'	(79)
	harengirengi-tii	'to be angry'	(79)
	matakitaki-rii	'to inspect'	(35)
	tangi-hii	'to take'	(35)
	potehitii	'to overtake'	(35)

<sup>†</sup> I assume the active verbal forms for 'work' and 'talk' are the same as the nominal forms *te mahi* 'the work' and *ri korero* 'the talk'.



TABLE 5. VOWEL LENGTHENING FOR THE PASSIVE.

Active form	Passive form	Gloss	Shand (1911)
kite	kitē	‘to see’	(41), (76)
kapo	kapō	‘to follow, overtake’	(78), (79)
whai	whaii	‘to incant’	(35)
	hurii	‘to hear’	(41)

de Lacy (p.c.) suggests that the vowel-lengthening suffix is simply a phonetically written version of the *-Cia* suffix; apparent vowel lengthening is the result of word-final vowel reduction of the *-Cia* suffix from above, and subsequent vowel quality assimilation. First, all the verbs that undergo final vowel lengthening fit the requirement from de Lacy (2002) that bimoric roots take the *-a* variant of the *-Cia* passive suffix. Second, Moriori was said to exhibit vowel-clipping, where word-final vowels were phonetically reduced or omitted (Deighton 1889; Shand 1911; Williams 1919). Therefore, it is not unexpected that an [-a] suffix would be realized as [-ə]. Assimilation of the vowel quality from the preceding vowel means it is a small step to suggest that the [-ə] suffix takes the shape of the preceding vowel. In the manuscripts, this would be phonetically transcribed as a long vowel (e.g., <ē>, <ā>, and <ii>), rather than the phonological [-a]. This is also observed for the *-Cia* suffix in table 4, where the phonological [-Cia] suffixes are often realized as <-Cii>.

A verb may take multiple forms of passive morphology. For example, the verb *mau* ‘to bring/take’ has two forms of the passive suffix (example (17)). The fact that the same verb can be passivized in different ways is central to the claim of this paper.

- (17) Morphological alternatives for the passivization of *mau* ‘to bring/take’  
(Shand 1911:35, 41)

*mau-a* ‘to bring/take-PASS’  
*mau-rii* ‘to bring/take-PASS’

A few verbs take a  $\emptyset$  passive suffix. Examples are given in table 6.

Verbs that take a  $\emptyset$  suffix can be identified as passive by the morphology of the arguments. For example, in (18) the active form of the verb *tchiro* ‘look’ takes an unmarked agent (only marked with the person-marker *ko*), while in (19), the agent is marked with *e*, indicating that the clause is passive, despite no difference in verb form.

TABLE 6. PHONOLOGICALLY SILENT PASSIVE FORMS.

Active form	Passive form	Gloss	Shand (1911)
tarei	tarei	‘to sculpt’	(35), (34)
tchiro	tchiro	‘to look’	(78), (95)
<i>huna</i> <sup>†</sup>	<i>huna</i>	‘to hide’	(35), (76)

<sup>†</sup> The active form *huna* is found in a serial verb construction *whano huna* ‘go hide’; see (40).

- (18) *Active sentence with tchiro* ‘to look’ (Shand 1911:78)

Ka tchiro **ko Whakatau** ki a ’Pukura.  
 TA look PERS **Whakatau** to PERS Apukura  
 ‘Whakatau looked at Apukura.’

- (19) *Passive sentence with tchiro* ‘to look’ (Shand 1911:95)

E tchiro **e korū**, ka kei pou pou ko ro  
 TA look AG 2DU.EXCL TA eat aloft KO DEF  
 manu ko ro Karewarewa, k’ hāro ta manu ko ro Kāhu.  
 bird KO DEF sparrowhawk TA.soar DEF bird KO DEF hawk  
 ‘You two look if the sparrowhawk feeds with outstretched wings, and if the hawk soars.’

Summing up, the standard passive construction in Moriori usually has a verbal suffix, the agent is marked with *e*, and the passive subject is unmarked. It will now be demonstrated that sentences with preverbal determiners are passive, for which the preverbal determiner marks the passive quality of the verb, rather than a suffix. The line of reasoning will focus on the morphological markings on the arguments in preverbal determiner sentences, as well as the complementary distribution of preverbal determiners and passive suffix.

The first piece of evidence is that the case-markings on the arguments in a preverbal determiner clause are identical to the case-markings in a standard passive sentence. Examine the active version of the verb *tchiro* ‘to look’ in (18) with the preverbal determiner version of that same verb (example (20)). The verb form is the same in each, but the argument marking is distinctly different. In (18), the verb takes an unmarked agent, only preceded by the person particle *ko*. In the preverbal determiner version of this verb, the agent is marked with *e*, and the patient argument is unmarked.

- (20) *Preverbal determiner sentence with tchiro* ‘to look’ (Shand 1911:77)

ka te tchiro mai eneti **e ’Pukura te waka o**  
 TA DEF look DIR again AG Apukura DEF canoe of  
**ka tamiriki** ...  
 DEF.PL children  
 ‘Apukura watched the canoe of her children ...’

When we compare preverbal determiner sentences to a standard passive clause where the verb takes a passive suffix, we see that the case-markings match exactly. Compare the preverbal determiner sentence (example (21)) with a suffixed passive sentence in (22). Both contain an agent preceded by *e*, the passive agent preposition. They also both contain an unmarked patient argument.<sup>8</sup> In active transitive sentences, it would be expected that the patient

8. There is one preverbal determiner example (Shand 1911:77) where the patient is preceded by *i* and agent preceded by *e*, which could be problematic for the passive analysis of preverbal determiners if *i* is analyzed as an accusative case-marker. On the surface, it looks like there is mixed case-marking, with both *e* and *i*-marked nominals. However, Shand (1911) mentions “euphonic” uses of *i*, while Williams (1919:421) notes that there is an unusual distribution of *i*, including in some passive and intransitive clauses. There is also precedence for mixed case-marking in Māori; Nicholas (2017:424) notes that there can be mixed case-marking in *me*-imperatives, with an *e*-marked agent and *i*-marked patient. Further research is needed of the use of *i* in Moriori.

argument is preceded by the accusative marker *i*. It may therefore be concluded that preverbal determiner sentences have the same syntactic structure as passives.

- (21) *A sentence with a preverbal determiner* (Shand 1911:77)

Ka tā karo ka konehi o Tu  
 TA DEF scoop.out DEF.PL eye of Tu  
 e Tchupakihimi rauu ko Paparakewa ...  
 AG Tchupakihimi 3PL PERS Paparakewa

‘The eyes were gouged out by Tupakihimi and Paparakewa ...’

- (22) *A passive sentence with a suffix* (Shand 1911:77)

Ka wero-hia e raū a Rakei ki tao.  
 TA spear-PASS AG 3DU PERS Rakei with spear

‘They thrust and pierced Rakei with spears.’

A brief note is needed of how “passive” is defined in this paper. As Harlow (2007:119) mentions, Māori intransitive verbs can be passivized, meaning Māori passivization is more permissive in comparison to the commonly accepted definition of passivization formed from transitive verbs. In Moriori, all 12 unequivocal examples of preverbal determiner sentences employ transitive verbs, which take two arguments. Every clause with a preverbal determiner has two arguments, even if one may be omitted due to *pro*-drop. Therefore, Moriori preverbal determiner passives are formed from transitive clauses.

Passivization reduces the transitivity of the verb, demoting the agent to an oblique phrase. If preverbal determiners mark passive verbs, the oblique agent should not be an obligatory argument in the clause. Therefore, we should expect the agent of the clause to be optional. This is indeed the case, with oblique agents in preverbal determiner sentences mostly being dropped (example (23)).<sup>9</sup>

- (23) *Dropped oblique agents* (Shand 1911:64, 35)

- a. Ka te mot’(u) te manaw’(a)?

TA DEF sever DEF heart

‘Did **you** cut off the heart?’

- b. Ekore i tē tarei ta iho o ta tatau

NEG TA DEF sculpt DEF core of DEF 1PL.INCL

rakau ke tika.

tree COMP straight

‘**We** cannot manage to chip the heart of our tree to make it straight.’

However, there are examples where the patient argument is omitted and only the *e*-marked agent remains (see (2)). Although this would be unusual for a passive, this construction is found across all Moriori passives, including the suffixed versions. For example, in (24), the *matakitaki* ‘to inspect’ has a passive

9. These examples could be simply argued to involve *pro*-drop, a common occurrence in the language. As there are no native speakers, the optionality of the agent cannot be tested empirically. However, pronominals are used frequently throughout the texts, meaning it seems significant that agents are regularly missing in preverbal determiner sentences.

suffix but only the oblique *e*-marked agent is overt, while the pronominal patient is omitted.

(24) *Omission of patient in suffixed passive clause* (Shand 1911:35)

Ka matakítaki-rii e ka rangat'(a).

TA inspect-PASS AG DEF.PL people

'The people gazed at it.'

Having claimed there are two methods by which a clause can be made passive, with a passive suffix or with a preverbal determiner, we make two predictions. First, a verb could be able to use both methods to achieve the same result. If preverbal determiners mark the passive, then it should be possible to mark the passive with a standard suffix instead. Second, if this is possible, preverbal determiners and the passive suffix should be in complementary distribution; if one is used the other would be redundant and hence not used.<sup>10</sup> These predictions are borne out in the data. *Koti* 'to cut' can be passivized with an *-a* suffix (example (25a)). Compare this with the preverbal determiner sentence with *koti* 'to cut' in (25b).

(25) *Complementary distribution of preverbal determiners and passive suffixes* (Shand 1911:41, 64)

a. **koti-a** ana ta upoko o Mono

cut-PASS TA DEF head of Mono

e to' teina ...

AG POSS younger.sibling

'Mono's head was cut off by his younger brother ...'

b. Ka **te koti** ta ure?

TA DEF cut DEF penis

'Did you cut off the penis?''<sup>11</sup>

As predicted, the verb could take either the passive suffix or the preverbal determiner, but not both, demonstrating complementary distribution. In all other examples of preverbal determiner sentences, no passive suffix is also found on the verb. When a verb is made passive, it will not take both forms, but instead will take only one. If there are two morphological markings which individually mark the passive, having both on a single verb would be redundant. Hence, we would not expect them to appear together. Therefore, the conclusion that preverbal determiners are passive markers is strengthened.

A question that remains is what conditions the use of the preverbal determiner as opposed to the *-Cia* passive suffix. Clark (1973:579) suggests the Māori passive is triggered by aspectual distinctions; active clauses are employed for imperfective aspect, while passives are used in perfective clauses. It is possible that the two forms of passive in Moriori are similarly triggered by aspectual variation. However, there appears to be no aspectual consistency

10. Note that the *-Cia* suffix may attach to more than just the verb (e.g., the verb and a manner particle) in Māori passives (Biggs 1973), meaning two passive markers may co-occur in Māori, albeit both being *-Cia* suffixes.

11. Due to the sensitivities of the era, the original English gloss has 'te ure' instead of 'the penis'.

between sentences with preverbal determiners. In (26), a single completed act indicates perfective aspect. However, in (27), the act of managing implies a continuous action, indicating imperfective aspect. As such, an aspectual reason for the two passive markers appears unlikely.

- (26) *Preverbal determiner sentence with perfective aspect* (Shand 1911:64)

Ka te koti ta ure?

TA DEF cut DEF penis

‘Did you cut off the penis?’

- (27) *Preverbal determiner sentence with imperfective aspect* (Shand 1911:35)

Ekore i tē tarei ta iho o ta tatau rakau ke tika.

NEG TA DEF sculpt DEF core of DEF 1.PL.INCL tree COMP straight

‘We cannot manage to chip the heart of our tree to make it straight.’

Another potential analysis of preverbal determiners is that the language was transitioning between ergative and accusative patterns. This model, first suggested by Clark (1973) and subsequently expanded on by Pucilowski (2006) and Otsuka (2011), has an ergative analysis of Proto-Polynesian, in which two types of transitive clause were said to exist: middle verbs where the patient is marked with *i*, and “ergative” verbs where the agent is marked with *e* and the patient is unmarked. The verbs which were found in each pattern were lexically determined, but as the language shifted to Eastern Polynesian, Pucilowski (2006) and Otsuka (2011) claim that it became possible for all verbs to appear in both patterns.

Otsuka (2011) argues that *i*-marked patients in the middle verb pattern have a lower degree of affectedness than unmarked patients in the ergative alignment. Therefore, she suggests that Eastern Polynesian developed a method to derive less affected patients of ergative verbs by turning them into middle verbs and marking the patient with *i*. When a middle verb occurred in the “ergative” structure, showing a more affected patient, the patient became unmarked and the verb was suffixed by *-Cia*. As such, the *-Cia* suffix became a marker of more affected patients. In this model, “passive” constructions are instead treated as active transitive clauses, with ergative case-marking.

Otsuka (2011) cites Pukapukan as a language in transition.<sup>12</sup> Pukapukan is a Samoic Outlier ergative language, with *e*-marked agents and unmarked patients. This language has middle verbs, and a derived ergative with *-Cia* is also possible (example (28c)). Crucially, the *-Cia* suffix is observed on both derived ergatives and inherent ergatives (example (28b,c)), which is unexpected in Proto-Polynesian syntax. Otsuka argues that the optional *-Cia* affix on ergative verbs shows the language is transitioning to the Eastern Polynesian pattern, with *-Cia* becoming obligatory on all verbs with *e*-marked agents.

12. The use of ergative marker *e* both with and without *-Cia* suffix in Pukapukan was first noted by Chung (1978), who argued that Pukapukan was undergoing the passive to ergative reanalysis.

- (28) PUKAPUKAN(Chung 1978:323–24)
- a. *Ergative without -Cia*

Na patu te tamaiti e mātou.  
PST hit DEF child ERG 1PL  
‘We hit the child.’
- b. *Ergative with -Cia*

Na patu-a te tamaiti e mātou.  
PST hit-CIA DEF child ERG 1PL  
‘We hit the child.’
- c. *Derived ergative from middle*

Ko mina-ngia te yua e-ku.  
PROG want-CIA DEF water ERG-1SG  
‘I want the water.’

It would be possible to analyse Moriori as going through a similar transitional process. Like Pukapukan, some verbs with *e*-marked objects have the *-Cia* affix, while others do not (instead having a preverbal determiner). Therefore, it may be that Moriori is going through a similar transformational process, where the *-Cia* affix is becoming obligatory for all verbs with an *e*-marked agent. However, this does not bring us any closer to understanding why a preverbal determiner would be used instead of the *-Cia* affix. Instead, the preverbal determiner creates a more problems in this model; the increasing use of *-Cia* is explained by its role as a marker of more affected patients, but there is no reason why a preverbal determiner would also provide similar information.

Although a definitive analysis for why Moriori has two passive markers cannot be given, we can at least confirm that preverbal determiners replace the *-Cia* affix in clauses with *e*-marked agents. This paper will continue to call these clauses passive, following the most common linguistic model of Māori (e.g., Harlow 2007).

The answer to why the preverbal passive marker takes the form of a determiner is also elusive. Unfortunately, due to the absence of any new data, and the scarcity of the existing data, it is unlikely we will ever find out. A brief look over two of the narratives in Shand (1911), *Ko Ru rauu Ko Ta Utu-kai-taokete* and *Ko Rakei* shows how uncommon passive verbs are, both suffixed and those with preverbal determiners (table 7). Passive verbs show up only 7.9% of the time across the two texts, making a comparison between the different passive constructions difficult, due to their rarity.

However, from the evidence above, it can be confidently claimed that preverbal determiners are markers of the passive construction. The remaining part

TABLE 7. FREQUENCY OF ACTIVE/PASSIVE VERBS IN SHAND (1911).

	Active verbs	Passive suffixed verbs	Passive verbs with preverbal determiners
<i>Ko Ru rauu Ko Ta Utu-kai-taokete</i> (Shand 1911:40–42)	169	15	0
<i>Ko Rakei</i> (Shand 1911:63–65)	171	6	8

of this paper will be spent ruling out other potential analyses of preverbal determiners in Moriori.

**4. RULING OUT *kei te* TA PARTICLE.** Clark (1994:131) suggests preverbal determiner sentences may be cases of the present tense continuous TA marker. This is because the *kei te* TA particle in Māori has a strong resemblance to the *ka te* particles in preverbal determiner sentences. *Kei te* marks the continuous present in Māori, with *i te* the past tense variant (Bauer 2010:61). This section will demonstrate the TA particle combined with a preverbal determiner is not a continuous aspect marker in Moriori.

As Clark (1994) touches upon, the *ka* particle preceding the determiner is not phonologically the same as *kei*. However, with so many differences between the phonology of Māori and Moriori, it may be assumed this is just a vowel change. However, the *kei te* continuous TA particle does have an equivalent in Moriori, which is given in (29). Note the English gloss clearly marks the verbs as continuous.<sup>13</sup>

(29) *The continuous TA particle in Moriori* (Shand 1911:79)

- a. Tō    kau    e te    kau    mai    nei.  
       warrior swim TA.CONT swim DIR PROX  
       ‘Wading warriors, wading hither.’
- b. Tō    rewa!    a te    rewa.  
       warrior float TA.CONT float  
       ‘Swimming warriors, swimming.’

Unlike sentences with preverbal determiners, the continuous aspect particle contains a single vowel followed by *te*. There does not seem to be phonological variation of *te*, like there is for preverbal determiners. Therefore, preverbal determiners do not parallel with the Moriori continuous aspect particle.

Furthermore, if preverbal determiners were part of a continuous aspect maker, the durative context should be clear in the sentence. In reality, sentences with preverbal determiners are quite clearly not marked with continuous aspect. For example, the three preverbal determiner sentences below are yes/no questions. In the narrative, Tamahiwa’s sons killed Rakei, but they may not have killed him fully (in Moriori folklore, unless you cut off the penis, heart, and head, the person is not fully dead). A long time later, a messenger comes to tell Tamahiwa that Rakei is alive, so Tamahiwa asks his sons whether they did indeed cut off the penis, heart, and head. There is no clear interpretation which could explain a continuous aspect marker being used in the context. Clearly the questions do not relate to the present, so the present continuous is ruled out. Furthermore, asking the question ‘Were you cutting off the penis/heart/head?’ does not fit into the context of the story.<sup>14</sup>

13. Bauer (2010) describes the *kei te* construction in Māori as a single TA particle, which I will follow in the analysis of the Moriori version.

14. In addition, in the Māori translations of the story, the *kei te* particle is not used in any of these sentences. In contrast, *kei te* is used in the Māori translations of (29), which do show continuous aspect.

(30) *Yes/no questions in Moriori* (Shand 1911:64)

- a. Ka te kotī ta ure?  
     TA DEF cut DEF penis  
     ‘Did you cut off the penis?’
- b. Ka te mot’(u) te manaw’(a)?  
     TA DEF sever DEF heart  
     ‘Did you cut off the heart?’
- c. Ka te kotī ta upoko?  
     TA DEF cut DEF head  
     ‘Did you cut off the head?’

As such, each of these preverbal determiner sentences is unambiguously without durative aspect. This section concludes that preverbal determiners are not part of a larger continuous aspect marker.

**5. RULING OUT NOMINALIZATION.** Clark (1994) also suggests that preverbal determiners could precede nominalized verbs, with the *ka* particle (preceding the determiner) being a variant of the *ko* particle. In Polynesian languages, nominalizations are formed when a determiner introduces a verb, with the verb usually marked by a nominalizing suffix (Chung 1974). As preverbal determiners in Moriori also directly precede the verb, these constructions bear a visual resemblance to nominalizations.

This section will demonstrate that the verbs preceded by preverbal determiners in Moriori do not have nominal properties. This will be achieved by two pieces of evidence: preverbal determiner sentences contrast true nominalizations structurally and the verbs in preverbal determiner sentences do not have properties associated with determiner phrases (DPs).

Polynesian nominalizations differ from their verbal counterparts in several ways: the verb may be marked by a nominalizing suffix, the primary argument is expressed as a possessive DP (Chung 1974; Cablitz 2000; Massam 2000), and the TA particle is replaced by a determiner (Mosel and Hovdhaugen 1992:59; Hooper 1993:82; Bauer 2010:48). Moriori nominalizations also follow these patterns. Moriori’s nominalizing suffix takes the form *-(ta)nga*. This is illustrated in the following sentence for the verb *karanga* ‘call’ and the nominalized form *karanga-tanga* ‘the call’.<sup>15</sup>

(31) *Nominalizing suffix in Moriori* (Shand 1911:42)

- Ka ru ka karanga-tanga a Kura penei, karanga mai  
     TA two DEF.PL call-NMLZ POSS Kura same call DIR  
     ko Ta Utu ...  
     PERS Ta Utu  
     ‘Twice Kura called in this manner. Ta Utu replied ...’

Like all Polynesian nominalizations, the primary argument in Moriori nominalizations is expressed as a possessive. This can be seen in (32), where the

15. Not all nominalized verbs in Moriori will take a nominalizing suffix. For example, the verbal form *tangi* ‘cry’ (Shand 1911:63) is identical to the nominalized version *tangi* ‘the crying’ (Shand 1911:63). A preposition *ki* ‘to’ precedes the nominalized version of *tangi*, clearly identifying it as a nominal.



verb *whano* ‘to go’ is nominalized, and the argument *Rakei* is introduced by the A-type possessive particle.<sup>16</sup>

- (32) *The primary argument in a nominalization is possessive* (Shand 1911:62)

He roa te whano-nga a Rakei ka ora.  
 INDF long DEF journey-NMLZ POSS Rakei TA well  
 ‘It was a long time before Rakei got well.’

Moriori nominalized verbs appear in all expected places for DPs, including as the case-marked argument of a verb (example (33)), the complement of a preposition (example (34)), and *ko*-topicalized (example (35)).

- (33) *A case-marked nominalized verb* (Shand 1911:40)

Koii t’hokowai e mau nei i enei hoko-tipu-ranga  
 hence DEF.proverb TA hold PROX STAT-AG DEM CAUS-grow-NMLZ  
 ‘Hence the proverb which holds to this generation ...’

- (34) *A nominalized verb as the complement of a preposition* (Shand 1911:79)

Karanga ko Rei ki a Whakatau, pera hoki  
 call PERS Rei to PERS Whakatau same also  
 me re karanga-tanga ki era tchupapaku.  
 with DEF call-NMLZ to those corpse  
 ‘Rei cried out to Whakatau in the same manner as for the other slain.’

- (35) *A ko-topicalized nominalized verb* (Shand 1911:64)

Ko tch ora-nga o Rakei tchuwhatii ko Kahukura.  
 TOP DEF well-NMLZ POSS Rakei reach.maturity PERS Kahukura  
 ‘When Rakei recovered, Kahukura had reached maturity.’

Preverbal determiner sentences do not show any of the characteristics of nominalized verbs. None of the verbs in preverbal determiner sentences have a nominalizing suffix. Although some nominalized verbs in Moriori do not have a suffix (see footnote 15), it is significant that not one of the preverbal determiner verbs has a nominalizing suffix.

There is also a clear contrast in how the agent is expressed in preverbal determiner sentences and nominalized clauses. Contrast the nominalized verb *huri* in (36) with the preverbal determiner sentence with the verbal form *huri* in (37).<sup>17</sup> In both cases, the verb is transitive, which therefore takes an agent and a patient; in the nominalized form, the agent *Rakei* is in a possessive construction, as would be expected from nominalizations in Polynesian languages, but in (37), the agent *mau* ‘we’ is preceded by the agentive marker *e*.

- (36) *Nominalization of huri* (Shand 1911:64)

tchiei tau [t’ huri mai a Rakei i tao].  
 PST.NEG land DEF dodge DIR POSS Rakei ACC spear  
 ‘Rakei did not ward it (the spear) off properly’

16. Moriori has both *O* and *A* type possessive markers, just like other Polynesian languages (Wilson 1982).

17. While there is no nominalizing suffix in (36), the verb is easily identified as a nominalization: it is in the argument position of the verb *tau* ‘to land’, its primary argument is possessive and it is preceded by a determiner instead of a TA particle.

(37) *Preverbal determiner version of huri* (Shand 1911:63)

U-u, ka tch **huri e maū** ko ro' tā pari.  
 yes TA DEF **turn** AG 1DU.EXCL to over DEF cliff  
 'Yes, we threw him down over the cliffs'

The main argument is not expressed as a possessive in any of the other preverbal determiner sentences either. How the arguments are expressed in preverbal determiner sentences further raises doubt that preverbal determiners introduce nominalized verbs. However, note that nominalizations in Māori may occasionally occur with an *e*-marked agent (Waite 1994). There are two reasons to suggest that this is not the same as the Moriori preverbal determiner sentences: (i) In these Māori cases, the verb is required to take the passive *-Cia* suffix, and (ii) like other nominalizations, the other argument will be marked with the genitive preposition, rather than being unmarked (Waite 1994:68). The Moriori preverbal determiner sentences have neither the *-Cia* suffix, nor genitive-marked argument.

Furthermore, preverbal determiner sentences have a TA particle preceding the determiner, unlike nominalized clauses. In nominalizations, a determiner replaces the TA particle, while in preverbal determiner sentences, there is a determiner *in addition to* the TA particle. Clark (1994) suggests the *ka* particle preceding a preverbal determiner is a variation of the topic particle *ko*.<sup>18</sup> However, different TA markers can be used in preverbal determiner sentences, such as *i* (PST) (see (4)) which is too different from *ko* to be a spelling mistake. This strongly suggests that preverbal determiner structures are not nominalizations.

Another reason to doubt that the preverbal determiner forms are nominalizations is that there is no evidence that they behave as nominals. Unlike true nominalizations in Moriori, preverbal determiner verbs cannot be case-marked, follow a preposition, or be *ko*-topicalized. Instead, the verb acts as a main verbal predicate. Examine (38); there the verb is followed by an agent and a patient. There is only one possible predicate in this sentence, *tchiro* 'look', which stands alone as a complete clause. If the verb was nominalized, this would mean the entire clause was a single DP, which could not stand alone as a clause, as this sentence does.

(38) *A preverbal determiner preceding the primary predicate* (Shand 1911:77)

Ka te tchiro mai eneti e 'Pukura te waka o ka tamiriki.  
 TA DEF look DIR again AG Apukura DEF canoe of DEF.PL children  
 'Apukura watched the canoe of her children.'

**6. RULING OUT THE COMPLEMENTIZER *ki te*.** Preverbal determiners preceded by a TA particle have more than a striking resemblance to the Māori complementizer *ki te*. In preverbal determiner sentences, the TA particle *ka* (predominantly) is followed by the determiner and then a verb. In the Māori

18. This is at odds with the other data in Shand (1911); I was not able to find any examples of *ko* showing up with a different vowel, or any other form apart from *kō*.

infinitive construction, the particle *ki* is followed by the particle *te* and then the verb. Clearly the two structures resemble one another.

The *ki te* complementizer in Māori has a very restricted distribution. *Ki te* is a variation of the complementizer *kia*, used to embed a clause under a verb of volition, ability, motion, or command (Chung 1977). The *ki te* complementizer is used as an alternative to the complementizer *kia* when there is Equi deletion of the subject of the subordinate clause (Hale 1968; Hohepa 1970; Chung 1977; Pearce and Waite 1997). Equi deletion occurs when the subject of the subordinate clause is co-referential with a DP in the matrix clause. The embedded subject is deleted, and the *ki te* complementizer is used instead of *kia*.

(39) *Māori examples with kia and ki te* (Chung 1977:363)

- a. Ka whakaaro au **kia** haere ia.  
 TA think 1SG COMP go 3SG  
 'I decided that he would go.'
- b. Ka whakaaro au **ki te** haere.  
 TA think 1SG COMP go  
 'I decided to go.'

This section demonstrates that in Moriori, preverbal determiners and their preceding TA particle do not function as a complementizer. The Moriori complementizer which introduces finite verbs is *ke* (equivalent to *kia* in Māori).

(40) *The Moriori complementizer ke* (Shand 1911:35)

- Ka ki etu ta ratau kuī a Niwā te wahine  
 TA say DIR 3PL female elder PERS Niwa DEF woman  
 a Manaii ki to' timit' toke **ke** whano huna  
 of Manaii to POSS.SG child small COMP go hide  
 i tch ata pongipongi.  
 at DEF morning dark  
 'Their mother Niwa, Manaii's wife, told her little (or youngest)  
 son to go secretly in the early dawn of the morning.'

The *ke* complementizer has a variant *ki te*. Like Māori, the *ki te* variant is employed when the lower subject is co-referential with a DP a higher clause, as can be seen in (41).

(41) *Ki te with a subject that is co-referential with a higher DP* (Shand 1911:41)

- a. E kore au e kaha **ki te** here.  
 TA NEG 1SG TA strong COMP go  
 'I will not be able to go.'
- b. Na ka puta a Ta Utu **ki ta** whai i a  
 CONJ TA appear PERS Ta Utu COMP chase ACC PERS  
 rauu ke patu mounu mo ka punga ...  
 3DU COMP kill bait for DEF.PL eel.trap  
 'When Ta Utu appeared, to chase and kill them to be used as bait for  
 the eel baskets ...'

The *ki te* form is also used to mark infinitive verbs in matrix clauses, as demonstrated in (42).

(42) *Ki te with a matrix infinitive verb* (Shand 1911:63)

- a. **Ki tē** aha koa nei?  
 COMP what INT PROX  
 'To do indeed what?'
- b. **Ki ri** kimi noa i tēhe rakau me kore, e ongo  
 COMP seek INT ACC DEF tree if NEG TA draw  
 to korū hunanga a Rakei.  
 POSS 2DU relative PERS Rakei  
 'To seek out a tree [to see] if your relative Rakei may not be drawn [thither].'

Verbs preceded by *ki te* in Māori cannot have a case-marked subjects (Pearce and Waite 1997). This paper makes the same assumption for *ki te* verbs in Moriori. If preverbal determiners can co-occur with subjects, we can confirm that preverbal determiners are not part of an infinitive complementizer. As preverbal determiner sentences may contain both the agent and patient arguments (example (43)), we can rule out the hypothesis that the TA + preverbal determiner unit is a complementizer.

(43) *Preverbal determiner sentences with an agent and patient* (Shand 1911:77, 65)

- a. ka **te** tchiro mai eneti e 'Pukura te waka o  
 TA DEF look DIR again AG Apukura DEF canoe of  
 ka tamiriki ...  
 DEF.PL children  
 'Apukura watched the canoe of her children ...'
- b. Ka **tā** karo ka konehi o Tu  
 TA DEF scoop.out DEF.PL eye of Tu  
 e Tchupakihimi rau ko Paparakewa.  
 AG Tchupakihimi 3PL PERS Paparakewa  
 'The eyes were gouged out by Tupakihimi and Paparakewa.'
- c. Tenei i tēhe kupu ka nawen'(e) mo Tamahiwa,  
 DEM DEF word TA forgotten about Tamahiwa  
 mo tiware-tanga tona metehine, ka **ra** waih' e  
 about incest-NMLZ POSS mother TA DEF make AGT  
 ii wahine mana.  
 3SG wife for.him  
 'This is something which was forgotten about Tamahiwa, regarding his incestuous intercourse with his mother, making her his wife.'

**7. RULING OUT PREVERBAL PRONOUNS.** Many Western Polynesian languages have preverbal pronouns that are either optional or obligatory (Moyse-Faurie 1997). These preverbal pronouns appear between the TA particle and the verb.<sup>19</sup> Preverbal pronouns represent a different set of pronouns from the postverbal pronouns, in that they are never marked for case, while postverbal ones are. Depending on the language, preverbal pronouns may occur for

19. A distinction must be made between pronouns which are found between the TA particle and the verb (preverbal pronouns) and pronouns that are found *ko*-topicalized, preceding the TA particle. Eastern Polynesian languages do not have the former, but can *ko*-topicalise pronouns.

only some arguments (Tokelauan and Tuvaluan only allow transitive subject pronouns to be preposed) or all arguments (all pronouns are obligatorily preposed in Tongan).

As many of the sentences with preverbal determiners contain overt or covert pronouns, and the preverbal determiner is in the same position as preposed pronouns in other Polynesian languages, it could be hypothesised that preverbal determiners are preverbal pronouns. There are two possible iterations of this analysis. First, the preverbal determiner could itself be a pronominal, and second, the preverbal determiner heads a DP with a null noun head.

There are several reasons that the preverbal determiner is unlikely to itself be a pronoun. Moyse-Faurie (1997:25) claims that preverbal pronouns are not attested in East Polynesian languages, of which Moriōri is one. Languages that are under this family include the closely related Māōri language (Bauer 2010) and Cook Islands Māōri (Nicholas 2017), as well as Maquesan (Cablitz 2006) and Tahitian (Coppenrath and Prevost 1975), none of which contain preverbal pronouns. Therefore, it would be very surprising for Moriōri to have preverbal pronouns.

Furthermore, preverbal pronouns in other languages are identical, or very similar, to the pronouns found postverbally. When they do have different forms, the change is slight; in Tokelauan, the preverbal 2SG pronoun is *ke*, while the postverbal equivalent is *koe* (Hooper 1993). Similar contrasts in form are found in Tongan (Churchward 1953; Chung 1978), Samoan (Seiter 1978; Chung 1978; Mosel and Hovdhaugen 1992), Uvean (Rensch 1982), Niuafo'ou (Tsukamoto 1988), Futunan (Moyse-Faurie 1997), and Tuvaluan (Besnier 2000).<sup>20</sup>

In Moriōri, the determiner forms are entirely different to the independent pronouns found postverbally. Preverbal determiners take the form of *t'*, *ta*, *tā*, *te*, *tē*, *tch*, and *ra*, while the postverbal pronouns are given in table 8.

The vast lexical difference between Moriōri determiners and postverbal pronouns suggests that preverbal determiners are not preverbal pronouns. Furthermore, different pronominals may be represented by the same determiner, albeit different allomorphs. In (44a), the dropped pronominal is 1PL.EXCL; in (44b), a 2DU pronoun is missing, while in (44c) a 3SG pronoun is dropped.<sup>21</sup> All sentences employ a preverbal singular definite determiner.

TABLE 8. MORIŌRI PRONOUNS (BASED ON SHAND 1911).

	Singular	Dual inclusive	Dual exclusive	Plural inclusive	Plural exclusive
1st person	au	tauu/tau	māu/mau	tatau	matau
2nd person	ko'/ko'e	–	korū/koru	–	kotau
3rd person	ai/ii	–	rāu/rau/rauu	–	ratou/ratau

20. A full chart of preverbal and postverbal pronouns can be found in Moyse-Faurie (1997:24).

21. That the dropped pronoun in (44b) is 2DU is evident from the context of the story.

(44) *Preverbal determiner sentences with dropped pronouns*

(Shand 1911:35, 64, 63)

- a. Ekore i tē tarei ta iho o ta tatau rakau ke tika.  
 NEG TA DEF sculpt DEF core of DEF 1.PL.INCL tree COMP straight  
 ‘We cannot manage to chip the heart of our tree to make it straight.’
- b. Ka te koti ta ure?  
 TA DEF cut DEF penis  
 ‘Did **you** cut off the penis?’
- c. U-u, ka tch huri e maū ko ro’ tā pari.  
 yes TA DEF turn AG 1DU.EXCL to over DEF cliff  
 ‘Yes, we threw **him** down over the cliffs.’

Another possibility is that the preverbal determiner introduces a null nominal phrase (NP), which is found preverbally. In an analysis like this, the determiner would be overt, showing up on the surface, while the NP would not. This analysis of the preverbal determiner sentence (example (44b)) is given in (45).

(45) *Analysis with a null NP*

- Ka [DP te [NP Ø ]] koti ta ure?  
 TA DEF cut DEF penis  
 ‘Did you cut off the penis?’

However, the DP would have to be a pronominal or an R-expression, to get the appropriate interpretation. If we were to claim there was an elided pronoun or R-expression in this position, it would be impossible to explain the presence of the determiner. Pronouns in Moriori are never accompanied by a determiner, except for personal articles (*a* or *ko*), as seen in (46). When *ko*-fronted, pronouns are preceded by only the *ko* particle (example (47)).

(46) *Moriori pronouns are never accompanied by a determiner*

(Shand 1911:40)

- a. khia roro **ratau**.  
 TA go 3PL  
 ‘They went’
- b. E mounu ranei **a koru**?  
 TA bait Q PERS 2DU  
 ‘Have you any bait?’
- c. Ka me a Ta Utu ki **a rauu** ...  
 TA say PERS Ta Utu to PERS 3DU  
 ‘Ta Utu said to them ...’

(47) *Ko-fronted pronouns are preceded only by ko*

(Shand 1911:41)

- ko ko’(e)** ka tae ki to tauu matu(a).  
 TOP 2SG TA arrive to POSS 1DU.INCL father  
 ‘You are able and may reach our father.’

Similarly, R-expressions are accompanied by the person-marker *a* or *ko* in postverbal positions (example (48)) and nothing in *ko*-fronted contexts (example (49)). Determiners never accompany R-expressions, except when they are part of the name, such as *Ta Utu*.

- (48) *R-expressions are accompanied by a person-marker postverbally* (Shand 1911:63, 79)

- a. Ka whano a Rākei.  
     TA go PERS Rākei  
     ‘Rākei set out.’
- b. Karanga ko Rei ki a Whakatau ...  
     call PERS Rei to PERS Whakatau  
     ‘Rei cried out to Whakatau ...’

- (49) *R-expressions are unaccompanied in ko-fronting contexts*

(Shand 1911:64)

- Ko Torē k’here ma tatahi  
     TOP Torē TA-go by.way.of beach  
     ‘The Toreas went by the sea-beach.’

As such, the occurrence of the determiner preceding a null pronoun or an R-expression would be in complete contrast to other DPs in the language.

The final piece of evidence that preverbal determiners are not preverbal pronouns is that although in many preverbal determiner examples there is a pronominal argument missing from the clause, it is possible to have all arguments in full form following the verb, as well as a preverbal determiner (example (50)). If these determiners were standing in for an elided argument, their presence would be unnecessary when all arguments are present in the clause.

- (50) *A preverbal determiner with full arguments following the verb*

(Shand 1911:77)

- a. Ka tā karo ka konehi o Tu  
     TA DEF scoop.out DEF.PL eye of Tu  
     e Tchupakihimi rauu ko Paparakewa.  
     AG Tchupakihimi 3PL PERS Paparakewa  
     ‘The eyes were gouged out by Tupakihimi and Paparakewa.’
- b. ka te tchiro mai eneti e ’Pukura te waka o  
     TA DEF look DIR again AG Apukura DEF canoe of  
     ka tamiriki.  
     DEF.PL children  
     ‘Apukura watched the canoe of her children.’

The evidence in this section suggests that a preverbal pronominal analysis of preverbal determiners in Moriori is unsuitable. Apart from their surface position, preverbal determiners in Moriori do not have any real similarity to preverbal pronouns in other Polynesian languages.

**8. CONCLUSION.** This paper’s contribution is twofold. Moriori is an understudied language, with no native speakers, and very little remaining data. This paper presents a large amount of natural Moriori language data, for the first time with a standard three-line gloss. It is hoped that this leads to further linguistic analysis of this lesser explored language.

This paper also develops an analysis of preverbal determiners, a construction with no equivalent in other Polynesian languages. In Moriori, a definite

singular determiner is sometimes observed intervening between the TA particle and the verb. Previous analyses have included the preverbal determiner being part of a continuous aspect marker, or as a determiner introducing a nominalized verb (Clark 1994). Other potential hypotheses are that the determiner is part of a complementizer or is a preverbal pronoun. This paper rules each of these hypotheses out in favor of a passive analysis. Preverbal determiners mark a passive construction, and are in complementary distribution with passive suffixes. Clauses with preverbal determiners take passive morphology for the arguments, but do not require the standard *-Cia* passive suffix.

Several questions remain unanswered. With two passive markers, a speaker must decide which to use in any particular context. With no living L1 speakers, it is difficult to explain the difference between the two markers, a problem which is exacerbated by the scarcity of Moriori data. Furthermore, the preverbal passive marker takes the form of a definite singular determiner, including all the phonologically conditioned allomorphs. This is surprising since the passive has nothing to do with nominal determiners. An explanation for why this occurs is lacking. It is hoped that further examination of the Moriori data yields an answer for these outstanding questions, but it is likely they may never be answered.

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